

I hereby give notice that a hearing by commissioners will be held on:

Date: Monday 4 to Friday 8 November 2024

Time: 9:30am

Meeting room: Warkworth Town Hall

Venue: 2 Alnwick Street, Warkworth 0910, Auckland

HEARING REPORT

PRIVATE PLAN CHANGE 93 WARKWORTH SOUTH

KA WAIMANAWA LIMITED PARTNERSHIP AND STEPPING TOWARDS FAR LIMITED

COMMISSIONERS

Chairperson Karyn Kurzeja Commissioners Vaughan Smith

David Mead

Patrice Baillargeon Kaitohutohu Mataamua Whakawā Senior Hearings Advisor

Telephone: 09 890 4692 or 027 338 5383

Email: patrice.baillargeon@aucklandcouncil.govt.nz

Website: www.aucklandcouncil.govt.nz

WHAT HAPPENS AT A HEARING

Te Reo Māori and Sign Language Interpretation

Any party intending to give evidence in Māori or NZ sign language should advise the hearings advisor at least ten working days before the hearing so a qualified interpreter can be arranged.

Hearing Schedule

If you would like to appear at the hearing please return the appearance form to the hearings advisor by the date requested. A schedule will be prepared approximately one week before the hearing with speaking slots for those who have returned the appearance form. If changes need to be made to the schedule the hearings advisor will advise you of the changes.

Please note: during the course of the hearing changing circumstances may mean the proposed schedule may run ahead or behind time.

Cross Examination

No cross examination by the applicant or submitters is allowed at the hearing. Only the hearing commissioners are able to ask questions of the applicant or submitters. Attendees may suggest questions to the commissioners and they will decide whether or not to ask them.

The Hearing Procedure

The usual hearing procedure is:

- The chairperson will introduce the commissioners and will briefly outline the hearing procedure. The Chairperson may then call upon the parties present to introduce themselves. The Chairperson is addressed as Madam Chair or Mr Chairman.
- The applicant will be called upon to present their case. The applicant may be represented by legal counsel or consultants and may call witnesses in support of the application. After the applicant has presented their case, members of the hearing panel may ask questions to clarify the information presented.
- **Submitters** (for and against the application) are then called upon to speak. Submitters' active participation in the hearing process is completed after the presentation of their evidence so ensure you tell the hearing panel everything you want them to know during your presentation time. Submitters may be represented by legal counsel or consultants and may call witnesses on their behalf. The hearing panel may then question each speaker.
 - Late submissions: The council officer's report will identify submissions received outside
 of the submission period. At the hearing, late submitters may be asked to address the
 panel on why their submission should be accepted. Late submitters can speak only if
 the hearing panel accepts the late submission.
 - Should you wish to present written evidence in support of your submission please ensure you provide the number of copies indicated in the notification letter.
- **Council Officers** will then have the opportunity to clarify their position and provide any comments based on what they have heard at the hearing.
- The applicant or their representative has the right to summarise the application and reply to matters raised by submitters. Hearing panel members may further question the applicant at this stage. The applicants reply may be provided in writing after the hearing has adjourned.
- The chair will outline the next steps in the process and adjourn or close the hearing.
- If adjourned the hearing panel will decide when they have enough information to make a
 decision and close the hearing. The hearings advisor will contact you once the hearing is
 closed.

Please note

- that the hearing will be audio recorded and this will be publicly available after the hearing
- catering is not provided at the hearing.



A NOTIFIED PRIVATE PLAN CHANGE TO THE AUCKLAND UNITARY PLAN BY KA WAIMANAWA LIMITED PARTNERSHIP AND STEPPING TOWARDS FAR LIMITED

	TABLE OF CONTENTS	PAGE NO.
Reporting officer's	report	7 - 128
Appendix 1	Plan Change 93, As Notified This attachment has not been re-produced in this agenda. The Notification materials are available here: https://www.aucklandcouncil.govt.nz/have-your-say/hearings/find-hearing/Pages/Hearing-documents.aspx?HearingId=835	129 - 130
Appendix 2	Section 32 Report	131 - 326
Appendix 3	Council Decision to Accept PPC93	327 - 332
Appendix 4	Submissions and Further Submissions	333 - 748
Appendix 5	Recommended Changes	749 - 828
Appendix 6	Specialist Technical Memos	829 - 1022

Reporting officer: David Wren

Reporting on proposed **Private Plan Change 93 - Warkworth South** to rezone 159 Ha of land zoned Future Urban, Open Space-Conservation and Rural-Rural Production to a Mix of urban zones with the application of two precincts and an amendment to the Rural Urban Boundary to the south of Warkworth.



APPLICANT: KA WAIMANAWA LIMITED PARTNERSHIP AND STEPPING TOWARDS FAR LIMITED

SUBMITTERS:	
Page 335 - 343	Hugh Briggs
Page 344 - 345	David Owen Morgan
Page 346 - 347	Dianne Lillian Morgan
Page 348 - 349	Dominique Coote
Page 350 - 351	Louisa Gowing
Page 352 - 353	Stanley Coote
Page 354 - 358	Stephen Haycock
Page 359 - 361	Warkworth Area Liaison Group (WALG) and One Mahurangi
Page 362 - 364	Paula Christine Anderson
Page 365 - 366	Maria Collins
Page 367 - 369	William Arthur Endean
Page 370 - 373	Arthur Douglas Brown
Page 374 - 376	Wendy Patricia Court
Page 377 - 378	Mark Calvert
Page 379 - 380	Warwick William Scown
Page 381 - 382	Stevenson Family Trust
Page 383 - 390	Auckland Council
Page 391 - 393	Mahurangi Trail Society Incorporated
Page 394 - 396	Karen and Stefan Richardson
Page 397 - 424	Auckland Transport
Page 425 - 428	Ash Hames and Fiona Rayner
Page 429 - 434	Barry Blennerhassett and Lorraine Margaret Blennerhassett (Blennerhassett Family)
Page 435 - 436	David Lawrence Morrison
Page 437 - 446	KA Waimanawa Limited Partnership and Stepping Towards Far Limited
Page 447 - 460	Mikel Jon Thorogood (Mike Thorogood)
Page 461 - 466	Guy Matches
Page 467 - 472	John and Sue Wynyard (Wynyard Family)
Page 473 - 604	Department of Conservation
Page 605 - 608	Te Tāhuhu o te Mātauranga / Ministry of Education
Page 609 - 610	GW Boyes
Page 611 - 615	The New Zealand Transport Agency / Waka Kotahi
Page 616 - 627	Watercare Services Limited
Page 628 - 630	Caroline Barrett
Page 631 - 633	Pete Sinton



Page 634 - 645	Bevan Morrison	
Page 636 - 637	Red Bluff Investment Ltd	
Page 638 - 639	Gumfield Property Ltd	
Page 640 - 641	Kenilworth Orchards	
Page 642 - 645	Thompson Road Residents	
Page 646	M A & MG Wilson	
Page 647 - 652	R and T Morrison, D Morrison	

FURTHER SUBMITTERS:		
Page 653 - 654	Ray Crosswell	
Page 655 - 659	Sarah Menzies	
Page 660 - 664	The New Zealand Transport Agency / Waka Kotahi	
Page 665 - 669	Auckland Transport	
Page 670 - 680	Barry Blennerhassett and Lorraine Margaret Blennerhassett (Blennerhassett Family)	
Page 681 - 688	Mikel Jon Thorogood (Mike Thorogood)	
Page 689 - 712	KA Waimanawa Limited Partnership and Stepping Towards Far Limited	
Page 713 - 720	John and Sue Wynyard (Wynyard Family)	
Page 721 - 732	R and T Morrison, D Morrison	
Page 733 - 738	Ash Hames and Fiona Rayner	
Page 739 - 742	Watercare Services Limited	
Page 743 - 745	Karen and Stefan Richardson	
Page 746 - 748	Te Tāhuhu o te Mātauranga / Ministry of Education	



Hearing Report for Proposed Plan Change 93: K A Waimanawa Limited Partnership and Stepping Toward Far Limited, Warkworth South, Private plan change to the Auckland Unitary Plan (Operative in part) Section 42A Hearing Report under the Resource Management Act 1991

Report to: Hearing Commissioners

Hearing Date/s: 4 November 2024 to 8 November 2024

File No:

File Reference

Report Author David Wren

Report Peter Vari **Approvers**

Report produced 13 September 2024

Summary of Proposed Plan Change 93, Warkworth South, Warkworth

Plan subject to change	Auckland Unitary Plan (Operative in part), 2016	
Number and name of change	Proposed Plan Change 93 (Private) (Warkworth South) to the Auckland Unitary Plan	
Status of Plan	Operative in part	
Type of change	Private (requested) plan change.	
Applicant	K A Waimanawa Limited Partnership and Stepping Toward Far Limited (collectively referred to as 'the applicant' in this report).	
Committee date of approval (or adoption) for notification	Pursuant to clause 25(2)(b) of part 2 of Schedule 1 of the Resource Management Act 1991, Proposed Plan Change 93 was accepted by the Planning, Parks and Environment Committee on 7 September 2023.	
Parts of the Auckland Unitary Plan affected by the proposed plan change	The plan change request relates to approximately 159ha of land located generally to the south of the existing Warkworth urban area. The proposal is to rezone land zoned Open Space – Conservation and Rural – Rural Production to a mix of residential, business, open space and rural zones and the introduction of two new precincts – Waimanawa and Morrison Heritage Orchard. The Plan Change also seeks a small extension to the Rural Urban Boundary.	
Date draft proposed plan change was sent to iwi for feedback	The applicant has advised that it has engaged with 12 iwi groups. The Manuhiri Kaitiaki Charitable Trust (for Ngāti Manuhiri) was consulted at a very early stage in the preparation of the plan change both in terms of the possible name for this area (Waimanawa) and the proposed urban development of this area. Subsequent to this, the Trust has prepared a Cultural Values Assessment (CVA) which has been addressed in Section Eight of the applicant's request document. On 30 June 2022, an overview of the private plan change request, was sent to the Ngāti Ngāti Tai ki Tāmaki Tribal Trust Ngāti Poa Iwi Trust Ngāti Poa Iwi Trust Ngāti Poa Trust Board Ngāti Whanaunga Incorporated Ngā Maunga Whakahii o Kaipara Development Trust	

	Nasti Matua Ōrskai Truat
	Ngāti Whātua Ōrākei Trust Ta Kananan hai Qattlamant Trust
	Te Kawerau lwi Settlement Trust
	• Te Rūnanga o Ngāti Whātua.
	The following responses were received;
	Te Kawerau a Maki deferred to Ngāti Manuhiri
	 Ngā Maunga Whakahii o Kaipara Development Trust deferred to Ngāti Manuhiri
Date of notification of the proposed plan change and whether it was publicly notified	Full public notification. 26 October 2023
or limited notified	
Plan development process used – collaborative, streamlined or normal	Normal
Submissions received (excluding withdrawals)	41
Date summary of submissions notified	25 January 2024
Number of further submissions received (numbers)	13
Legal Effect at Notification	N/a
Main issues or topics emerging from all submissions	 Support for the plan change from a number of submitters; Effects on particular properties; The provision of infrastructure including water, wastewater, stormwater and transportation; Effects on natural environment/ ecology; Details of the provisions proposed to achieve the above.

Report Author

This report has been prepared by David Wren – Planning Consultant for the Auckland Council.

I am a fully qualified planner and hearing commissioner and am a full member of the New Zealand Planning Institute. I operate a boutique planning consultancy called Planning Policy Research.

I hold a Bachelor of Town Planning from Auckland University and a Post Graduate Diploma in Development Studies from Massey University.

I have over 42 years of planning experience both in New Zealand and Overseas. My work has mainly consisted of sitting on hearing panels appointed by Auckland Council and as a duty commissioner, preparing applications and submissions for resource consent for residential and commercial property, preparing reports on requested Plan Changes for Auckland Council, preparing submissions for clients and attending hearings on the Proposed Auckland Unitary Plan, and presenting expert evidence in the Environment Court in a range of planning matters. I am also a part-time senior lecturer in the Property Department at the University of Auckland.

I have read the Code of Conduct for Expert Witnesses outlined in the Environment Court's Consolidated Practice Note and have complied with it in preparing this report. I also agree to follow the Code when presenting to the Commissioners. I confirm that the issues addressed in this report are within my area of expertise and that I have not omitted to consider material facts known to me that might alter or detract from my opinions.

Note on this s42A Report

This report has been produced to assist the Commissioners appointed to hear and decide on PPC93 and the applicant and those who made submissions on PPC93. The report provides an assessment of PPC93 as notified. It cannot, and does not provide an assessment of PPC93 as it is proposed to be amended by the applicant in response to submissions.

The evidence to be produced by the applicant and submitters may result in changes being proposed to PPC93. If after the circulation of evidence, on behalf of the applicant and submitters, there are significant changes proposed to PPC93, an addendum may be produced to this report, which will assess and advise on those amendments. Any addendum report will be produced prior to the hearing of submissions and in accordance with any direction from the Commissioners.

Contents

1.	BACKGROUND	8
2.	PROPOSED PLAN CHANGE PROVISIONS	10
3.	HEARINGS AND DECISION-MAKING CONSIDERATIONS	12
4.	STATUTORY AND POLICY FRAMEWORK	14
4.1 4.2. 4.3. 4.4. 4.5. 4.6. 4.7. Act	Resource Management Act 1991 National policy statements National environmental standards or regulations Auckland Unitary Plan Regional Policy Statement Auckland Unitary Plan (AUP) The Auckland Plan Any relevant management plans and strategies prepared under any of 37	18 30 36
5.	ANALYSIS OF THE SECTION 32 REPORT AND ANY INFORMATION PROVIDED BY THE APPLICANT	
5.1. reque	Assessment of Effects on the Environment (for private plan change ests)	39
6.	CONSULTATION	59
7.	COMMENTS FROM LOCAL BOARD	60
8.	NOTIFICATION AND SUBMISSIONS	63
8.1.	Notification details	63
9.	LEGAL AND STATUTORY CONTEXT RELEVANT TO SUBMISSION	S63
10.	ANALYSIS OF SUBMISSIONS AND FURTHER SUBMISSIONS	63
11.	OVERALL CONCLUSIONS	113
12.	SECTION 32AA ANALYSIS OF RECOMMENDED CHANGES	114
13.	INTERIM RECOMMENDATION	115
15.	SIGNATORIES	115

Abbreviations

Abbreviations in this report include:

Abbreviation	Meaning
PPC93	Proposed Plan Change 93
RMA	Resource Management Act 1991
AUP	Auckland Unitary Plan
RPS	Regional Policy Statement
AT	Auckland Transport
WSL	Watercare Services Limited

Attachments		
Appendix 1	Plan Change 93	
Appendix 2	Section 32 Report	
Appendix 3	Council Decision to Accept PPC93	
Appendix 4	Submissions and Further Submissions	
Appendix 5	Recommended Changes	
Appendix 6	Specialist Technical Memos	

EXECUTIVE SUMMARY

- 1. PPC93 aims to rezone of approximately 159 ha of Future Urban, Open Space Conservation and Rural Rural Production zoned land on either side of the old State Highway 1 ("Old SH1"), south of Warkworth.
- 2. The private plan change request includes the creation of two new precincts "Waimanawa" and "Morrison Heritage Orchard". This plan change and the precinct provisions generally align with the Warkworth Structure Plan including providing for the Wider Western Link Road (WWLR). The proposal also includes the introduction of the Stormwater management area Flow 1 (SMAF1) Overlay and an amendment to the Rural Urban Boundary (RUB) to the south of Warkworth.
- 3. The normal plan change process set out in Schedule 1 of the Resource Management Act 1991 ('RMA') was adhered to in developing PPC93.
- 4. PPC93 was notified on 26 October 2023 and 41 submissions were received. The requests for changes were notified on 25 January 2024 and with the period for receiving further submissions closing on 9 February 2024.
- 5. Thirteen further submissions were received;
- 6. In preparing for hearings on PPC93, this hearing report has been prepared in accordance with section 42A of the RMA.
- 7. This report considers the issues raised by submissions and further submissions on PPC93. The discussion and draft recommendations in this report are intended to assist the Hearing Commissions, and those persons or organisations that lodged submissions on PPC93. The recommendations contained within this report are not the decisions of the Hearing Commissioners.
- 8. This report also forms part of the council's ongoing obligations, which is, to consider the appropriateness of the proposed provisions, as well as the benefits and costs of any policies, rules or other methods, as well as the consideration of issues raised submissions on PPC93.
- 9. A report in accordance with section 32 of the RMA has also been prepared by the applicant for this purpose and is attached in Appendix 2. This 'Section 32 report' and associated documentation related to PPC93, on the council's website should be also considered in making decisions on PPC93.
- 10. The interim recommendation is that PPC93 be declined. However, if PPC93 is approved it is suggested that the changes set out in Appendix 5 are made.

1. BACKGROUND

- 11. This report concerns a private plan change request from KA Waimanawa Limited Partnership and Stepping Towards Far Limited. (i.e. the "applicant").
- 12. PPC93 aims to rezone of approximately 159 ha of Future Urban, Open Space Conservation and Rural Rural Production zoned land on either side of the old State Highway One ("SH1"), south of Warkworth.
- 13. The private plan change request includes the creation of two new precincts "Waimanawa" and "Morrison Heritage Orchard". PPC93 and the precinct provisions generally align with the Warkworth Structure Plan including providing for the Wider Western Link Road ("WWLR"). The proposal also includes the introduction of the Stormwater management area Flow 1 (SMAF1) Overlay and an amendment to the Rural Urban Boundary (RUB) to the south of Warkworth.
- 14. The Plan Change area is shown on Figure 1 below.

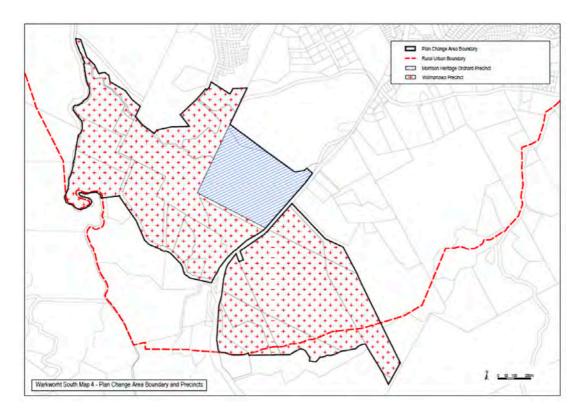
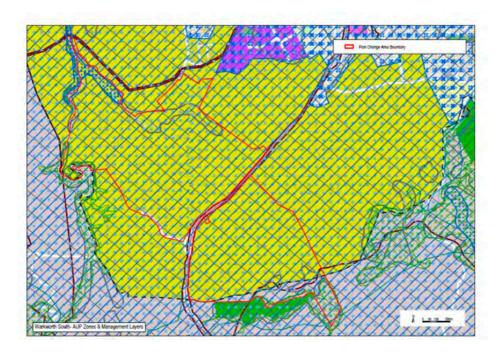


Figure 1 – Plan Change location and precinct boundaries.

- 15. The plan change request relates to approximately 159ha of land zoned Future Urban Zone (FUZ) Open Space Conservation and Rural Rural Production located generally to the south of the existing Warkworth urban area.
- 16. The land the subject of the plan change request, is located towards the south of the existing urban area in Warkworth and is located mostly within the RUB. It is bounded by the Mahurangi River in the west and straddles the previous SH1 and includes a small portion of land outside of the RUB in the south of the area immediately to the east of the old SH1. The plan change area has an irregular shape. It does not include all the land inside of but directly adjoining the RUB in the south. The plan change area is generally separated from the existing urban

- area by undeveloped land that is also zoned Future Urban Zone. As noted above a portion of the land subject to the request is located outside of the RUB, and the request includes an alteration to the RUB to accommodate this.
- 17. The current uses of the land within the Plan Change area are predominantly agriculture based and include an orchard, grazing land and some life-style small holdings. Accordingly, various residential and rural buildings together with some shelter belts are located throughout the area. There are some areas of bush located near and across the RUB in the south-east and in the north and west.
- 18. The topography varies from relatively flat land in the west to gently rolling in the north east with steeper land in the north and the south of the plan change area. As well as the Mahurangi River which borders the western boundary of the land, there are a number of other smaller water courses that predominantly run east to west towards the Mahurangi.
- 19. The land within the plan change area is currently not served for reticulated water, wastewater and stormwater infrastructure.
- 20. The only significant road in the plan change area is the old State Highway 1 which effectively bisects the plan change area into the western and eastern portions. This road is now no longer a state highway, with that status being revoked on 30 June 2024 now that the motorway has been extended to the north of Warkworth. The motorway runs to the West of the Plan Change area. (in this report I will refer to that road as "Old State Highway 1" or "Old SH1").
- 21. Land within the Plan Change area is generally subject to the High-Use Stream Management Areas Overlay and the High-Use Aquifer Management Area Overlay. Two areas (i.e., along and adjacent to the previous SH1 and a small area on the western boundary near the Mahurangi) are also subject to a Notice of Requirement for new arterial roads.
- 22. Figure 2 below sets out the current zoning of the land and overlays that apply in the area



is shown as a Red Line. The yellow zone is the Future Urban Zone and the light brown/mauve zone is the Rural/ Rural Production Zone).

2. PROPOSED PLAN CHANGE PROVISIONS

23. Figure 3 below sets out the applicant's proposed zoning.

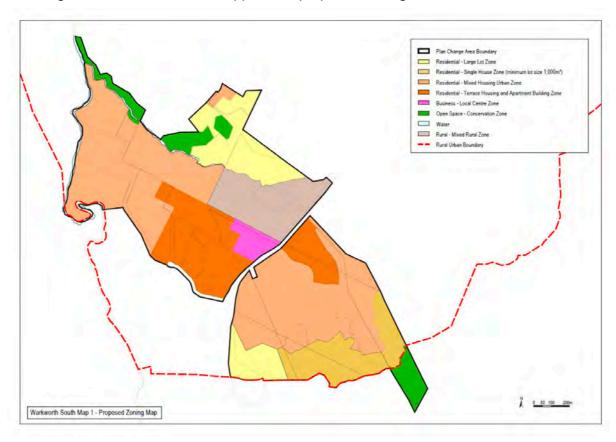


Figure 3 – Proposed Zoning

- 24. PPC93 also proposes to introduce the Stormwater Management Area Flow1 control over the Plan Change area SMAF.
- 25. In addition to the change in zoning proposed two new precincts are proposed as follows.
 - (a) The Waimanawa Precinct. This precinct will provide for residential growth in the Warkworth South area while also providing for a range of open spaces and a local centre. This precinct covers most of the plan change area and includes land on both sides of the old SH1. The proposed zonings with the precinct are;
 - Business Local Centre
 - Residential Large Lot
 - Residential –Single House.
 - Residential Mixed Housing Urban

- Residential Terrace Housing and Apartment Buildings
- Open Space Conservation
- (b) The Morrison Heritage Orchard Precinct. This precinct applies to land in the north of the plan change area immediately to the west of the old SH1. The purpose of this precinct to ensure the retention, operation, and enhancement of the existing Morrison's Orchard, located at 1773 SH1, while also enabling appropriate and sympathetic residential, tourist and visitor activities. The proposed zonings for the precinct are;
 - Rural Mixed Rural
 - Residential Large Lot.
- 26. PPC93 also contains six Precinct Plans which are cross referenced to provisions within the plan change including;
 - Waimanawa Precinct Plan 1 Spatial provisions
 - Waimanawa Precinct Plan 2 Environment
 - Waimanawa Precinct Plan 3 Transportation
 - Waimanawa Precinct Plan 4 Indicative Open Space
 - Waimanawa Precinct Plan 5 Bat Flight Corridor
 - Morrison Orchard: Precinct Plan
- 27. The reasons given by the applicant for the plan change request include the following;

The purpose of the plan change is to re-zone land in Warkworth South to:

- (a) Provide for the continuation and expansion of the Morrison Heritage Orchard and further development of this site with supporting activities and limited residential development.
- (b) Enable the urban development of the remainder of the area (referred to as Waimanawa) to proceed generally in accordance with the outcomes sought through the Warkworth Structure Plan.
- (c) The plan change is focussed on those planning zones, objectives, policies and rules which are essential to allow for the development of the land and its shift from rural activities to urban (except for Morrison Heritage Orchard).
- (d) The plan change follows the standard approach of introducing precincts into the AUP for development of greenfields and currently Future Urban zoned land and for specific sites which have a unique land use activity (for example, the Morrison Heritage Orchard).
- 28. The applicant provided the following information to support the plan change request:
 - Private plan change request, including drafted changes to the Auckland Unitary Plan
 - section 32 evaluation report
 - specialist reports:

- Planning Report by Osborne Hay (North) Ltd and Tattico Ltd.
- Masterplan and Urban Design Report by Reset Urban Design Ltd (Appendix Two).
- Visual and Landscape Assessment by Reset Urban Design Ltd (Appendix Four).
- Engineering and Infrastructure Assessment by Maven Associates (Appendix Five).
- Geotechnical Assessment by LDE (Waimanawa Valley and 1768 State Highway One) (Appendix Six).
- Geotechnical Assessment by CMW Geosciences (Waimanawa Hills) (Appendix Six).
- Land Contamination Report by LDE (Waimanawa Valley) (Appendix Seven).
- Land Contamination Report by Focus Environmental Services Limited (Waimanawa Hills) (Appendix Seven).
- Integrated Transport Assessment by Traffic Planning Consultants Limited (Appendix Eight).
- Ecological Baseline Assessment by Bioresearches Ltd (Appendix Nine).
- Assessment of Economic Effects by Market Economics Limited (Appendix Ten).
- Archaeological Assessment by Clough and Associates (Appendix Eleven).
- o Arborist Report by CWAL (Appendix Fourteen).
- Stormwater Modelling Report by Maven Associates (Appendix Fifteen).
- Soil and Resources Report by Hanmore Land Management (Appendix Sixteen).
- A cultural values assessment has been prepared for the plan change and provided by the Manuhiri Kaitiaki Charitable Trust and is included in Appendix Twelve.
- A draft Stormwater Management Plan for the Warkworth South plan change area is included in Appendix Thirteen.

3. HEARINGS AND DECISION-MAKING CONSIDERATIONS

- 29. Clause 8B (read together with Clause 29) of Schedule 1 of RMA requires that a local authority shall hold hearings into submissions on proposed private plan change requests.
- 30. Section 34 of the RMA provides for a local authority to delegate its functions, powers or duties under the RMA.
- 31. The Council has delegated its authority to three independent hearing commissions to hear and make decisions on PPC93. This delegation includes the authority to determine decisions on submissions on a plan change, and the

- authority to approve, decline, or approve with modifications, a private plan change request.
- 32. These hearing commissioners will not be recommending a decision to the council but will be issuing the decision directly.
- 33. This report summarises and discusses submissions received on PPC93. It makes recommendations on whether to accept, in full or in part; or reject, in full or in part; each submission. This report also recommends what amendments can be made to address matters raised in submissions if considered appropriate. Any conclusions or recommendations in this report are not binding to the hearing commissioners.
- 34. This report also includes views of the Rodney Local Board on the content of PPC93.
- 35. The Hearing Commissioners will consider all the information in submissions together with evidence presented at the hearing.
- 36. This report draws and relies on technical advice provided by the following technical experts contained in Appendix X of this report:

Author(s)	Name/s
Technical expert- transportation	Martin Peake – Consultant – Progressive Transport Solutions Limited
Technical expert – Arboricultural	Rhys Caldwell – Auckland Council Specialist Arborist
Technical expert – Geotechnical	Dr Frank Havel- Geotechnical; Practice Lead- Resilient Land & Coasts (RLC), Auckland Council
Technical expert – Urban Design	John Stenberg, Principal Urban Designer, Tamaki Makaurau Design Ope
Technical expert- Landscape Assessment	Gabrielle Howdle, Principal Landscape Architect, Tāmaki Makaurau Design Ope
Technical expert – Economic Assessment	Derek Foy, Director, Formative Limited
Technical expert – Historic Heritage (Archaeological)	Rebecca Ramsay – Senior Specialist: Heritage, Heritage Unit, Plans and Places
Technical expert – Historic Heritage (Built Heritage)	Megan Walker pecialist: Historic Heritage: Heritage, Heritage Unit, Plans and Places

Technical experts - Stormwater

Amber Tsang – Consultant Planner (on behalf of Auckland Council Healthy Waters); and

Kedan Li – Senior Healthy Waters Specialist, Auckland Council Healthy Waters

Technical expert – Open Space and Parks Planning

Gerard McCarten – Planning Manager – Sentinal Planning for Parks Planning – Parks and Community Facilities

Technical expert – Development Engineering

Steve Cavanagh – Regulatory Engineering Auckland Council

Technical expert – Infrastructure Funding

Ian Kloppers - Head of Infrastructure Funding & Development Strategy – Auckland Council.

Technical expert - Ecology

Rue Statham - Senior Ecologist - Ecology Advice
Team – Auckland Council

4. STATUTORY AND POLICY FRAMEWORK

- 37. Private plan change requests can be made to the council under Clause 21 of Schedule 1 of the RMA. The provisions of a private plan change request must comply with the same mandatory requirements as council-initiated plan changes, and the private plan change request must contain an evaluation report in accordance with section 32 and clause 22(1) in Schedule 1 of the RMA
- 38. The following sections summarise the statutory and policy framework, relevant to PPC93.

4.1 Resource Management Act 1991

4.1.1 Plan change matters – regional and district plans

39. In the development of a proposed plan change to a regional and/ or district plan, the RMA sets out mandatory requirements in the preparation and process of the proposed plan change. Table 4.1 below summarises matters for plan changes to regional and district plan matters. PPC93 does not propose any changes to the regional provisions of the AUP.

Relevant Act/ Policy/ Plan	Section	Matters
Resource Management Act 1991	Part 2	Purpose and intent of the Act

Relevant Act/ Policy/ Plan	Section	Matters
Resource Management Act 1991	Section 32	Requirements preparing and publishing evaluation reports. This section requires councils to consider the alternatives, costs and benefits of the proposal
Resource Management Act 1991	Section 80	Enables a 'combined' regional and district document. The Auckland Unitary Plan is in part a regional policy statement, regional coastal plan, regional plan and district plan to assist Council to carry out its functions as a regional council and as a territorial authority
Resource Management Act 1991	Schedule 1	Sets out the process for preparation and change of policy statements and plans by local authorities

Table 4.1 Plan change matters relevant to regional and district plans

40. The mandatory requirements for plan preparation are comprehensively summarised by the Environment Court in *Long Bay-Okura Great Park Society Incorporated and Others v North Shore City Council* (Decision A078/2008) ¹, where the Court set out the following measures for evaluating objectives, policies, rules and other methods. This is outlined in Box 1.

Box 1

A. General requirements

15

¹ Subsequent cases have updated the Long Bay summary, including *Colonial Vineyard v Marlborough District Council* [2014] NZEnvC 55.

- 1. A district plan (change) should be designed to accord with and assist the territorial authority to carry out its functions so as to achieve, the purpose of the Act.
- 2. When preparing its district plan (change) the territorial authority must give effect to any national policy statement or New Zealand Coastal Policy Statement.
- 3. When preparing its district plan (change) the territorial authority shall:
- (a) have regard to any proposed regional policy statement;
- (b) not be inconsistent with any operative regional policy statement.
- 4. In relation to regional plans:
- (a) the district plan (change) must not be inconsistent with an operative regional plan for any matter specified in section 30(1) [or a water conservation order]; and
- (b) must have regard to any proposed regional plan on any matter of regional significance etc.:.
- 5. When preparing its district plan (change) the territorial authority must also:
- have regard to any relevant management plans and strategies under other Acts, and to any relevant entry in the New Zealand Heritage List/ Rārangi Kōrero and to various fisheries regulations; and to consistency with plans and proposed plans of adjacent territorial authorities:
- take into account any relevant planning document recognised by an iwi authority; and
- not have regard to trade competition;
- 6. The district plan (change) must be prepared in accordance with any regulation (there are none at present);
- 7. The formal requirement that a district plan (change) must also state its objectives, policies and the rules (if any) and may state other matters.

B. Objectives [the section 32 test for objectives]

8. Each proposed objective in a district plan (change) is to be evaluated by the extent to which it is the most appropriate way to achieve the purpose of the Act.

C. Policies and methods (including rules) [the section 32 test for policies and rules]

- 9. The policies are to implement the objectives, and the rules (if any) are to implement the policies;
- 10. Each proposed policy or method (including each rule) is to be examined, having regard to its efficiency and effectiveness, as to whether it is the most appropriate method for achieving the objectives of the district plan taking into account:
 - a. the benefits and costs of the proposed policies and methods (including rules); and
 - b. the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

D. Rules

11. In making a rule the territorial authority must have regard to the actual or potential effect of activities on the environment.

E. Other statutes:

- 12. Finally territorial authorities may be required to comply with other statutes. Within the Auckland Region they are subject to:
- the Hauraki Gulf Maritime Park Act 2000;

•

4.1.2 Resource Management Act 1991- District matters

41. There are mandatory considerations in the development of a proposed plan change to district plans and rules. Table 3 below summarises district plan matters under the RMA, relevant to PPC93.

Table 4.2 Plan change- district plan matters under the RMA

Relevant Act/ Policy/ Plan	Section	Matters
Resource Management Act 1991	Part 2	Purpose and intent of the Act
Resource Management Act 1991	Section 31	Functions of territorial authorities in giving effect to the Resource Management Act 1991
Resource Management Act 1991	Section 73	Sets out Schedule 1 of the RMA as the process to prepare or change a district plan
Resource Management Act 1991	Section 74	Matters to be considered by a territorial authority when preparing a change to its district plan. This includes its functions under section 31, Part 2 of the RMA, national policy statements, other regulations and other matter
Resource Management Act 1991	Section 75	Outlines the requirements in the contents of a district plan
Resource Management Act 1991	Section 76	Outlines the purpose of district rules, which is to carry out the functions of the RMA and achieve the objective and policies set out in the district plan. A district rule also requires the territorial authority to have regard to the actual or potential effect (including adverse effects), of activities in the proposal, on the environment

4.2. National policy statements

- 42. Pursuant to Sections 74(1)(ea) and 75 of the RMA the relevant national policy statements (NPS) must be considered in the preparation, and in considering submissions on PPC93.
- 43. The applicant considers that the following are relevant to the assessment of PPC93.
 - The National Policy Statement on Urban Development 2020 updated May 2022 (NPS-UD)
 - National Policy Statement on Freshwater Management 2020 (NPS-FM)
 - New Zealand Coastal Policy Statement 2010 (NZCPS)
 - National Policy Statement for Highly Productive Land 2022 (NPS-HPL)
- 44. The applicant has not identified the National Policy Statement for Indigenous Biodiversity as being relevant to the consideration of PPC93.

The National Policy Statement on Urban Development (NPS-UD)

- 45. The application discusses the NPS-UD on pages 41 to 49 of the request document.
- 46. The NPS UD provides direction to decision-makers under the Act on planning for urban environments. The NPS-UD sets out objectives and policies that apply to all decision-makers when making planning decisions that affect an urban environment.

Applicant's assessment

- 47. The applicant's overall assessment is that PPC93 is consistent with the NPS-UD because;
 - Objective 1 is New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.
- 48. The applicant states that PPC93 is generally consistent with the Warkworth Structure Plan and provision is being made for the required infrastructure for the urban development of Warkworth South. Accordingly the applicant considers PPC93 gives effect in part to Objective 1 in terms of the continued expansion of Warkworth as a well functioning urban environment.
 - Objective 4 New Zealand's urban environments, including their amenity values, develop and change over time in response to the diverse and changing needs of people, communities and future generations.
- 49. The applicant considers that the change proposed for Warkworth South is consistent with this objective.

Policy 10:

Tier 1. 2 and 3 local authorities

(a) that share jurisdiction over urban environments work together when implementing this National Policy Statement; and

- (b) Engage with providers of development infrastructure and additional infrastructure to achieve integrated land use and infrastructure planning; and
- (c) Engage with the development sector to identify significant opportunities for urban development.
- 50. The applicant states that Consultation with infrastructure providers has been undertaken through the plan change development and an infrastructure package funding agreement is being developed to provide for the funding and provision of the required infrastructure for Waimanawa.
 - Objective 2: Planning decisions improve housing affordability by supportive competitive land and development markets.
- 51. The applicant states that a range of zonings are proposed which provide for a diversity of lot sizes and housing typology options which then provide different price points for housing to suit different sectors of the community.

Policy 1:

Planning decisions contribute to well-functioning urban environments, which are urban environments that.

as a minimum:

- a. have or enable a variety of homes that:
- i. meet the needs, in terms of type, price, and location, of different households; and
- ii. enable Māori to express their cultural traditions and norms; and
- b. have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and
- c. have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and
- d. support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and
- e. support reductions in greenhouse gas emissions; and
- f. are resilient to the likely current and future effects of climate change.
- 52. The applicant states that;
 - PPC93 implements a range of zones and a range of housing typologies;
 - PPC93 will provide additional choice for residents;
 - The area will be relatively self-contained so residents can meet their immediate needs within the two precincts:
 - The location of the plan change area, the change of SH1 to an urban arterial, the opening of the Ara Tuhono - Puhoi-Warkworth Motorway and the proposed internal transportation networks will ensure Waimanawa is both internally well-connected as well as having safe and efficient connections to the remainder of Warkworth and further afield
 - Flood modelling has been undertaken and this has taken account of climate change. The development of Waimanawa can be undertaken where flood risk is avoided, and downstream flood risks are not magnified.

Objective 5:

Planning decisions relating to urban environments, and FDSs, take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi)

Policy 9:

Local authorities, in taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) in relation to urban environments, must:

- (a) involve hapū and lwi in the preparation of RMA planning documents and any FDSs by undertaking effective consultation that is early, meaningful and, as far as practicable, in accordance with tikanga Māori; and
- (b) when preparing RMA planning documents and FDSs, take into account the values and aspirations of hapū and lwi for urban development; and
- (c) provide opportunities in appropriate circumstances for Māori involvement in decision-making on resource consents, designations, heritage orders, and water conservation orders, including in relation to sites of significance to Māori and issues of cultural significance; and
- (d) operate in a way that is consistent with Iwi participation legislation.
- 53. The applicant states that it has engaged with the Manuhiri Kaitiaki Charitable Trust who have subsequently prepared a Cultural Values Assessment. To date, Ngāti Manuhiri are generally supportive of the proposed Plan Change

Objective 6: Local authority decisions on urban development that affect urban environments are:

- (a) integrated with infrastructure planning and funding decisions; and
- (b) strategic over the medium term and long term; and
- (c) responsive, particularly in relation to proposals that would supply significant development capacity.
- 54. The applicant states that zoning may make the land available for development prior to the timing in the non-statutory Future Urban Land Supply Strategy (FULSS),² the timing difference is not significant and the proposed infrastructure funding package will ensure that the required infrastructure is in place to support the urban development.

Policy 6:

When making planning decisions that affect urban environments, decision-makers have particular regard to the following matters:

- (a) the planned urban built form anticipated by those RMA planning documents that have given effect to this National Policy Statement
- (b) that the planned urban built form in those RMA planning documents may involve significant changes to an area, and those changes:
 - (i) may detract from amenity values appreciated by some people but improve amenity

values appreciated by other people, communities, and future generations, including by

providing increased and varied housing densities and types; and

- (ii) are not, of themselves, an adverse effect
- (c) the benefits of urban development that are consistent with well-functioning urban environments (as described in Policy 1)
- (d) any relevant contribution that will be made to meeting the requirements of this National Policy Statement to provide or realise development capacity
- (e) the likely current and future effects of climate change.
- 55. The applicant states that PPC93 can be approved in respect of this policy as;
 - PPC93 is consistent with the Warkworth Structure Plan;
 - The timing difference from the FULSS is not significant.

_

² The FULSS was replaced by the Future Development Strategy in November 2023

- PPC93 provides the framework for the development of a well functioning urban environment;
- Consideration has been given to climate change.

Policy 8:

Local authority decisions affecting urban environments are responsive to plan changes that would add significantly to development capacity and contribute to well-functioning urban environments, even if the development capacity is:

- (a) unanticipated by RMA planning documents; or
- (b) out-of-sequence with planned land release.
- 56. The applicant states that The FULSS has identified that this part of Warkworth is to be development ready by 2028-2032. In the event this plan change is approved then the area should now be development ready by early 2025. Although this is earlier than the FULSS, with an infrastructure funding agreement in place, there is no reason why this part of Warkworth cannot now be developed.

Objective 8:

New Zealand's urban environments:

- (a) support reductions in greenhouse gas emissions; and
- (b) are resilient to the current and future effects of climate change

Policy 1:

Planning decisions contribute to well-functioning urban environments, which are urban environments that,

as a minimum:

- (a) have or enable a variety of homes that:
- (i) meet the needs, in terms of type, price, and location, of different households; and
- (ii) enable Māori to express their cultural traditions and norms; and
- (b) have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and
- (c) have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and
- (d) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and
- (e) support reductions in greenhouse gas emissions; and
- (f) are resilient to the likely current and future effects of climate change.
- 57. The applicant states that PPC93 achieves Objective 8 and Policy 1.

Comment

- 58. It is considered that in many respects, PPC93 gives effect to the NPS:UD. It provides for urban development on land identified for future urban development (with the exception of a small area of rural zoned land) and it is generally consistent with the Warkworth Structure Plan prepared by the Council.
- 59. PPC93 provides standard residential zones that provide adequate levels of amenity consistent with other parts of the AUP. It will also provide an increase in the supply of residential land. Subject to a more detailed discussion below provision is made to manage the effects of climate change which in this area are largely related to manging flooding.

- 60. There are a number of areas where it is considered that PPC93 may not give effect to the NPS-UD or where changes may be needed.
- 61. Firstly the integration of development with infrastructure is not clear cut. Objective 6 of the NPS is that local authority decisions on urban development that affect urban environments are integrated with infrastructure planning and funding decisions. PPC93 contains provisions that purport to tie development to the delivery of infrastructure. With some changes made, these provisions are likely to be suitable to ensure development does not occur ahead of infrastructure and by doing so create some degree of integration. However, it is considered that for such provisions to be effective in providing integration, there has to be some certainty that the infrastructure will in fact be able to be provided. There is in my view little point in zoning land that will not be serviced for many years, as providing live zoned land without the ability to develop will not achieve a well functioning urban environment and is not a sustainable use of resources.
- 62. While the applicant anticipates that it can provide water and wastewater infrastructure the submission from Watercare Services places doubt on this. The Council's development engineer (Steve Cavanagh) and Head of Infrastructure Funding & Development Strategy (Ian Kloppers) have provided some background information concerning water and wastewater infrastructure. This information and comments from Mr Cavanagh have identified that a substantial upgrading of the Snells Beach wastewater plant and other infrastructure will be required to cater for the demand from PPC93 well ahead of when upgrades are planned to be provided. The costs of providing the necessary upgrades to the WSL plant are significant and appear to be beyond the scope of the applicant to provide. There are no current plans or funding for this work.
- 63. The information provided by Mr Kloppers indicates that the current upgrade of the Snells Beach wastewater plant is not sufficient to serve PPC93 and that a further or second stage upgrade would be required. I understand this second stage is contemplated by WSL, but is planned to be completed by 2040. WSL is not planning to undertake the upgrade before then. The cost of upgrading the plant has been initially estimated to be in the region of \$200-\$300 million. The cost of a feasibility study to arrive at more certain costings would be in the order of \$1 million and will take 12 to 18 months to complete. I expect that WSL and the applicant will provide more detail about this at the hearing.
- 64. In respect of water supply the existing consented water take is for 15,000 people. A new water source will be required to go beyond the existing consent limit. The water treatment plant has been constructed so that it can be upgraded in stages in line with the consent conditions which provide for the stepped increases. Currently the WTP is not planned to be upgraded to the final stage until 2040 at which stage it would be able to serve Warkworth South.
- 65. The Council has also received a letter from the applicant dated 29 May 2024⁴ that advises of the applicant's preferred options for addressing these infrastructure matters. In respect of water supply the applicants propose either to establish a water bore, treatment plant and reservoir within Warkworth South or be part of a process to fund WSL to augment the current supply. In respect of wastewater the applicant suggests either a fully independent system servicing Warkworth South provided by the applicant or an expanded wastewater network

-

³ Contained in Appendix 6

⁴ See Appendix 6

- at the Watercare plant, but at no financial impact on Auckland Council's rating base. The applicant suggests the option of Infrastructure Financing Fund (IFF) procedures for Warkworth to fund the WSL upgrade.
- 66. At the time of writing this report there is little in the way of detail of these proposals.⁵ It is expected that the applicant will provide additional detail in their evidence to hearing.
- 67. In terms of decision making the applicant notes that no homes can be occupied until such time as there is reticulated water and wastewater system (excluding Residential Large Lot zone) and the applicant will demonstrate that there are viable solutions to resolve this.
- 68. In my view for the integration of the proposed land use with the provision of infrastructure to occur the Commissioners should have a degree of certainty not only that there is a viable option for infrastructure (i.e. a technical and financially sustainable option exists) but that there is some certainty that the option will in fact be implemented. The applicant has suggested some options, but I consider that at this time, there is little information about their feasibility and they are certainly outside of the current planned schedule of WSL. At this stage I have reservations that the full necessary infrastructure can and will be provided. This is due in part to lack of detail about some of the options (for example where will a standalone wastewater treatment plant be located, what resource consents will be required and what is the likelihood that any consents will be granted, how long will such a plant run for, who will manage it and what happens if the entity responsible for the plant fails and additionally in respect of water supply is there a viable supply).
- 69. At a plan change level of decision making there is in my experience a level of tension between the detail necessary to make decisions and the uncertainty of planning for futures that are someway off. Given that PPC93 proposes an early release of FUZ land for urban purposes, and that infrastructure provision is a significant issue in this plan change, I consider that it is important that there is sufficient detail to give a degree of certainty that the land can and will be serviced. This view in my opinion is backed up by the NPS-UD.
- 70. Policy 8 of the NPS:UD in my opinion is relevant. As noted this policy provides for the consideration of out of sequence plan changes if they add significantly to development capacity and contribute to well-functioning urban environments. The criteria for what constitutes significant development capacity has yet to be included within the AUP. It is my understanding that the Council has suggested alternative wording for such criteria as part of PC80 but that a hearing before the Environment Court on such matters is yet to take place. The criteria proposed by the Council is detailed and covers matters such as adequacy of current supply, location, land use, infrastructure, funding and timing. Without putting too much weight on it (as it is still a proposal), the infrastructure need is recognised in the Council's proposed criteria and in alternative criteria proposed by the appellant. The proposed Council criteria also examines whether there is sufficient supply of land zoned and infrastructure ready land for the next 10 years. According to the Housing and Business Capacity Assessment for the Auckland region⁶ there is a surplus of capacity of such land in the short, medium and long terms.

⁶ Housing and Business Development Capacity Assessment for the Auckland region 2023 Table 31.

⁵ Memo Ian Kloppers – 23 July 2024

- 71. PPC93 provides a fair amount of additional capacity but in my view can only be considered effective capacity if it is serviced. If it is not serviced, then there is no additional capacity. The term 'well functioning urban environment is defined in Policy 1 of the NPS:UD. This definition does not make reference to the provision of infrastructure, however the matters that are included, such as homes that meet the needs of different households, cannot be achieved if the land is not serviced. In my view a well functioning urban environment is one that is serviced.
- 72. Objective 6 of the NPS-UD states that local authority decisions on urban development that affect urban environments are integrated with infrastructure planning and funding decisions, strategic over the medium term and long term; and responsive, particularly in relation to proposals that would supply significant development capacity. This objective requires that decision making on land use (i.e. PPC93) is integrated with infrastructure and funding decisions. I consider that this integration in not apparent in this instance.
- 73. At the time of writing this report based on the discussion above, I consider that there is insufficient evidence to show that the land within the plan change area can and will be adequately serviced with water and wastewater infrastructure. I consider that the plan change does not sufficiently provide for the integration of land use and infrastructure.
- 74. The second area where there may be some inconsistency with the NPS:UD is in respect of reductions in greenhouse gas emissions as required by Objective 8. The application's analysis of the NPS-UD does not address this in any significant way other than to mention that the provision of the Morrison Heritage Orchard Precinct will provide a degree of self containment in respect of recreational opportunities which is positive in terms of greenhouse gas emissions and in the longer term the provision of a public transport centre has the potential to reduce reliance on private car travel.
- 75. In response to a request for additional information about this matter the applicant notes that it considers that the proposal will positively contribute to the reduction of greenhouse gases with the provision of a series of walkable neighbourhoods with safe and accessible routes to the planned local centre and transport hub. No analysis of the greenhouse gas production has been provided and I understand that there is no funding for the development of a transport hub in the near future.
- 76. In my view the applicant should explain in greater detail how PPC93 supports a reduction in greenhouse gas emissions and the options it has explored in this respect.

Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021.

- 77. Section 77G of the RMA requires that every relevant residential zone of a specified territorial authority must have the Medium Density Residential Standards (MDRS) incorporated into that zone. The MDRS are set out in Schedule 3A of the RMA. The term relevant residential zone in the context of Warkworth includes all residential zones except a large lot residential zone.
- 78. The application states that the PPC93 has adopted the standard zones as modified by the Medium Density Residential Standards (MDRS) provisions as set

out in PC78. The zone provisions are to be read as those modified by PC78 and are there different from the zoning particularly the Mixed Housing Suburban Zone as depicted on the Warkworth Structure Plan.

- 79. The application has also identified a number of qualifying matters including the following;
 - a more restrictive front yard rule for residential sites adjacent to the WWLR and Green Avenue
 - A more restrictive rear yard rule in part of the Residential- Mixed Housing Urban Zone to provide for a Bat Flight Corridor
 - A more restrictive rear yard rule for residential sites adjacent to the Avice Miller Reserve is proposed (3m rather than 1m).
 - Residential Single House zoned area western part (adjacent to Avice Miller Scenic Reserve): and A more restrictive minimum lot size in the Residential – Single House zone; and
 - A more restrictive maximum height limit in the Landscape Protection Area (Eastern Escarpment) Residential – Single House Zoned Area - eastern part bush covenant:
 - A more restrictive minimum landscaping requirement in the Landscape Protection Areas (Northern and Eastern Escarpments).
 - Differing riparian yards and planting requirements alongside some streams.
- 80. The application provides an assessment of each of these matters.

Comment

81. Subject to further comments discussed in the assessment of submissions part of this report in respect to submission point 24.17 from the applicant relating to the MDRS, it appears as if these proposed qualifying matters are justified however the explanations, perhaps lack detail as required by s77L particularly in respect of an appropriate range of options considered to achieve the greatest heights and densities permitted by the MDRS while managing the characteristics identified. While the qualifying matters are generally supported it will likely assist decision making if an alternatives assessment is provided in evidence.

National Policy Statement for Freshwater Management 2020 (NPSFM).

- 82. The applicant has provided an assessment of PPC93 against the relevant provisions of the NPSFM. This assessment notes as follows;
 - The plan change has been developed to ensure that Waimanawa faces, respects and protects the Mahurangi River.
 - Changes put forward in this plan change relate to the activity status and therefore the process through which future resource consent applications are dealt with. Very broad matters of discretion and assessment criteria are introduced to enable adequate and appropriate control.
 - The primary streams (including the upper reaches of the Mahurangi River) within the plan change area are identified for retention in the Precinct Plan.
 Over time the riparian margins will be protected either through esplanade reserves, esplanade strips or riparian yards.
 - Some watercourses have been identified which may require future modification or reclamation to provide for the safe and efficient urban development within Waimanawa.

- No natural wetlands are proposed to be removed and existing natural wetlands will be preserved and can be protected through future subdivisions. A constructed wetland has been developed within Waimanawa over recent years and it is proposed that this is retained in part and incorporated into the stormwater management system.
- A treatment train approach for stormwater management is proposed to ensure run-off into the upper reaches of the Mahurangi River are appropriately treated. This will ensure the water quality objectives of E1 and E2 of the AUP are achieved.
- No water use allocation is sought. Waimanawa will be serviced by a potable water supply from the existing Warkworth potable water network.
- No changes to the regional provisions of the AUP are proposed.
- Overall, it is considered that the approach taken will enable for the efficient development of a well-functioning environment while protecting and enhancing the existing freshwater network within the Waimanawa catchment.

Comment

- 83. Consideration of the PPC93 under the NPSFM requires an ecological assessment and an assessment of stormwater matters.
- 84. In respect of ecological matters PPC93 has been assessed by Rue Statham Senior Ecologist at Auckland Council in his assessment dated 23 April 2024. Mr Statham considers that there are deficiencies in PPC93. Specifically he notes that:
 - 6.3 The private plan change is not, however, consistent with the direction and framework of National Policy Statement for Freshwater Management 2020, National Environmental Standards for Freshwater Regulations 2023, and the Unitary Plan for wetlands, or buffers around wetlands. Buffers are not proposed for wetlands. A 10m buffer for each of the wetlands is recommended, as well as avoidance of wetland reclamation for the Western Link Road.
 - 6.4 Whilst the protection of some streams is provided, those the applicant has shown on the Precinct Plan, the private plan change appears inconsistent with National Policy Statement for Freshwater Management 2020, National Environmental Standards for Freshwater Regulations 2023, and the Unitary Plan (Chapter E3). I believe this is relevant as the statutory considerations afford protection, maintenance, and preferable enhancement unless reclamation has no practicable alterative. The applicant has provided no evidence to support reclamation of some of the streams in a green field development.
- 85. Mr Statham has made a number of recommendations for changes to the precinct provisions in his assessment which it is understood would resolve his concerns regarding freshwater management. I also note that Rule lxxx.6.12 requires 10m planting around wetlands identified on Precinct Plan 1 but that Mr Statham considers that additional wetlands should be identified.
- 86. There also appear to be some matters of disagreement between Mr Statham and the applicant in respect of some of the details. It is anticipated that these matters will be addressed in evidence by the applicant.

- 87. There appears to be some scope to make the changes recommended by Mr Statham as these would appear to partially meet the concerns in the submission from Paula Anderson (Submission 9).
- 88. I note also that the applicant's assessment does not address some of the potential changes proposed by the applicant to address some of the infrastructural issues identified above in the assessment under the NPS-UD. For example the applicant states that no water use allocation is sought. However, if an onsite water bore is provided to supply water, then water use allocation will be a matter that will require assessment.

New Zealand Coastal Policy Statement 2010 (NZCPS)

- 89. The application states that while the proposed plan change area does not have direct frontage to the coastal environment, stormwater discharges from the plan change will occur into the upper reaches of the Mahurangi River, which lead into the Mahurangi Harbour.
- 90. Therefore, the provisions that relate to ecological sustaining ecosystems, indigenous biodiversity, Mana Whenua, enhancement of public walking access, protection of values of the coastal environment, (Objectives 1, 3, 4, 6 and the associated policies 1, 2, 4, 7, 11, 18, 19, 21 and 23 of the NZCPS) have some relevance to the plan change.
- 91. The applicant's assessment is that these matters are addressed through the PPC93 provisions or though resource consents required by existing provisions within the AUP:OP.

Comment

92. It is considered that the applicant's assessment is generally appropriate except for some matters raised in the ecological assessment and the stormwater assessment by Council specialists [see Appendix 6] Subject to those matters being satisfactorily resolved it is considered that PPC93 will give effect to the NZCPS.

National Policy Statement for Highly Productive Land 2022 (NPS-HPL)

- 93. The applicant has undertaken its own mapping of the soils within PPC93 and concluded that the plan change area has a mix of class 3 and class 4 soils with only a small area (3.92ha or 3%) being prime soil.
- 94. The applicant acknowledges that an assessment of the objectives and policies is required. The applicant concludes that the urban development of the land is not contrary to the NPS-HPL.

Comment.

95. While the applicant has undertaken its own assessment of the LUC classes on the land recent caselaw has indicated that until the Council produces its own mapping of land use classes as required by the NPS, then the standard LUC maps should be used to determine soil classifications for the purposes of the NPS and that the status of land as highly productive land needs to be determined as

- at the commencement date of the NPS-HPL (17 October 2022). Such maps have not yet been provided by the Council.
- 96. The Landcare Research Maps (New Zealand Land Resource Inventory), show that much of the land within PPC93 is class 3 land as shown below.

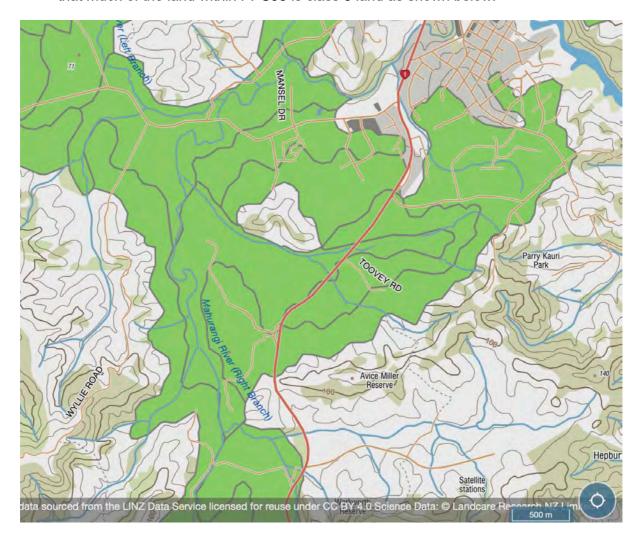


Figure – add boundary

- 97. However it is considered that the NPS has little relevance to PPC93. The most relevant policy is Policy 5 which states that the urban rezoning of highly productive land is avoided, except as provided in this National Policy Statement, does not apply to PPC93. This is because the term "urban rezoning" is specifically defined as being changing from a general rural or rural production zone to an urban zone. All the land within the RUB is zoned FUZ and accordingly is not urban rezoning, and the land outside the RUB is not identified as being highly productive.
- 98. Additionally on 17 October 2022 (the commencement date of the NPS-HPL) the land within the RUB was identified in the then FULSS for urban development within 10 years, which meant it fell within the definition of "land identified for future urban development".
- 99. Clause 3.4(1) of the NPS-HPL refers to mapping of general rural or rural production zone land. Clause 3.4(2) outlines that land that at the commencement

date is identified for future urban development must not be mapped as highly productive land. Future Urban Zone is not an urban zone but nor is it a rural zone. It identifies land that is suitable for future urbanisation and is a holding zone enabling primarily rural activities until live urban zonings are applied. A common sense approach would seem to be that the land within the FUZ is not highly productive for the purposes of the NPS. The rezoning in PPC93 of a small area of land outside the RUB does not relate to highly productive land.

National Policy Statement for Indigenous Biodiversity (NPS-IB)

100. The applicant does not refer to the NPS-IB. This is likely to be because it came into force after the plan change request was initially assessed under clause 25 of Schedule 1 of the RMA. Notwithstanding the timing, it is necessary that PPC93 be assessed in respect of this NPS.

Comment

- 101. In his technical memo Mr Statham identifies a number of areas where he considers PPC93 fails to give effect to the NPS-IB. Areas identified include the lack of taking a precautionary approach when considering effects on indigenous biodiversity and the protection of wetlands.
- 102. I am thus unable to confirm that PPC93 gives effect to the NPS:IB and I would expect that the applicant would address this in evidence.

4.3. National environmental standards or regulations

103. Under section 44A of the RMA, local authorities must observe national environmental standards in their district/ region. No rule or provision may duplicate or be in conflict with a national environmental standard or regulation. It is considered that the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 and National Environmental Standards for Freshwater Regulations 2023 are relevant to consideration of PPC93. These are discussed below.

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011

104. The applicant has identified that a Preliminary Site Investigation has been undertaken for the Waimanawa Valley and a Detailed Site Investigation has been prepared for Waimanawa Hills. These have confirmed that no areas of significant contamination which may limit or prohibit future urban development have been identified, although resource consents may be required.

Comment

105. The assessments by the applicant are accepted but it is noted that resource consents may be required at earthworks stages.

National Environmental Standards for Freshwater Regulations 2023

106. The applicant's overall assessment does not separately address these regulations but they are discussed in the environmental effects assessment of ecology. These are discussed later in this report in paragraphs 197 to 201.

4.4. Auckland Unitary Plan Regional Policy Statement

- 107. Section 75(3)(c) of the RMA requires that a district plan must give effect to any regional policy statement (RPS). The applicant has assessed PPC93 in respect of the RPS in section 6.5 of the request document.
- 108. The chapters of the RPS identified by the applicant that are relevant to PPC93 include:
 - B2. Tāhuhu whakaruruhau ā-taone Urban growth and form
 - B3. Ngā pūnaha hanganga, kawekawe me ngā pūngao Infrastructure, transport and energy
 - B7. Toitū te whenua, toitū te taiao Natural resources

B2 Tāhuhu whakaruruhau ā-taone - Urban growth and form

- 109. Section B2.2 of the AUP includes the RPS objectives and policies for urban growth and form.
- 110. The application states that PPC93 meets these objectives by;
 - providing for the planning framework to create a high quality, wellfunctioning diverse urban environment within this portion of Warkworth South:
 - providing for an efficient use of land for urban purposes and associated economic benefits;
 - providing for the efficient use of the existing SH1 when it reverts to an urban arterial upon the opening of the Ara Tūhono – Puhoi to Warkworth Motorway:
 - providing for the key infrastructure required for the urban development of Warkworth South including a new water reservoir, a new wastewater pumping station(s), associated main lines and part of the WWLR;
 - providing within Waimanawa social vitality through a broad range of housing choice and living environments while also contributing to the range of housing choices and living environments in Warkworth;
 - retaining a compact form with the plan change area being within the area predominantly zoned as Future Urban; and
 - managing adverse effects on the environment as outlined in the rest of this section 32 analysis.
 - Providing for appropriate land uses consistent with the Warkworth Structure Plan;
 - Providing urbanisation within the RUB apart from a small extension to the RUB that will not impact on the integrity of the RUB.
 - Proving the necessary infrastructure
 - Consideration has been given to the climate change in the development of the plan change.

Comment

- 111. Caselaw indicates that the RPS objectives and policies need to viewed as a whole.
- 112. The development proposed within the plan change area is relatively consistent with the Warkworth Structure Plan. However, the plan change area is somewhat

disconnected from the existing urban area in Warkworth which does not create, in the short to medium term, a compact form, and does not appear to be well placed to deliver some of the benefits of a compact form, such as enhanced public transport. A range of housing types is likely to result from the proposed zoning and precinct provisions.

- 113. The area proposed to extend beyond the existing RUB is in my view acceptable given the existing landownership and because the proposed boundary is well defined by existing and protected bush reserve areas which are also considered to create a strong natural boundary given the use of the land and is stronger than the current ridge line which is also protected by the Outstanding Natural Landscape Overlay. Visually the new development will not be perceptible from within the adjoining rural area. The new boundary is considered to be 'defendable' and the Council landscape specialist is comfortable with the change. The change to the RUB will not change the establishment of a compact urban form as it will remain in similar type development, does not rely on the extension of infrastructure or transport links. I consider the change to be negligible and is consistent with 2.2.2(2).
- 114. As noted above [ref paragraphs 58 onwards] PPC93 may not be able to adequately integrate development with infrastructure. Certainly PPC93 is premature in respect of planned infrastructure provision for Warkworth, and there remains considerable uncertainty about whether alternative infrastructure can or will be provided. This absence of integration is likely to be contrary to aspects of B2.1 Issues and with Objective B2.2.1(5) which is the development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages is integrated with the provision of appropriate infrastructure.
- 115. The application does not comment on other provisions within B.2. While some of these may not be relevant, aspects of B2.3 (A quality built environment), B2.4 (Residential Growth), B2.5 (Commercial and industrial growth), B2.7 (Open space and recreation facilities) and B2.8 (Social facilities) are relevant. I consider the applicant should address these matters in evidence.
- 116. Mr McCarten on behalf of Parks Planning Parks and Community Facilities considers that; I consider PC93 does not achieve the more specific objective B2.7.1 or accord with its supporting policies at B2.7.2. PC93 might purport to provide for a range of connected open spaces, but when assessed in terms of their functionality and against the council's OSPP in terms of recreational provision they would not meet the needs of the future community.
- 117. Mr Stenberg (Principal Urban Designer, Tamaki Makaurau Design Ope) has suggested some changes PPC93 to address aspects of the local centre design and the safety of the street and neighbourhoods suggesting deficiencies in respect of B2.3 A quality built environment.
- 118. Policy 2.4.2(6) which reflects some of the B2.1 issues statements, particularly in respect of the integration of land use and infrastructure is to;
 - Ensure development is adequately serviced by existing infrastructure or is provided with infrastructure prior to or at the same time as residential intensification.

- 119. Objective B2.2.1(5) states
 - (5) The development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages is integrated with the provision of appropriate infrastructure.
- 120. As noted previously the currently planned provision of some infrastructure does not coincide with the potential development timing enabled by PPC93. While private infrastructure provision is possible, there exists a high degree of uncertainty over any private provision in this instance.
- 121. Noting that these provisions need to be viewed as a whole, I consider that PPC100 does not give effect to important themes within B2 particularly in respect of infrastructure provision and integration and the provision of a compact urban form.

B3. Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy

- 122. The applicant has considered this Chapter of the RPS and considers that;
 - The proposed infrastructure package will provide for the efficient and effective servicing of Waimanawa. The infrastructure being provided will need to be designed to Council standards and accepted by Council, Watercare and/or Auckland Transport. It can therefore be assumed it will be designed and constructed to an appropriate standard so that its operation is resilient.
 - The location of the proposed reservoir and wastewater pumping station(s) is driven both by topography and accessibility. The proposed location of these facilities are considered to be appropriate and reflect their functional and operational requirement.
 - The provision for and alignment of the WWLR has been refined to reflect local topography and to provide for a more efficient route and better urban design outcome.
 - The first stage of the development of Waimanawa will include the construction of the reservoir and wastewater pumping station(s) and the first part of the WWLR (from the SH1 end). The local infrastructure network can then be developed in stages as the development of Waimanawa proceeds.

Comment

- 123. Concerns about the ability to adequately service PPC93 have been discussed previously [paragraphs 58 onwards]. These are not repeated here other than to note in my view that additional information will be required before I can recommend that there will be adequate water and wastewater infrastructure provision in concert with the rezoning of land for urban development.
- 124. PPC93 has also been reviewed by Martin Peake (Director, Progressive Transport Solutions Ltd) for the Council. In respect of the RPS Mr Peake Advises that;

I consider that PPC93 poorly aligns with the Regional Policy Statement in relation to transport (in particular B3.3.2(5)(b) and (c)) as there is no funding to provide for either the public transport interchange or to provide bus services to the Plan Change Area. I consider that this will result in reliance on private vehicle use, particularly for longer distance trips in the short to medium term. I

consider that the Applicant should provide further assessment as to how PPC93 aligns with the AUP Regional Policy Statement objectives and policies in relation to transport, particularly for the proposed Residential – Terrance Housing and Apartment Building zone (THAB) in the period where access to public transport is likely to be limited. ⁷

125. Overall in reliance of the views of the technical experts, I have concluded that without further assessment PPC93 will not give effect to this aspect of the RPS.

B4. Te tiaki taonga tuku iho - Natural heritage

- 126. Chapter B4 of the AUP sets out the strategic framework for natural heritage resources. Section B4.2 sets out the strategic framework for outstanding natural features and landscapes.
- 127. The applicant does not specifically address this chapter of the RPS in its assessment.

Comment

128. While that portion of the plan change area within the RUB is not identified as having natural character, the area of rural zoned land proposed to be included within the RUB is subject to the Outstanding Natural Character Overlay. While it is considered that the specific provisions applying to this land within the Precinct and the rules associated with the overlay will be adequate to maintain the protection of this land⁸, the applicant should provide evidence to address the relevant parts of B4 at the hearing.

B5. Ngā rawa tuku iho me te āhua - Historic Heritage and special character

- 129. Chapter B5 of the AUP sets out the RPS objectives and policies for historic heritage and special character.
- 130. The applicant does not specifically address this chapter in its assessment.

Comment

131. Given the archaeological and historic heritage assessment undertaken by the applicant and reviewed by Council specialists [Rebecca Ramsay and Megan Walker Appendix 6] it is considered that this chapter is not particularly relevant to PPC93 and that the existing provisions of the AUP are sufficient to manage any historic heritage resources that may exist within the plan change area.

B6. Mana Whenua

- 132. Chapter B6 of the AUP sets out the strategic framework for the recognition of the Treaty of Waitangi partnerships and participation, recognition of Mana Whenua values; Māori economic, social and cultural development; and the protection of Mana Whenua cultural heritage.
- 133. The applicant does not specifically address this chapter in its assessment.

-

⁷ Specialist memorandum M Peake Appendix 6

⁸ Refer to Landscape report – G Howdle P6

Comment

134. It would appear that there are no matters of concern to Mana Whenua that are not being addressed by the applicant and that adequate and ongoing consultation is being undertaken by the applicant. No Mana Whenua groups have made submissions and no major concerns were raised through the pre-notification consultation processes with any lwi group. I also note that the applicant is maintaining ongoing consultation with mana whenua. This aspect is also addressed in section 6 of this report and addresses the CVA provided by the Manuhiri Kaitiaki Charitable Trust.

B7 Toitū te whenua, toitū te taiao – Natural resources

- 135. Chapter B7 Natural Resources is concerned with a number of matters including land and water resources including habitats and biodiversity.
- 136. In respect of freshwater systems the objectives in B7.3.1 area as follows;

B7.3.1. Objectives

- (1) Degraded freshwater systems are enhanced.
- (2) Loss of freshwater systems is minimised.
- (3) The adverse effects of changes in land use on freshwater are avoided, remedied or mitigated.
- 137. The applicant states that in respect of these matters;
 - The Auckland-wide objectives and policies on water quality and lakes, streams, rivers and wetlands apply to the two precincts.
 - Full infrastructure/services are provided in terms of water supply, stormwater and wastewater to minimise the risk of untreated or contaminated discharges into the upper reaches of the Mahurangi River. The exception to this is the land within the proposed Residential Large Lot and Rural Mixed Rural zones. However, the minimum lot size required in these zones ensures that adequate wastewater treatment and disposal and stormwater disposal can be undertaken on future sites.
 - The stormwater catchment management plan sets out a treatment train process for stormwater to ensure that discharge of contaminants are appropriately managed and controlled.
 - The assessment process for any works that impact streams is addressed in the matters of discretion and assessment criteria.
 - Primary streams are identified for protection and enhancement. Over time a mix of esplanade reserves, esplanade strips and riparian yards will provide for the enhancement and protection of riparian vegetation.
 - The same methods relating to the protection of the other streams as set out in the Auckland-wide provisions apply.
 - The Regional Policy Statement has identified the Mahurangi Harbour as an area degraded by human activities. The transition of Waimanawa from a predominantly pastoral use to an urban use, the implementation of the stormwater treatment train and the enhancement and protection of riparian margin will improve water quality run-off into the upper reaches of the Mahurangi River. This will, in part, contribute to the overall improvement in the water quality of the Mahurangi River which flows into the Mahurangi Harbour.

Comment

- 138. The Council specialists with expertise in these areas have concerns that changes are required to PPC93 in respect of these matters. These are discussed below in the section 5.1 Environmental Effects.
- 139. There are other parts of Chapter B7 that are not addressed by the applicant that are relevant to PPC93 including;
 - B7.2 Indigenous biodiversity in respect of streams and SEAs on the land
 - B7.4. Coastal water, freshwater and geothermal water particularly in respect of freshwater
- 140. These matters are discussed below in the sections of this report on environmental effects but the applicant should also confirm in evidence its view on these sections of the RPS which are relevant to PPC93.
- 141. In respect of B7 Toitū te whenua, toitū te taiao Natural resources I consider that there are aspects of PPC93 that do not give effect the RPS.

Proposed Plan Change 80

- 142. Proposed Plan Change 80 (PC80) makes a number of changes to the RPS that the Commissioners must have regard to. At the time of writing PC80 was subject to one appeal and accordingly is not yet operative. I understand that the Commissioners must have regard to this under s74(2)(a)(i) of the RMA.
- 143. PC80 makes changes throughout the RPS. Of greatest relevance to PPC93 is the introduction of the concept of a well functioning urban environment and resilience to the effects of climate change are introduced throughout. This reflects changes made to the NPS:UD.
- 144. As I have noted in my assessment of the NPS:UD a well functioning urban environment requires adequate infrastructure and there is doubt in my mind that this is being achieved through PC93 as notified.

Conclusion RPS

- 145. Case law has established that RPS provisions need to be read as a whole. Of note is the wording of several objectives and policies that include a list of matters to be achieved where the requirement within the objective or policy is to achieve all of the matters in the list. (i.e. B2.3.1 and Policy B2.3.2).
- 146. Overall it is my conclusion that PPC93 as notified does not give effect to the RPS as a whole. The prime areas of concern include;
 - a. The provision of infrastructure in coordination with development.
 - b. The provision of a quality compact urban form.
 - c. The provision for public transportation.
 - d. Provision for a reduction in greenhouse gas emissions.
 - e. The functionality of open space provision
 - f. Aspects relating to freshwater and biodiversity
 - g. A well functioning urban environment

4.5. Auckland Unitary Plan (AUP)

- 147. The applicant has not provided an assessment of PPC93 against the provisions of the AUP. It is therefore appropriate that is done in evidence.
- 148. It is not proposed here to undertake a full assessment of PPC93 against the AUP but it is useful to highlight a general matter. In order to avoid repetition specific matters are addressed as part of the effects analysis below.
- 149. Currently the land proposed to be included in the Morrison Heritage Orchard Precinct is zoned FUZ and is located within the RUB. PPC93 proposes to rezone this land Rural Mixed Rural Zone (MRZ). The requestor proposes that this land will still be located within the RUB.
- 150. The provision of a rural zone within the RUB is inconsistent with other parts of the AUP. For example the 'urban area' is defined as 'Land zoned residential or business, together with adjoining special purpose and open space zones'. Locating a rural zone within the RUB, which effectively defines the urban area, is not consistent with this definition. The MRZ also provides for a wide range of rural activities, including intensive farming, animal breeding, rural industries and primary produce manufacturing that may not be compatible with the urban land surrounding it nor with some of the activities proposed to be included within the Precinct. It may have been preferable for the applicant to propose a special purpose zone rather than using a precinct.
- 151. Elsewhere the applicant proposes to utilise the standard zones within the AUP with modifications largely in respect of specific matters identified in the plan change. This is considered appropriate and will enable development consistent with the AUP zones.

AUP Conclusion

152. Based on the assessment above I have concluded that aspects of the proposed zoning of land in the Morrison Heritage Orchard Precinct is inconsistent with the AUP given that rural zoned land should not be located within the RUB.

4.6. The Auckland Plan

- 153. Section 74(2)(b)(i) of the RMA requires that a territorial authority must have regard to plans and strategies prepared under other Acts when considering a plan change.
- 154. The Auckland Plan 2050 prepared under section 79 of the Local Government (Auckland Council) Act 2009, is a relevant strategy document that the council should have regard to when considering PC89.
- 155. The applicant's assessment of the Auckland Plan notes that;

The Auckland Plan 2050 is the long-term spatial plan to ensure Auckland grows in a way that will meet the opportunities and challenges of the future. The Auckland Plan identifies Warkworth as a growth node. It is intended that the Warkworth township provides a range of services to the surrounding rural areas. Significant future employment growth is anticipated alongside residential growth.

Comment

156. I agree that PPC93 is not inconsistent with the Auckland Plan growth aspirations for Warkworth. However I note that the Auckland Plan development strategy has now been replaced by the Future Development Strategy, which I discuss below.

4.7. Any relevant management plans and strategies prepared under any other Act

- 157. The applicant has identified that the Council's Future Urban Land Supply Strategy (FULSS) is relevant to the consideration of PPC93.
- 158. However, in the period between the acceptance of the plan change request and now, the FULSS has been replaced with the Future Development Strategy 2023 (FDS) as required by the NPS-UD. Clause 3.13 of the NPS:UD states that the purpose of the FDS is:
 - (a) to promote long-term strategic planning by setting out how a local authority

intends to:

- (i) achieve well-functioning urban environments in its existing and future urban areas: and
- (ii) provide at least sufficient development capacity, as required by clauses 3.2 and 3.3, over the next 30 years to meet expected demand; and
- (b) assist the integration of planning decisions under the Act with infrastructure planning and funding decisions.
- 159. Additionally clause 3.17 of the NPS:UD states that the Council must have regard to the FDS when preparing or changing RMA planning documents, which includes PPC93. Clause 3.8 relates to unanticipated or out of sequence plan changes. This states that the Council must have regard to the development capacity provided by the plan change if that development capacity:
 - (a) Would contribute to a well-functioning urban environment; and
 - (b) Is well connected along transport corridors; and
 - (c) Meets the criteria set out in the RPS.9
- 160. As discussed above in paragraph 70, the Council have proposed criteria to implement 'c' above as part of PC80 but that a hearing on an appeal from Beachlands South Limited Partnership has yet to be heard by the Environment Court.
- 161. The FDS makes substantial changes to the land release programme for Warkworth. The timing for the release of land in Warkworth South is now set at between 2040 and 2045 rather than later this decade as set out in the FULSS. The FDS also sets out prerequisites for the release of land which in the case of Warkworth South include Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works. The FDS did not identify significant challenges that would otherwise make

⁹ There are no specific criteria in the RPS in respect of out of sequence development but the Beachlands South Limited Partnership appeal on PC80 includes suggested significant development capacity criteria and the Council has also proposed alternative significant development capacity criteria as part of the PC80 appeal.

development in Wartkworth South inappropriate, provided that the plan changes occur in line with the associated Auckland Council Structure Plan and after all infrastructure prerequisites are met.

162. The FDS also allows consideration of private provision of infrastructure as follows:

Whilst this strategy sets infrastructure prerequisites that align with council's planned investment in future urban areas, it also signals a pathway for the private sector to fund infrastructure ahead of when the council can fund the required infrastructure.

Private sector infrastructure provision could consider:

- private sector funding to the council and it's CCOs to provide the infrastructure ahead of programme where it does not impact council's debt profile and fits with the financial position of the council and CCOs;
- private sector provision of infrastructure with deferred vesting in the council:
- independent standalone infrastructure, where it can be provided, funded and operated by the private sector pending delivery and connection of public infrastructure to a place.
- 163. The FDS further states that any mechanism that enables additional development in future urban areas prior to when the Council can or intends to provide the infrastructure will be subject to an agreement between the developer and the Council. At this stage I am not aware that such an agreement has been made. The FDS is silent on whether any agreement needs to be in place prior to a plan change to enable the development is in place. However I consider that a high degree of confidence will be required in respect of the technical feasibility and overall likelihood of an alternative solution being put in place, prior to rezoning, given the NPS-UD and RPS provisions that require integration of land use and infrastructure. I consider that it is inappropriate to provide live urban zoning if there is not a viable and likely infrastructure solution.
- 164. Due to the time of the approval of the FDS the application material does not include an assessment of PPC93 in respect of the FDS. This is something that should be addressed by the applicant in evidence at the hearing.

5. ANALYSIS OF THE SECTION 32 REPORT AND ANY OTHER INFORMATION PROVIDED BY THE APPLICANT

- 165. Section 74 of the RMA requires that a plan change must have particular regard to an evaluation prepared in accordance with Section 32 of the RMA.
- 166. Section 32 of the RMA requires an evaluation report examining the extent to which the objectives of the plan change are the most appropriate way to achieve the purpose of the Act. Section 32 also requires the report to examine whether the provisions are the most appropriate way of achieving the objectives.
- 167. The applicant has prepared an assessment against Section 32 in the statutory assessment in Section 14 of the Plan Change request

-

¹⁰ FDS P45

- 168. The s32 report has identified a number of overall options for PPC93. These are:
 - (a) The Current Plan Change:
 - (b) Strict alignment to the Warkworth Structure Plan:
 - (c) Fewer zones, focused on lower density development;
 - (d) More extensive medium density housing;
 - (e) Plan change for only the two principal landowners' properties;
 - (f) Deferred zoning (status quo).
- 169. The Section 32 report also contains a specific section on the extension proposed to the Rural Urban Boundary (RUB). This considered two options being:
 - (a) to retain the RUB in the existing alignment; or
 - (b) to move the RUB in the southern area, to align with the property boundary (proposed alignment).
- 170. Other specific themes of PPC93 where options were identified include;
 - a. The precinct provisions
 - b. Landscape provisions
 - c. Ecological provisions
 - d. Open space and cycleway network.
 - e. Stormwater management
 - f. Transport provisions
 - g. Local centre
 - h. Auckland wide provisions relied on.
 - i. Notification provisions
- 171. The s32 report concludes that the section 32 analysis demonstrates that the objectives for both the Waimanawa and Morrison Heritage Orchard precincts are the most appropriate way to achieve the purpose of the Act. The supporting policies then rules and assessment criteria are then the most appropriate way to achieve these objectives.¹¹
- 172. It is considered that the s32 report largely covers the range of matters that need to be addressed. However its conclusions should be assessed in light of the comments above in respect of the relevant plans and the environmental effects and the submissions discussed below.
- 5.1. Assessment of Effects on the Environment (for private plan change requests)
- 173. Clause 22 of Schedule 1 to the RMA requires private plan changes to include an assessment of environmental effects that are anticipated by the Plan Change, taking into account the Fourth Schedule of the RMA.
- 174. An assessment of actual and potential effects on the environment ("AEE") is included in the Section 32 Evaluation Report. The submitted Plan Change request identifies and evaluates the following actual and potential effects:
 - Mana whenua values
 - Land supply and economic matters

¹¹ Warkworth South Updated Warkworth South Plan Change Report Final 23 August 2023 P177

- Urban design
- Visual and landscape assessment
- Ecological assessment
- Archaeological assessment
- Arboricultural assessment
- Engineering and site servicing
- Land contamination
- Integrated transportation assessment
- Health Impact Assessment
- Reverse sensitivity and potential effects on residential amenity
- Natural hazards.
- 175. These are discussed below in turn.

Mana whenua values

Applicant's Assessment

- 176. The applicant advises that consultation has been undertaken with the Manuhiri Kaitiaki Charitable Trust and notes that the Trust has produced a CVA which is attached to the application. The CVA has produced a list of recommendations.
- 177. The application sets out how a number of these recommendations have been either included within the masterplan design or relate to ongoing design and development stages¹². The application notes that the applicant are at least open to the recommendations of the Trust in respect of the ongoing matters.
- 178. It is also noted that the applicant carried out consultation with the wider range of mana whenua groups recommended by the Council. It is understood that no other mana whenua groups sought to be further consulted on PPC93.
- 179. No submissions were received from mana whenua.

Comment

180. Given the degree of consultation undertaken and the ongoing involvement with the project by the Manuhiri Charitable Trust it is considered that PPC93 will adequately manage the effects of the plan change on cultural values.

Land supply and economic matters

Applicant's Assessment

- 181. The application includes an assessment of economic effects undertaken by Market Economics. ¹³
- 182. That report concludes that moving the urbanisation of the Warkworth South forward as proposed by the application would have benefits in terms of housing affordability and meeting demand for housing. It also concludes that the 3ha local centre has benefits for the community tin terms of an increased range of goods and services while facilitating construction of recreational parks and other

-

¹² Plan Change Report Section 8

¹³ Appendix 10 Plan Change Report

community infrastructure provides valuable amenity space for a large catchment ahead of time.

Comment

- 183. The potential economic effects of PPC93 have been assessed for the Council by Derek Foy, the Director of Formative Limited. A copy of Mr Foy's assessment is contained in Appendix 6.
- 184. Mr Foy concludes as follows;

In my opinion the applicant has adequately assessed the appropriateness of the PPCR area being changed to a residential zoning, and the application provides for an appropriate range of residential zone types and an appropriately sized local centre.

The zones proposed by the PPCR are very similar to those anticipated by the WSP, and therefore fit well into the broader Warkworth urban fabric. The size of the proposed LCZ is adequate to provide for the needs of the local community without generating adverse retail distribution effects on the town centre, and the LCZ is well located within the PPCR area to provide convenient access to the community.

The development enabled by the PPCR would be enabled earlier than was anticipated by the FULSS, and much earlier than is currently anticipated by the FDS. Assuming that appropriately structured funding arrangements can be imposed on the applicant, and no (or at least minimal) additional funding burden is imposed on public agencies, then in my opinion there is no reason from an economics perspective why that different timing should preclude approval of the PPCR.

There are positive aspects of the PPCR, such as the additional housing capacity it would provide, assisting housing affordability and choice in Warkworth, and contributing to a critical mass of population in Warkworth to support an increased range of services and facilities in the town.

Overall I do support the PPCR from an economics perspective because the PPCR area is in an appropriate location, and because the PPCR enables a similar range of activities to those that are anticipated in the WSP, and therefore fit well with holistic plans for Warkworth's future development and urban form.

185. Relying on this advice, I am of the view that PPC93 will have largely positive economic effects and the zoning strategy, particularly the business local centre zoning, is appropriate subject to Mr Foy's provisos about the funding of infrastructure expressed above.

Urban Design

Applicant's Assessment

186. The applicant notes that an urban design report for PPC93 has been prepared by Reset Urban Design. This includes an analysis of the area including site constraints and opportunities, the vision, the design principles and strategies for the masterplan which is proposed PPC93 will give effect.

Comment

- 187. The urban design effects of PPC93 have been assessed for the Council by John Stenberg, Principal Urban Designer, Tamaki Makaurau Ope. A copy of Mr Stenberg's assessment is contained in Appendix 6.
- 188. Mr Stenberg considers that further work is required to ensure the provision of safe public environments, connectivity and efficiency as a key aspect of integration and frontage conditions related to roads.
- 189. To this end Mr Stenberg recommends a number of changes. These include the inclusion of policies relating to safety to implement proposed objectives, the inclusion of a north road connection towards the industrial area to the north and more explicit connections to the Future Urban Zones to the south.
- 190. Mr Stenberg considers that the proposed provisions relating to the Wider Western Link Road ('WWLR') frontages are inadequate to provide activation to the street and encourage street address. He recommends that matters of discretion and criteria should be incorporated into the precinct plan to ensure provision is made for pedestrian access between dwellings and roads including the WWLR. This will assist in ensuring that there is a better relationship between the street and the houses.
- 191. Mr Stenberg also recommends that subdivision layout provisions should encourage streets adjacent to esplanade reserves to support the use of green routes and visual exposure and amenity to the wider community and provide an appropriate level of surveillance, from vehicles and development fronting street over the active part of the day (6am-10pm).
- 192. Overall Mr Stenberg supports PPC93 subject to recommended changes.
- 193. I consider that some of the matters recommended by Mr Stenberg may be beneficial if these can be incorporated in the plan change. For example Mr Stenberg's recommendation regarding pedestrian frontage to particular roads is an appropriate response for visual amenity and safety reasons. However the provision of a road connection to the northern industrial area from the main plan change area is not likely to be practical given topographical and ecological factors. Some of Mr Stenberg's recommendations can be accommodated in response to submissions and these have been included in Appendix 5.

Landscape and Visual Effects

Applicant's assessment

- 194. A visual and landscape assessment has been carried out by Reset Urban Design. That assessment concludes that;
 - "11.9 When considered collectively, it is concluded that even though the Private Plan Change will create a high level of change, the Site can accommodate the proposed masterplans without significantly diminishing the landscape values. The character of the landscape will be impacted by the proposed development, but it is anticipated that future development within Warkworth South will reduce the overall impact of the scale of the proposal. With a comprehensive

maintenance and management programme the landscape will be maintained to a high quality.

11.10 It is considered that as the level of sensitivity of the site to visual change is generally Low-Moderate, the mitigation measures of the design applied to the development are effective at reducing impacts and the overall adverse effects of the proposal on the landscape and visual amenity are considered to be an acceptable change within the surrounding environment.

11.11 Combining both the landscape and visual effects of the development it in concluded that the overall effects will be no more than minor."

Comment

- 195. The applicant's assessment has been reviewed for the Council by Gabrielle Howdle, Principal Landscape Architect, Tāmaki Makaurau Design Ope. Ms Howdle's assessment is attached in Appendix 6. In respect of the applicant's assessment Ms Howdle includes the following conclusions.
 - 1.1 Overall, the proposal generally follows the proposed zones as introduced within the Warkworth Structure Plan. However, I consider that parts of the proposed plan change (as notified) are inconsistent with the outcomes of the RPS.
 - 1.2 To adequately respond to the outcomes of the RPS in regard to the ONL, I am of the opinion that the 6m building yard and 3m vegetated buffer standards must be retained.
 - 1.3 To ensure that the PPC and future development is able to respond to the intrinsic qualities, physical characteristics, landscape, and social values of the area, it is considered that the landscape features (streams, tributaries, shelterbelts, stand of trees) within the Morrisons Heritage Orchard precinct need to be identified and introduced into the PPC plans and provisions for retention and protection.
 - 1.4 The number of workers and visitor accommodation should not be increased, and the ability to consider the cumulative effects of the activities outlined as permitted within the Morrisons Heritage Orchard should be applied as an assessment criteria / matter of discretion. The full width of the stream buffer (10m) needs to be retained along the stream within the Waimanawa Precinct to the north of the local centre.
 - 1.5 Overall, it is my opinion that the proposed plan change (as notified) would result in moderate-high adverse landscape effects in regard to the Morrison Heritage Orchard Precinct, and moderate low adverse effects in regard to the Waimanawa Precinct (as notified not as proposed to be changed within the submissions). The adverse effects of the PPC could be reduced from a landscape perspective through the inclusion of a number of provisions which would better respond to the features valued within the landscape. These are outlined below.
 - Identify and include on the Morrison Orchard Precinct Plan (XXX.9.1) the permanent and intermittent streams and their margins (10m) to be retained and protected.
 - Introduce provisions which ensure the long-term protection of the streams from inappropriate subdivision, use and development.

- Identify and include on the Morrison Orchard Precinct Plan (XXX.9.1) the existing shelterbelts along the southern and eastern boundaries to be retained and protected.
- Introduce provisions which ensure the long-term protection of the shelterbelts/vegetation from the effects of inappropriate subdivision, use and development within areas A and B
- Identify and include on the Morrison Orchard Precinct Plan (XXX.9.1) existing stands of native vegetation along the northern ridgeline to be retained and protected from the effects of inappropriate subdivision, use and development.
- Introduce provisions which ensure the long-term protection of the vegetation from the effects of inappropriate subdivision, use and development within Area C
- Require and update Waimanawa Precinct Plan 1 Spatial Provisions and Precinct Plan 2 Environment (XXX.10.1 and XX.10.2) to provide for a 10m riparian margin along the stream edge within Waimanawa Precinct (to the north of the local centre zoning) and within the Morrisons Heritage Orchard Precinct.
- Introduce a restricted discretionary activity status for accessory dwellings within the residential low density residential and large lor zone within the landscape protection eastern escarpment to ensure the location, design and effects of additional built form is appropriate and retains the values of the ONL.
- Retain the provisions that require a 6m yard setback from the ONL/ Avice Scenic Reserve and a minimum 3m wide vegetated buffer as outlined within the PPC.
- Retain the maximum of ten workers accommodation units and the 25units/100 people visitor accommodation units within the Morrisons Heritage Orchard Precinct and introduce an assessment criteria / matter of discretion which allows the assessment of cumulative effects of subdivision, development and use within the MHOP to ensure the landscape (including visual and cultural /social) values are retained.
- 196. Based on this advice I consider that changes to PPC93 are warranted particularly in respect of the Morrisons Heritage Orchard Precinct. Some of Ms Howdle's recommendations can be accommodated in response to submissions. These changes which relate chiefly to the Morrison Heritage Orchard Precinct are set out in Appendix 5. I consider that accessory buildings need not be made restricted discretionary activities as there are adequate building coverage controls,. In addition the ONL overlay, which is not changed by PPC93 contains rules on buildings and development in that part of the Precinct.

Ecological Effects

Applicant's Assessment

197. The applicant's assessment states that:

- 1 The areas of moderate value vegetation identified is either protected by existing covenants, SEA overlay or an area of esplanade reserve. The remaining areas will be protected by future esplanade reserves or retained within the proposed open space or riparian areas.
- 2 A minimum 20 m clear way buffer for bat flight is provided for through a specific set-back so that the construction of dwellings and accessory buildings cannot be constructed within that area.
- 3 Development within the plan change area can be undertaken in a manner where no reclamation of natural wetlands is required and where effects on these very small areas of natural wetlands can be avoided. Within Waimanawa Hills the identified natural wetlands are adjacent to watercourses and will form part of future open space areas which run along these watercourses. Within Waimanawa Valley the only area of natural wetlands is within an area proposed to be zoned Residential Large Lot. A minimum lot size of 4000m2 will ensure there is opportunity to subdivide this land in accordance with the zoning and in a manner where a practical building platform could still be established without compromising the small areas of natural wetlands.
- 4 The Precinct Plan shows the streams which are to be retained as part of the future development. Any modification or reclamation of these watercourses would require resource consent as a non-complying activity.

Comment

- 198. The applicant's assessment has been reviewed by Rue Statham Senior Ecologist, Auckland Council. The report from Mr Statham is set out in Appendix 6 of this report.
- 199. Mr Statham concludes the following;

I am unable to support the plan change in its current form with the standards as proposed.

Council and applicant must agree on Waimanawa Precinct Plan 1, regarding the values and attributes to be shown. As I have explained, not all ecological values are shown, and there is disagreement on bat flight corridors. Special yards are not clearly shown, as are neither agreed Significant Ecological Areas.

The private plan change is generally consistent with the direction and framework of the AUP:OP, delivering a minimum of a 10m riparian margin along most streams in the proposed urban areas. However, I do not support the discrepancy with the Western Link Road and a lack of robust justification as to why the location of the Western Link Road must infringe the 10m riparian margin. Noting this is a greenfield development, the applicant is not providing for a wider riparian margin, it is my recommendation that they should especially for a stream with a large catchment such as this.

The private plan change is not, however, consistent with the direction and framework of National Policy Statement for Freshwater Management 2020, National Environmental Standards for Freshwater Regulations 2023, and the Unitary Plan for wetlands, or buffers around wetlands. Buffers are not proposed

for wetlands. A 10m buffer for each of the wetlands is recommended, as well as avoidance of wetland reclamation for the Western Link Road.

Whilst the protection of some streams is provided, those the applicant has shown on the Precinct Plan, the private plan change appears inconsistent with National Policy Statement for Freshwater Management 2020, National Environmental Standards for Freshwater Regulations 2023, and the Unitary Plan (Chapter E3). I believe this is relevant as the statutory considerations afford protection, maintenance, and preferable enhancement unless reclamation has no practicable alterative. The applicant has provided no evidence to support reclamation of some of the streams in a green field development.

Whilst the protection of [most] indigenous habitat is proposed, the Precinct does not fully give effect to the AUP: OP in relation to indigenous biodiversity (B7.2), not only due to the absence of assessment of habitats against B7.2.2(1), but also standards that give effect to native terrestrial vegetation protection, retention, and enhancement, including restoration planting on the escarpments. Similarly, Morrison Heritage Orchard Precinct, the streams and associated riparian plantings are not identified or restoration provided for. It is questionable that indigenous habitats and/or exotic trees could be removed without appropriate consideration of their value to Morrison's Orchard and adjacent land use and development.

Northern and Eastern escarpments have a lack of Precinct standards to deliver on the restoration of the slopes, and retention / protection of habitats. I will suggest a standard that would incorporate a contour derived assessment for restoration planting, and for the protection and maintenance of existing indigenous habitats and the restoration. This would include all existing SEA. However, should applicant and Council agree on Waimanawa Precinct Plan 1, the standard could be revised accordingly.

Walkways and their locations should be reconsidered, especially for the likelihood that locating them in riparian margins will undermine ecological / biodiversity restoration outcomes. Furthermore concerns are raised with regard to the placement and construction of walkways where it is suspected that Kauri Dieback is present.

Planting, pet ownership and development setbacks, as they relates to bats and/or flight corridors, requires further consideration and discussion with stakeholders.

- 200. Mr Statham has recommended a number of changes to PPC93 which would address some of his concerns. However he notes that he is unable to make recommendations in respect of bats and flight corridors.
- 201. Based on this advice I have concluded that while there are aspects of PPC93 that cause ecological effects, these may be able to be addressed through changes to the plan change and the applicant may wish to provide a response to these concerns in evidence. I do note Rule Ixxx.6.12 provides for 10m riparian yards for wetlands identified on Precinct Plan 2. B but that Mr Statham has recommended alternative wordings. Some of Mr Statham's recommendations can be accommodated in response to the submission from Paula Anderson who opposes PPC93 for a number of reasons including the effects on water generally. Suggested changes are set out in Appendix 5.

Archaeology

Applicant's assessment

202. The applicant assessment states;

An Archaeological Assessment was undertaken of the plan change area by Clough and Associates and is included in Appendix Eleven. No archaeological sites were identified on the eastern side of Stage Highway One.

Within Waimanawa Valley a single archaeological site was identified and relates to a section of road connecting the Kaipara Flats to the Mahurangi created in the 1850s, with parts remaining in use to this day as farm tracks. The site is considered to have limited archaeological/historic heritage value. The Archaeological Assessment concludes that future development as a result of the proposed plan change is likely to affect the recorded archaeological site. However, any adverse effects are considered likely to be minor and can be appropriately mitigated by information recovery under the archaeological provisions of the Heritage New Zealand Pouhere Taonga Act 2014.

Comment

- 203. The applicant's assessment has been reviewed for the Council by Rebecca Ramsey, Senior Specialist, Heritage Unit, Auckland Council. A copy of Ms Ramsey's assessment is contained in Appendix 6. Ms Ramsey advises that;
 - 5.1 The Historic Heritage Assessment provides a full description of the heritage sites and values within the plan change area.
 - 5.2 Any archaeological / historic heritage effects associated to the plan change can be appropriately managed through the existing provisions in the AUP and under the Heritage New Zealand Pouhere Taonga Act (2014).
 - 5.3 Once detailed development plans for the Mason Heights section of the proposed plan change area are available, a more detailed assessment regarding actual and potential effects on Historic Road, R09/2284 is required to support an authority application under the Heritage New Zealand Pouhere Taonga Act (2014).
 - 5.4 Further, it is worth reiterating that development of a project specific accidental discovery protocol, must not be contrary to the Accidental Discovery Rule set out in the AUP.6
 - 5.5 Overall, I agree with the assessment's identification of potential impacts on historic heritage, and I can support the private plan change.
- 204. Based on this advice I consider that the effects of PPC93 on Archaeology will be acceptable.

Effects on Trees

Applicant's assessment

205. The applicant's arboricultural assessment notes that a number of trees or groups of trees should be retained, but it did not identify any trees which met the criteria to be scheduled as notable trees. The applicant further notes that all trees are located within existing (1 group) or future (5) esplanade reserves and as such no further protection mechanisms are required to be incorporated within PPC93 as they will be protected regardless.

Comment

- 206. The applicant's assessment has been reviewed by Rhys Caldwell, Auckland Council Specialist Arborist. A copy of Mr Caldwell's assessment is contained in Appendix 6.
- 207. Mr Caldwell advised that;

Generally the tree population on site appears to be fairly typical for a rural environment. There have been no significant trees assessed as worthy for inclusion as notable trees. Any existing trees and vegetation located adjacent to the streams or within a Significant Ecological Area will still be protected under the plan change.

208. Based on this assessment I have concluded that the effects of PPC93 on trees will be acceptable from an arboricultural perspective.

Engineering and Site Servicing

Geotechnical

Applicant's assessment

209. The applicant has undertaken separate assessments of the Waimanawa Valley and the Waimanawa Hills. These assessments have concluded as follows;

In terms of Waimanawa Valley, the LDE report concludes:

"Specific consideration will be required for the points summarised within this document when developing the proposed plan change and as the project progresses to subdivision and design. Consolidation and settlement analysis should be conducted in more detail and be site specific for the different stages of the proposed plan change, with remediation methods considered to overcome potential consolidation settlement. In particular, the low-lying alluvial plains to the northwest of the proposed plan change extent.

Based on our review of the data available and our site-specific investigations and preliminary assessment, it is considered that the proposed land within the plan change boundary west of state highway one is geotechnically suitable for residential subdivision, including light infrastructure and community centres (i.e., schools and parks). While earthworks, site contouring, retaining wall and specific analysis and development will be required, these are considered part in parcel for developments of this nature."

The CMW Geosciences Report for Waimanawa Hills concludes:

"The majority of the northern portion of the site is anticipated to require minimal engineering input to be suitable for residential development. Geotechnical

hazards associated with recent alluvium such as liquefaction and load induced settlement may require small scale remediation.

The southern portion of the site and gullies, however, is anticipated to require more extensive engineering solutions such as shear keys, in-ground walls, and subsoil drainage to remediate the geotechnical risk here.

Further subsurface investigation is required to confirm assumptions in this report and provide further recommendations around the development of the site."

Comment

- 210. The geotechnical aspects of PPC93 have been assessed for the Council by Dr Frank Havel, Resilient Land and Coasts, Auckland Council. Dr Havel's assessment is attached in Appendix 6.
- 211. Dr Havel concludes as follow:

At the plan change stage, it is appropriate to comment on the suitability of the land for rezoning. We consider that the site is suitable from the geotechnical perspective to support the proposed private land change, provided that detailed geotechnical assessments, specific engineering designs of earthworks, associated remedial measures, structures, infrastructure and appropriate construction methodologies are submitted for proposed works once the scope is decided. We recommend that the resource consent stage is the most appropriate time to address the specific geotechnical issues on the site.

Inputs from the Council geotechnical specialists will be required at the future resource and building consent stages.

212. Based on this advice I consider that development potentially provided for by PPC93 is appropriate from a geotechnical perspective. I note that geotechnical matters will be considered in detail through the various resource consents for subdivision and development required by the AUP:OP.

Stormwater Management

213. The applicant has prepared a draft Stormwater Management Plan for the PPC93 area. This involves a treatment train process which relies on a series of proposed stormwater ponds before any discharges into watercourses. This is intended to provide for necessary treatment and retention. In addition a SMAF1 overlay over the whole plan change area is proposed.

Comment

- 214. The applicant's stormwater assessment has been reviewed for the Council by Amber Tsang (Consultant Planner) and Kedan Li Senior Healthy Waters Specialist Auckland Council Healthy Waters. A copy of this review is contained in Appendix 6 to this report.
- 215. Ms Tsang and Ms Li advise that the primary stormwater issues associated with PPC93 are:
 - Water quality stormwater runoff from all 38 post-development subcatchments within the site are proposed to discharge into the Mahurangi

- River via streams within the site boundary. The Mahurangi River is identified as a Significant Ecological Area (SEA) under the AUP(OP). Appropriate treatment of stormwater is therefore required onsite prior to its discharge in order to avoid and/or mitigate water quality effects.
- Stream hydrology and erosion development increases imperviousness and will therefore increase the flow rate and volume of runoff into the stream network while reducing ground infiltration unless mitigated. Appropriate mitigation is required to retain base flow and reduce the risk of erosion in the watercourses.
- Stormwater devices the feasibility of any proposed stormwater management and devices shall be adequately demonstrated. This is to ensure that adverse effects in relation to stormwater discharges from PPC 93 will practically be able to be mitigated.
- Flood management within PPC 93 both primary and secondary stormwater systems shall be designed as per the Auckland Council Stormwater Code of Practice (SWCoP) and the proposed development lots shall be free from flooding.
- Downstream flooding management flooding risks associated with increased stormwater runoff being discharged from PPC 93 onto the downstream properties and infrastructure (i.e. the Woodcock Road bridge) shall be avoid and/or mitigated.
- Precinct provisions shall be included to ensure the implementation of the stormwater mitigation measures proposed in the SMP.
- 216. The review has raised the following concerns with the stormwater management aspects of PPC93.
 - Policy IXXX.3.17 and standard Ixxx.6.10 are not sufficient to ensure implementation of the appropriate stormwater quality treatment as well as other stormwater management proposed in the SMP. In addition, no objective in relation to stormwater quality and quantity management has been proposed.
 - Urban subdivision and development within the Morrison Heritage Orchard Precinct should be subject to the same stormwater quality treatment requirements as elsewhere.
 - Ms Li recommends that stormwater detention for 50% AEP (i.e. 2-year ARI) storm events, on top of the AUP(OP) Chapter E10 SMAF1 detention requirements, is required to reduce the risk of erosion in the watercourses within and immediate downstream of the site.
 - Ms Li also considers that roof water reuse should be required for PPC 93.
 - Riparian planting is considered an appropriate stream erosion mitigation measure and should be required along **all streams within the site**.
 - The applicant's SMP has failed to confirm that adverse stormwater effects will practically be able to be mitigated by the stormwater management devices as currently proposed. It is also unclear if the design, use and ongoing maintenance of any public devices will be feasible and practical.
 - The review recommends an additional information requirement for flood modelling at the time of development.

- New precinct provisions and recommended amendments to the Applicant's proposed provisions), as outlined in Attachment A to the review are considered necessary to be included as precinct provisions within PPC 93. This is to ensure the implementation of the Applicant's SMP and mitigation of stormwater effects on the receiving environment, as well as to achieve the NDC's outcomes via appropriate land development controls.
- The SMP as currently drafted is not acceptable in accordance with Heathy Waters' NDC requirements. Key areas of concern are:
 - Feasibility of the proposed communal wetlands.
 - Lack of information on the type and number of public stormwater devices within Stormwater Management Zones B, C and D.
 - Lack of justification to confirm whether at source management device is the BPO for many sub-catchments in Stormwater Management Zone B for stormwater quality and quantity management.
 - The proposed mitigation for stream erosion is not considered sufficient.

217. The overall conclusion of the review is that:

The Applicant's proposed precinct provisions, **subject to the recommended amendments as outlined in Attachment A**, will ensure future developments enabled by PPC 93 provide appropriate stormwater quality treatment, hydrological and erosion mitigation, and onsite flood management.

Provided that the outstanding matters with regard to the feasibility of the proposed stormwater management devices are addressed and satisfied at the hearing, PPC 93 is supported from a stormwater and flooding perspective.

218. I have therefore concluded that without changes to PPC93 there are likely to be unacceptable stormwater management effects. I note also that in order for the stormwater arrangements to be able to be approved under Healthy Water's Network Discharge Consent, an SMP must be approved and referenced within the plan change and there is a rule (lxxx.6.10) and an assessment criterion (i.e. lxxx.8.2(d)) that reference the SMP. While the recommended changes are able to made due to scope provided by submission 9 from Paula Anderson, the applicant may wish to provide evidence of how it intends to comply with the NDC.

Earthworks

219. The applicant has included an earthworks model for the urban portions of the PPC93 area prepared by Maven. This report has concluded that;

"The information gathered to-date confirms the site suitable for residential development.

Bulk recontouring is required to enable the construction of a complying roading network and to ensure suitable building platforms can be provided. Initial design plans demonstrate finished levels of 1:8 grade, considered suitable for the density proposed. The earthworks will be supported by engineered retaining walls. Initial locations are indicated, and geotechnical input confirms these walls can be constructed."

Comment

220. Based on the advice from Dr Havel noted above [Paragraph 211] it is considered that these matters can be adequately managed at the time of resource consent.

Water Supply

221. The applicant stated that a practical and economically feasible connection to the Warkworth potable water network can be undertaken through the construction of a new line from Warkworth to a new proposed reservoir (the Warkworth South Reservoir) to be located on the eastern side of Waimanawa Hills. This connection and water reservoir would be constructed as the first stage of the development of Waimanawa with both then being vested in Watercare. The applicant has advised that the Warkworth potable water supply has been upgraded in recent years and there is no barrier to connecting to this water supply immediately.

Comment

222. These matters are discussed in detail above [paragraphs 58 onwards]. As noted there I have concluded that at this time there is insufficient evidence that the land within PPC93 can be serviced for water supply.

Wastewater

223. The applicant initially advised that a practical and economically feasible connection to the Warkworth wasterwater network can be undertaken through the construction of a rising main from the southern end of Warkworth to a possible new wastewater pumping station adjacent to SH1 opposite Morrisons Heritage Orchard and a second one to be located on or adjacent to the proposed Endeans Farm Recreational Park. This connection and pumping station(s) would be constructed as the first stage of the development of Waimanawa with both then being vested in Watercare. The applicant further advised that the connection to the Warkworth wastewater network cannot be undertaken until the current upgrading of the Warkworth network is completed, which at this stage is programmed for early 2025.

Comment

224. These matters are discussed in detail above [paragraphs 58 onwards]. As noted there I have concluded that at this time there is insufficient evidence that the land within PPC93 can be serviced for wastewater disposal.

Provision of Power and Telecommunication

225. The applicant advises that Chorus and Vector Limited have confirmed that the plan change area can be serviced in terms of telecommunications and electricity at the time or urban development.

Comment

226. Mr Cavanagh advises that clarification is required around the delivery of power infrastructure — particularly as a substation is likely to be required and considerations such as its location and any cost sharing needs to be considered. The applicant should advise on this at the hearing.

Overall Comment - Infrastructure

227. In my view there are significant questions still to be answered in respect of the provision of infrastructure particularly in respect of water, wastewater and to a lesser extent electricity. It is considered that the applicant should provide additional information at the hearing regarding how it intends such infrastructure to be provided given the constraints on WSL networks in the Warkworth area.

Land Contamination

228. The applicant's assessment provides comment on land contamination on page 94. Essentially the assessment is that parts of the land have been identified as potentially being a HAIL area due to previous agricultural uses but that no specific contaminated area have been identified. Further work may be required at Resource Consent stage.

Comment

229. I consider that it is appropriate for any existing contamination to be managed by way of resource consent at the time of development, that contamination is not likely to adversely impact on the implementation of PPC93

Integrated Transportation Assessment

230. The applicant has provided an Integrated Transport Assessment (ITA) to support PPC93. The ITA concludes;

"The following conclusions can be made in respect of the proposal to rezone the subject site to residential zones plus a local centre with the balance to be zoned open spaces and rural:

- The potential residential development and local centre for the site is feasible from a transportation perspective and has been anticipated in the future planning for Warkworth in the Warkworth Structure Plan and other strategic plans;
- Based on current mode shares, the 2028 peak hour trip generation of the proposal is estimated to be 1,311 motor vehicle movements, 146 walking movements, 8 cycle movements and 3 public transport movements:
- With appropriate traffic management on SH1, the estimated trips generated by the proposal can be accommodated on the adjacent transport network while maintaining acceptable levels of safety and performance:
- The Plan Change Area will have a high level of accessibility to public transportation, walking, and cycling and the effects of private car travel from the development area will likely be reduced; and
- Any development enabled by the proposed plan change is consistent with and encourages key regional and district transport policies.

The provision of following transport elements should be considered within the Precinct provisions to enable any future development to be designed to adequately cater for all travel modes and to mitigate the traffic impact on the wider transport network:

- Creation of footpaths along both sides of the new street alignments that meet Auckland Transport's standards;
- Connection of new footpaths with the existing public footpath network immediately outside the site, with new and upgraded pedestrian infrastructure along the frontages on SH1 and Valerie Close;
- The design of any intersection with the Wider Western Link Road or SH1 will be assessed by the extent to which it is supported by a transport assessment and safety audit, demonstrating the intersection will provide a safe, efficient and effective connection to service the expected subdivision and development, including safe and convenient provision for pedestrians and cyclists;
- Regular and safe crossing opportunities on the arterial roads where pedestrian desire lines are evident;
- Separated, protected, or off-street cycle facilities on arterial and collector roads;
- A public transport interchange to be built on the WWLR near the proposed Local Centre zone to enhance the accessibility to the public transport to help accommodate the anticipated demands associated with growth in Warkworth South and other areas;
- Measures such as a lower speed limit, a speed threshold and advanced road markings and signage on SH1 to slow northbound traffic; and
- Allowance for a crossroad intersection on State Highway 1 at the Wider Western Link Road and Collector Road in the "Waimanawa Hills" area with either traffic signal or roundabout control."

Comment

- 231. The ITA has been reviewed for the Council by Martin Peake of Progressive Transport Solutions Limited. A copy of Mr Peake's assessment is contained in Appendix 6. Mr Peake has made a comprehensive assessment of the transport related aspects of PPC93 and the submissions. Mr Peake's assessment about PPC93 in respect of the RPS is noted above in paragraph 123.
- 232. Overall Mr Peake concludes that :

The timing of PPC93 is earlier than that envisaged by the recently approved Future Development Strategy and in advance of the identified pre-requisite transport infrastructure. However, I consider that there is sufficient capacity within the immediate surrounding road network to accommodate the forecast traffic in the short to medium term and acknowledge that the Applicant is providing parts of the pre-requisite transport infrastructure to support the plan change.¹⁴

- 233. Mr Peak also considers that some additional assessments are required following a review of the submissions. These are discussed in section 10.2 of this report.
- 234. Mr Peak further advises that;

Subject to the above further information, and my recommendations on changes to precinct provisions ... and specific amendments to the precinct provisions sought by submitters which I have indicated support, I consider that the traffic and transport effects of the plan change can be appropriately managed.

_

¹⁴ Technical Specialist Memo – Martin Peake p25

I provide the following recommendations:

- (a) The interim active modes facility along SH1 north of the Wider Western Link Road should be extended to the northern Wech Drive / SH1 intersection.
- (b) A crossing facility to assist pedestrians and cyclists crossing SH1 where the interim active modes facility on SH1 terminates at the Morison Heritage Orchard should be required in the transport infrastructure detailed in the precinct provisions.
- (c) Precinct provisions should ensure that any connection created to Mason Heights should include pedestrian facilities and that any connection to Mason Heights is provided to an urban local road standard, including upgrading Mason Heights to urban standard.
- (d) The precinct provisions should require an assessment for active mode crossing facilities across SH1 to ensure facilities are considered in any future resource consent application.
- (e) The precinct provisions should require an upgrade to the SH1 / Valerie Close intersection.
- 235. The recommended changes from Mr Peake can be implemented within PPC93 as these are the subject of submissions received. Based on the advice from Mr Peake (and subject to matters raised previously in respect of public transport and climate change) I consider that subject to a number of changes and additional assessments, the traffic effects of PPC93 are likely to be acceptable.
- 236. I also note that the decision on the NOR for the designated portions of the Wider Western Link Road have been issued by AT. The locations of the eastern and western ends of the WWLR do not appear to have been changed from the notified NOR. However the location of NOR is subject to appeal and this cannot be regarded as settled.

Health Impact Assessment.

237. In respect of health impacts the application notes;

No specific existing activities or environmental conditions have been identified which could give rise to potential adverse health impacts if the area is urbanised in accordance with the plan change.

As identified above, future applications for earthworks may need to include a Detailed Site Investigation and if contamination is identified then Site Management Plans to address soil contamination would need to be prepared. This is not uncommon across Auckland and there is no indication that any soil contamination identified will not be able to be appropriately addressed at the time of bulk earthworks.

The implementation of greenways as proposed will assist in the promotion of walking and cycling which is considered to be a positive health outcome. ¹⁵

Comment

¹⁵ Warkworth South Updated Warkworth South Plan Change Report Final 23 August 2023 p97

238. I consider that this assessment is correct but potentially does not fully take into account the difficulties of achieving walking and cycling outside of the plan change area to other parts of Warkworth and the reliance on cars for travel outside of the area. The concerns in respect of walking and cycling provision can be largely met through changes made in response to submissions.

Reverse Sensitivity and Potential Effects on Residential Amenity

239. The application considers that the plan change area is not adjacent to any existing sensitive land uses or other uses where a risk if reverse sensitivity may arise. The application report identifies that there may be potential reserve sensitivity issues between the continued use of the Morrison Orchard (i.e. sprays etc) and the residential are to the south. To avoid such effects the application notes that the WWLR will provide a buffer area between the orchard and the new urban area to the south and a new park to the west provides the opportunity for additional landscaping to act as a buffer in that direction.

Comment

240. I consider that as the Morrison Heritage Orchard Precinct is proposed to be zoned MRZ the potential for reverse sensitivity effects between residential development within the Waimanawa Precinct and a range of rural activities are provided for within the MRZ zone that may impact residential zones. The WWLR will provide a buffer of sorts, but there is currently no guarantee that the existing shelter belt will be retained and the location of any new parks is not certain.

Natural Hazards

241. The application material has identified flooding as a potential hazard that required assessment. To this end a stormwater modelling report has been provided as part of the application. The application considers that development of the plan change area can proceed in a manner where flooding risks are avoided or mitigated to an appropriate level.

Comment

- 242. The flooding effects of PPC93 have been assessed by Amber Tsang and Kedan Li on behalf of Healthy Waters. A copy of this assessment is contained in Appendix 6.
- 243. In respect of onsite flood management Ms Li recommends that;

..detailed flood modelling and assessment at resource consent stage should be required. This is because there are major overland flow paths and extensive flood plains within the plan change area.

Bulk earthworks and large scale of site re-contouring is likely to happen for greenfield development that covers a large area of land. While Chapter E36 of the AUP(OP) will apply and impose restrictions on development and activities within the flood hazard areas (i.e. 1% AEP floodplains and overland flow paths), the extent and location of these flood hazard areas are likely to change following land modification at the development stage.

Ms Li considers that while the flood modelling provided in Appendix D of the SMP is appropriate at a plan change level, its results cannot be used to confirm the

extent and location of the latest flood hazard areas due to the limitation of the model (i.e. updated site contour and 3.8-degree climate change factor have not been considered).

Based on the above, the following is recommended to be included as a special information requirement as part of the precinct provisions:

A detailed flood modelling and assessment must be undertaken when subdivision or development requiring resource consent is proposed to be undertaken on land which may be subject to the 1 per cent annual exceedance probability (AEP) floodplain or overland flow paths. Modelling limitation must include but is not limited to:

- Modelling boundary condition.
- ARF used in the modelling.
- Terrain detail for proposed development,
- Unknown factor regarding the post processing of the flood plain results.
- 244. In respect of downstream flood management, Ms Li notes;

The Woodcocks Road bridge (i.e. approximately 500m downstream of PPC93) is not considered a holding point, i.e. the potential of backwater effects is considered to be low, as the peak flow discharge from PPC 93 would be ahead of the upper catchment peak flow. However, Ms Li points out that the assessment on the downstream level and freeboard of the Woodcocks Road bridge (i.e. Section 3.8 of the Stormwater Modelling Report) could have overestimated the capacity of the bridge specifics. This is because the Woodcocks Road bridge has been modelled as a free-flow structure rather than a restriction. In addition, the 3.8-degree climate change factor has not been considered.

There are four existing culverts across the Old State Highway 1 within the plan change area. The culvert modelling and assessment are provided in Section 3.9 and Appendix B of the Stormwater Modelling Report. It has indicated that the two northern culverts are under capacity and would overtop for all modelled scenarios. The southern culvert would overtop for the post development 100-year ARI scenario. The southernmost culvert has minimal freeboard. It has also indicated that the overtopping status would be worse for the post-development scenarios when compared with the pre-development scenarios. It is stated in the Stormwater Modelling Report that these culverts will be upgraded as a part of Auckland Transport's proposal to repurpose the Old State Highway 1 to an arterial road.

The submissions received from Auckland Transport and New Zealand Transport Agency Waka Kotahi have raised no issue in relation to flooding, the Woodcocks Road bridge, and culverts across the Old State Highway 1. On this basis, no further information with regard to downstream flooding is considered necessary from the Applicant at the plan change hearing. It is expected that the Applicant will continue to liaise with the asset owners at development stage.

245. It is considered that the effects of flooding can be managed subject to appropriate assessments being undertaken at the time of subdivision and development. It is appropriate to add the additional information requirements into PPC93. There are no submissions that specifically request such changes but the changes recommended by Ms Li may fall within the general scope of a number of submissions that request PPC93 be declined (For example submissions 9 and 13).

Open Space.

- 246. The open space and parks planning aspects of PPC93 have been assessed for the Council by Gerard McCarten planning consultant acting on behalf of Parks Planning, Parks and Community Facilities. A copy of Mr McCarten's assessment is contained in Appendix 6.
- 247. Mr McCarten has concerns about the location of the suburb park located within a floodplain, located where its eventual size is not limited by surrounding constraints and located more centrally to the plan change area. He also considers that there is an under provision of neighbourhood parks with areas been identified for informal recreation also functioning as stormwater management basins or stormwater ponds. These would not provide the necessary recreational functions and instead are part of the green infrastructure network.
- 248. In respect of the proposed open space zoning Mr McCarten notes that "The general approach to zoning for open space being not to live zone most open space is appropriate and supported".

249. He also notes that'

With respect to the proposed areas of Open Space – Conservation Zone in PC93, these are generally given heavily vegetated areas and the zoning would align with broader expectations that these areas are protected from development for conservation and landscape purposes. The proposed provisions within PC93 do not imply or create an expectation that this land would be acquired or vested with the council. Therefore I am comfortable with the use of the zone in these instances, with one exception:

- Lot 4 DP 344489 is an elongated strip of land that with other land parcels form part of the property known of 125 Valerie Close. It is located in northwestern corner of the plan change, and is separated from the remainder of the property by a stream that runs alongside it. It is steeply sloped and covered in bush. Future subdivision will trigger esplanade reserve requirements. However, a 20 m esplanade reserve would not cover all of the land and leave a residual strip the north, separated from the rest of the plan change area, inaccessible other than through adjoining FUZ land to the north and with no obvious utility value. Open Space Conservation zone may be appropriate given its conservation and landscape values, but it may also create a false expectation that the council will acquire the land on the grounds of its zoning, inaccessibility and having no other value.
- 250. Mr McCarten recommends a number of changes be made to PC93 as set out in his memo. These include changes to the Precinct Plan 4 in relation to the suburb and neighbourhood reserves and separate provision of open space for protected areas and connection spaces, changes to the precinct description to remove unclear names, Change policies IXXX.2.(2)-(4) to include reference to Precinct Plan 4 and provide for flexibility in their provision, Change policies IXXX.2.(20) to include reference to development in addition to subdivision, Change standard Ixxx6.16 in relation to fencing and an update to a plan reference in in matter of discretion IXXX.8.1(1)(a).

251. I note that there are no submissions that request these changes and accordingly unless the applicant is able to amend these provisions, the provision for parks within PPC93 is not considered to be acceptable.

Conclusion of Effects

252. Overall, and based on the advice of the Council specialists I have concluded that some of the effects of PPC93 may be able to be avoided, remedied or mitigated through the plan change as notified or through the amendments recommended by Council specialists. However aspects of PPC93, including the potential inability to provide appropriate infrastructure may not able to be adequately resolved.

6. CONSULTATION

- 253. Section 15 of the Applicant's request document sets out the consultation undertaken by the applicant. This records that consultation has been undertaken with:
 - (a) Mana Whenua
 - (b) Rodney Local Board
 - (c) Auckland Council
 - (d) Healthy Waters
 - (e) Supporting Growth Alliance (AT/AC/NZTA)
 - (f) Watercare Services Ltd
 - (g) Ministry of Education
 - (h) Matakana Coast Trail Trust
 - (i) One Mahurangi
 - (j) Adjoining residents
 - (k) Mahurangi Sports Collective
 - (I) Landowners within the Plan Change area
 - (m) Warkworth Area Liaison Group.
- 254. The applicant supplied details about the extent of consultation with Mana Whenua. The application advises that the Manuhiri Kaitiaki Charitable Trust (for Ngāti Manuhiri) was consulted at a very early stage in the preparation of the plan change both in terms of the possible name for this area (Waimanawa) and the proposed urban development of this area. Subsequent to this, the Trust has prepared a CVA which has been addressed in the application report.
- 255. The responses are summarised in table 6.1 below.
- 256. Table 6.1 Mana Whenua consultation

Iwi authority	Detail
Ngāi Tai ki Tamaki	No response received
Ngati Maru	No response received
Ngati Poa (iwi trust)	No response received.
Ngati Poa (Trust Board)	No response received
Ngāti te Ata	No response received

lwi authority	Detail
Ngātiwai	No response received
Ngāti Whanaunga	No response received
Ngā Maunga Whakahii o Kaipara	Deferred to Ngāti Manuhiri
Ngāti Whātua Ōrākei	Deferred to Ngāti Manuhiri
Te Kawerau ā Maki	No response received
Te Rūnanga o Ngāti Whātua	No response received

- 257. The applicant notes that the various parties consulted raised a number of valid issues which have subsequently been addressed in PPC93 as follows;
 - The plan change largely reflects the Warkworth Structure Plan. The alignment of the WWLR still achieves the transportation purpose of this road but the alignment better reflects the local topography and fits comfortably within the proposed zone layout. A number of landowners have indicated their strong support for the WWLR alignment compared to the earlier proposed alignment by Supporting Growth (which is no longer being pursued by Supporting Growth) which has now been confirmed in the AT decision of the NOR but is subject to appeal.
 - An infrastructure funding package is being developed. The required infrastructure for wastewater, potable water and stormwater will be provided for as part of the development of Waimanawa.
 - The WWLR will be constructed to a collector road standard as part of the development of Waimanawa. The width of land vested is to allow for the future upgrading of the road to an arterial standard.
 - SH1 will be transformed to an urban arterial standard as part of the development of Waimanawa and this will include a pedestrian/cycle connection to the existing Warkworth pedestrian network.
 - The objectives and policies support the provision of social infrastructure including education facilities.
 - Refinements to the key roading routes and zone boundaries have been undertaken through the process reflecting feedback received.

7. COMMENTS FROM LOCAL BOARD

- 258. Comments on PPC93 have been received from the Rodney Local Board.
- 259. At its meeting of 20 March 2024 the Rodney Local Board resolved as follows;

That the Rodney Local Board:

a) whakarite / provide the following local board views on private plan change 93 lodged by KA Waimanawa Limited Partnership and Stepping Towards Far Limited

- i) express concern about the flood risks associated with the development as it is near to the Mahurangi River and is subject to flooding and overland flow paths in the area
- ii) express concerns that adjacent urbanisation of the Mahurangi River and contributing waterways poses an increased flood risk and the potential for stream habitat loss due to the increase of impervious areas and resulting stormwater generated noting modern mitigation methods are not always successful in offsetting negative effects to residents, housing and the ecological environment within and on surrounding land and housing areas
- iii) tono / request the development is timed to ensure the provision of adequate water and wastewater infrastructure if this cannot be provided for in a self-sustainable way (solely within the development) and if this is not achievable, we request that it is timed with delivery of the needed infrastructure upgrades to support the development, noting that Watercare has stated that future planned upgrades already planned are needed for other developments already planned in the area, and therefore will not have the capacity to service the Warkworth South area
- iv) acknowledge the development will have economic benefits for local businesses, particularly those located to the south of the Warkworth town centre (e.g. The Grange on Auckland Road / Old State Highway 1), which will be within walking distance
- v) tono / request that off street parking/garaging is provided for proposed housing understanding increasing walking, cycling and public transport use are ultimate goals, the realities are that residents will also use vehicles to commute for employment, recreation and other services and the provision of off-street parking within each property boundary also enables safe plugin vehicle charging
- vi) express concern that the proposed plan change area will be separated by a 'future urban zone' rather than an existing developed urban area, reducing the opportunities to make connections with other developed parts of Warkworth and through the area has been identified by Auckland Council as future urban, the timing of the proposed plan change seems premature in comparison to areas closer to the current developed areas
- vii) express concern there is a lack of public transport to service the plan change area as funding for bus routes in the area is already constrained
- viii) express concern the plan change is premature before the future roading network capabilities are clear as the upgrades to the Hill Street intersection along with other arterial routes proposed by Supporting Growth (Waka Kotahi New Zealand Transport and Auckland Transport) are not guaranteed
- ix) tautoko / support the developer's provision of arterial routes within the plan change area
- x) tautoko / support the proposed upgrades to pedestrian and cycle path connections on connecting roads such as Mason Heights and Auckland Road (Old State Highway 1)
- xi) express concern for any new development including intersections on the old state highway one inter- regional transport corridor which will remain as a long distance transport corridor connecting Warkworth to Orewa and provide a free alternative to the new toll road
- xii) suggest increased buffers or noise mitigation from traffic noise for future properties located adjacent to arterial roads, current, proposed and those also proposed and potentially affected by the future northern Notice or Requirements

- xiii) tautoko / support the provision of a southern bus interchange however, we express concerns about how new bus routes servicing this infrastructure will be funded as without direct links via a bus service, it is likely that residents will utilise the park and ride in the north of Warkworth and the capacity of the existing and planned park and rides near the motorway need to be assessed to determine if they can support this further demand, additional to current and future use from Warkworth North development
- xiv) tautoko / support the development providing walking and cycling routes in line with the Puhoi to Pakiri Greenways Plan
- xv) tautoko / support most of the road widths proposed which include carriageways that enable emergency vehicle and public transport access however, are concerned the centre planting on the proposed 'Green Road' may impede access
- xvi) tono / request that all road widths (some to be determined) enable emergency vehicle and public transport access
- xvii) tautoko / support the proposed varied lot sizes and mixed housing model to offer a variety of options for buyers and future residents
- xviii) tautoko / support the proposed business and local centre to offer provision of some services and employment
- xix) tautoko / support the inclusion of open space, conservation, sports, active and recreation zones and suggest including smaller pockets of play areas and additional wider buffers around waterways throughout the proposal, to increase the total open space available, decrease total impervious areas, and further protect natural areas
- xx) tautoko / support the preservation of natural wetlands and the retention of Waimanawa wetland reserve and provision of the Endeans Farm Recreational Park however express concerns about alterations to existing wetlands whether natural or man-made
- xxi) express concerns about the effects on longtail bats present in the site and strongly request appropriate mitigation to result in no net losses of the bat population
- xxii) express concern the proposed development area includes a Significant Ecological Area and ecological values both on land and in the freshwater systems, including the presence of wetland and long-tail bats
- xxiii) express concern that there is already insufficient council and central government funding for the infrastructure required for live-zoned greenfield areas in Auckland, and out-of-sequence development will only worsen this funding gap and ultimately result in overcrowded schools, parks with no facilities, traffic congestion, and temporary waste and water solutions therefore council need to ensure that there is a planned approach to delivering infrastructure as detailed in the Future Development Strategy, not ad hoc developments that ultimately lead to urban sprawl and poor outcomes
- xxiv) express concern that council does not have the funding to purchase park or reserve land in live-zoned developments, and this problem will only worsen if out-of-sequence developments are consented
- xxv) tono / request that a complete integrated stormwater planning for all drainage sub catchments be completed before any development occurs.
- b) kopou / appoint a Local Board Member M Carmichael to speak to the local board views at a hearing on private plan change 93
- c) tautapa / delegate authority to the chairperson of the Rodney Local Board to make a replacement appointment in the event the local board member appointed in resoluSon b) is unable to aTend the private plan change hearing.

260. These matters have generally been considered in the preparation of this report.

8. NOTIFICATION AND SUBMISSIONS

8.1. Notification details

261. Details of the notification timeframes and number of submissions received are outlined below:

Date of public notification for submissions 26 October	2023
--	------

Closing date for submissions	23 November 2023
Ologina date for subtilissions	20 110 10111111111111111111111111111111

Number of submissions received 41

Date of public notification for further 25 January 2024

submissions

Closing date for further submissions 9 February 2024

Number of further submissions received 13

262. Forty one initial submissions were together with 13 further submissions. Copies of all the submissions are attached as **Appendix 4** to this report.

9. LEGAL AND STATUTORY CONTEXT RELEVANT TO SUBMISSIONS

263. A number of submissions request changes outside of the plan change area. As PPC93 does not include the land the subject of those submissions I consider these submissions are not "on the plan change" and according should not be considered. These submissions (or part of submissions) are identified in the analysis that follows.

10. ANALYSIS OF SUBMISSIONS AND FURTHER SUBMISSIONS

- 264. The following sections address the submissions received on PPC93. It discusses the relief sought in the submissions and makes recommendations to the Hearing Commissioners.
- 265. Submissions that address the same issues and seek the same relief have generally been grouped together in this report under the following topic headings. Some submissions will appear under more than one heading. The headings I have used are as follows:
 - Submissions seeking that PPC93 be declined;
 - Submissions concerning transport;

- Submissions concerning infrastructure generally;
- Submissions concerning ecology;
- Submissions concerning the Morrison Heritage Orchard Precinct;
- Submissions concerning specific provisions not otherwise addressed;
- Submissions seeking that the PPC93 be approved;
- 266. In the tables to follow the following abbreviations are used in respect of the further submissions:
 - (S) = Supports the submission point;
 - (Sp) = Supports the submission point in part;
 - (O) = Opposes the submission point;
 - (Op) = Opposes the submission point in part.

10.1 Submissions seeking that PPC93 be declined

267. Table 10.1.1

Sub No.	Name of submitter	Summary of relief sought	Further subs	S42A recommend ation
9.1	Paula Christine Anderson	Decline the plan change	FS07(O)	Accept
10.1	Maria Collins	Decline the plan change	FS07(O)	Accept
13.1	Wendy Patricia Court	Decline the plan change	FS07(O)	Accept
30.1	GW Boyes	Decline the plan change	FS07(O)	Accept
33.1	Caroline Barrett	Decline the plan change	FS07(O)	Accept
34.1	Pete Sinton	Decline the plan change	FS07(O)	Accept
25.2	Mikel Jon Thorogood (Mike Thorogood)	If the matters addressed in the submission cannot be addressed PPC93 should be refused.	FS07(O) FS12(Op)	Accept

Discussion

- 268. These submissions seek that the plan change be declined. The reasons given in the submissions are varied including environmental, the lack of infrastructure within Warkworth, inappropriate density, congestions and overcrowding, effects on water table and drainage, and the plan change being premature.
- 269. The submission from Mike Thorogood relates to refusal if other matters cannot be resolved.
- 270. The interim conclusion of this report based on an assessment of the plan change and the submissions is that it should not be approved as it is, primarily because

of uncertainty about whether the resulting urban development can be adequately serviced with required infrastructure in the near future, it does not give effect to important aspects of the NPS-UD and the RPS and because there are some matters that require additional assessment. Given that further information may be provided at the hearing by both the applicant and the submitters I recommend that, on an interim basis, these submissions be accepted.

Interim recommendations on submissions

- 271. That submissions 9.1, 10.1, 13.1, 30.1, 33.1, 34.1 and 25.2 be accepted.
- 272. There are no changes resulting from this recommendation.

Analysis of Submissions seeking changes to PPC93

273. Notwithstanding the interim recommendation in paragraph 271 above, it is appropriate that an analysis is made of the submissions seeking changes to PPC93. There are a number of requests for changes from range of submitters including the applicant. The discussion and 'recommendations' that follow (Sections 10.2 – 10.7) are made solely to assist the Commissioners should they decide to approve PPC93. At the time of writing these are not my recommendations.

10.2 Submissions concerning transport

274. Table 10.2.1

Sub No.	Name of submitter	Summary of relief sought	Further subs	S42A recommend ation
12.1	Arthur Douglas Brown	That the southern portion of the Western Link meets old SH1 in the area of the dwelling at 1829 Old SH1	FS07(O)	Reject
17.3	Auckland Council	Waimanawa Precinct Amend all activity tables to require subdivision and development not complying with 1xxx.6.8 Wider Western Link Road to be a noncomplying activity.	FS03(S) FS07(O)	Accept
17.4	Auckland Council	Waimanawa Precinct - Amend all activity tables to require subdivision and development not complying with Standard Ixxx.6.15 Transportation Infrastructure to be a noncomplying activity.	FS03(S) FS07(O) FS12(O)	Accept
17.6	Auckland Council	Waimanawa Precinct- Amend Table IXXX.6.15.1 Transport Infrastructure Requirements to reduce the trigger from 20 residential lots to 3 residential lots.	FS03(S) FS07(O) FS12(O)	Accept

17.7	Auckland Council	Waimanawa Precinct - Add an additional indicative north-south	FS07(O)	Reject
20.1	Auckland Transport	connection on Precinct Map 3. Decline the plan change unless the matters set out in this submission, as outlined in the main body of this submission and in this table, are addressed and resolved to Auckland Transport's satisfaction.	FS02(S) FS07(O) FS12(O)	Accept
20.2	Auckland Transport	Take into account the public transport deficiencies and assess the proposal against the NPS-UD and RPS objectives and policies relevant to public transport and transport choice.	FS02(S) FS07(O) FS12(O)	Accept
20.3	Auckland Transport	Amend Map 3 - Control: Arterial Roads, so it is clear that its purpose is to identify the Wider Western Link Road as an arterial road in the controls layer of the AUP(OP) map viewer. Delete from Map 3 the annotations for State Highway 1 and the indicative WWLR / SH1 intersection.	FS07(S)	Accept
20.4	Auckland Transport	Ensure that a minimum area of 2500m2 is identified for the public transport Interchange. Amend plan change as required to ensure that this is provided for.	FS07(O)	Accept
20.5	Auckland Transport	Amend the fourth paragraph of IXXX.1 Precinct description, by deleting the following: 'the proposed opening of the Puhoi to Warkworth Motorway in 2023 and'	FS07(S) FS12(S)	Accept
20.6	Auckland Transport	Amend paragraph 12 of IXXX.1 Precinct description as follows: 'Construction of the Wider Western Link Road through the precinct to a collector road standard will be integrated with subdivision and development within the Precinct.'	FS07(O) FS12(S)	Accept
20.7	Auckland Transport	Amend paragraph 14 of IXXX.1 Precinct description as follows: ' provision is made for an off- road greenway network providing a network of tracks and walkways through the various open spaces and roads and'	FS07(S)	Accept

20.8	Auckland Transport	Amend the plan change by including precinct provisions (objectives, policies and rules) within the Waimanawa Precinct to require that future developments and alterations to existing buildings mitigate potential road traffic noise effects on activities sensitive to noise from the existing State Highway 1 arterial and the future Wider Western Link Road arterial.	FS07(O)	Reject
20.9	Auckland Transport	Amend Objective 2, and split it into two objectives as follows: '(2) The Warkworth South Precinct is subdivided and developed in a manner that Subdivision and development achieves an accessible urban area with efficient, safe and integrated vehicle, walking and cycle connections internally and to the wider Warkworth urban area. (2A) while Subdivision and development providesing for and supportsing the safety and efficiency of the current and future national strategic and local reading transport network.'	FS06(S) FS07(S) FS08(S)	Accept
20.10	Auckland Transport	Amend Objective 8 as follows: 'Subdivision and development is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, and wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements.'	FS07(O) FS13(O	Reject
20.11	Auckland Transport	Amend Objective 10 as follows: 'To provide for the opportunity for a future public transportation interchange adjacent to the local centre which can be safely accessed by a range of buses and other required transportation modes.'	FS07(O)	Accept
20.12	Auckland Transport	Add a new objective as follows: 'Subdivision and development does not occur in advance of the availability of operational transport infrastructure.'	FS07(O)	Accept

00.40	A., alde :: -!	Add a pass phiastics - stalls	E007(0)	Daisat
20.13	Auckland	Add a new objective as follows:	FS07(O)	Reject
	Transport	'Access to and from and within		
		the precinct for all modes of		
		transport occurs in a effective,		
		efficient and safe manner that		
		mitigates the adverse effects of		
		traffic generation on the		
		surrounding road network.		
20.14	Auckland	Add a new objective as follows:	FS06(S)	Accept
	Transport	'The precinct develops and	FS07(O)	
		functions in a way that:	FS08(S)	
		(a) supports a mode shift to		
		public and active modes of		
		transport		
		(b) provides safe and effective		
		movement between the		
		local centre, community facilities,		
		housing, jobs, open spaces and		
		the public transport facilities by		
		active modes.'		
20.15	Auckland	Amend Policy 12 as follows:	FS07(O)	Reject
20110	Transport	'Require subdivision and	FS13(O	1 10,001
	Transport	development to provide	1010(0	
		stormwater, wastewater, potable		
		water, electricity, and		
		communication services and		
		educational infrastructure in a		
20.16	Auckland	coordinated manner.'	F007(O)	Accept
20.16		Amend Policy 13 as follows:	FS07(O)	Accept
	Transport	'Require subdivision and		
		development to provide for		
		walking and cycling networks		
		within the precinct, including to		
		any future public transport		
		interchange, while also providing		
		connections to the wider		
		transportation network and any		
		future public transport		
		interchange existing urban		
		development.'		
20.17	Auckland	Amend Policy 14 as follows:	FS07(O)	Accept
	Transport	'Require subdivision and		
		development to upgrade existing		
		and/or provide new roading		
		infrastructure (which is designed		
		in accordance with Table		
		IXXX.6.15.2 Minimum Road		
		Width, Function and Required		
		Design Elements for a range of		
		modes of transport and including		
		public transport) within the		
		precinct and to provide		
		connections to adjoining land		
	i .	1 commoditions to adjoining land	1	

		generally in accordance with Precinct Plan 3.'		
20.18	Auckland Transport	Amend Policy 15 as follows: 'Provide for and require the Wider Western Link Road to be constructed to a collector road standard in the interim to service subdivision and development within the precinct, while recognising that it will form part of provision is made for its future upgrading by Auckland Transport to provide a future strategic transport connection.'	FS07(Sp)	Accept
20.19	Auckland Transport	Amend Policy 16 as follows: 'Avoid direct vehicle access from individual sites on to the Wider Western Link Road and State Highway One, while allowing direct pedestrian and cycle access and for bus and service vehicle access to the future public transport interchange.'	FS07(S) FS10(S)	Accept
20.20	Auckland Transport	Retain Policy 19	FS07(S)	Accept
20.21	Auckland Transport	Include a new policy as follows: 'Provide for the development and operation of a public transport interchange in the indicative location identified on Precinct Plan 3.'	FS07(O)	Accept
20.23	Auckland Transport	Amend the activity tables to include a restricted discretionary (RD) status for 'Subdivision and / or development that does not comply with Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements'. Consequential to this, amend Ixxx.7 Assessment - restricted discretionary activities, to include appropriate Matters of Discretion and Assessment Criteria to assess proposals that do not comply with Table IXXX.6.15.2.	FS07(O)	Accept in part
20.24	Auckland Transport	Amend (A17) in Table IXXX.4.1 All zones, to include the following standard in the 'Standards to be complied with' column: 'Ixxx6.15 Transportation Infrastructure' Make similar amendments to other entries in Table IXXX.4.1 where required.	FS07(O)	Accept

20.25	Auckland Transport	Amend (A3) in Table IXXX.4.2 Residential - Large Lot Zone, to apply a NC activity status to 'Development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'	FS07(O) FS10(O) FS12(O)	Accept
20.26	Auckland Transport	Amend (A4) in Table IXXX.4.2 Residential - Large Lot Zone, to apply a NC activity status to 'Subdivision not complying with Standard Ixxx6.15 (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'	FS07(O) FS10(O) FS12(O)	Accept
20.27	Auckland Transport	Amend Table IXXX.4.3 Residential - Single House Zone to include the following as a noncomplying activity (NC). 'Development not complying with Standard Ixxx.6.7 Limited Access Restrictions and Pedestrian Connections'	FS07(O) FS12(O)	Accept
20.28	Auckland Transport	Amend (A6) Table IXXX.4.4 to apply a discretionary (D) or restricted discretionary (RD) status (with appropriate assessment matters, including transport effects) to restaurants and cafes within the existing former Ransom Vineyard Building. In the alternative, provide supporting information about transport effects sufficient to satisfy Auckland Transport that no additional assessment is required via a resource consent process.	FS07(O)	Accept
20.29	Auckland Transport	Amend (A7) Table IXXX.4.4 to apply a discretionary (D) or restricted discretionary (RD) status (with appropriate assessment matters, including transport effects) to education facilities within the existing former Ransom Vineyard Building. In the alternative, provide supporting information about transport effects sufficient to satisfy Auckland Transport that no additional assessment is	FS07(O)	Accept

	1	required via a resource consent		
		process.		
20.30	Auckland Transport	Amend (A8) in Table IXXX.4.4 Residential - Mixed Housing Urban Zone, to apply a non- complying (NC) status to 'Development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements).'	FS07(O) FS12(O)	Accept
20.31	Auckland Transport	Amend (A11) in Table IXXX.4.4 Residential - Mixed Housing Urban Zone, to apply a non- complying (NC) status to 'Subdivision not complying with Standard Ixxx6.15 (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements).'	FS07(O) FS12(O)	Accept
20.32	Auckland Transport	Amend (A6) in Table IXXX.4.5 Residential - Terrace Housing and Apartment Buildings, to apply a non-complying (NC) status to 'Development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements).'	FS07(O) FS12(O)	Accept
20.33	Auckland Transport	Amend (A9) in Table IXXX.4.5 Residential - Terrace Housing and Apartment Buildings, to apply a non-complying (NC) status to 'Subdivision not complying with Standard Ixxx6.15 (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements).'	FS07(O) FS12(O)	Accept
20.34	Auckland Transport	Amend (A1) in Table IXXX.4. 6 Business – Local Centre, to describe the activity as 'Operation and maintenance of a public transport interchange', and to delete the list of standards to be complied with as none are relevant to operation and maintenance but relate to the construction phase which is covered elsewhere in the table. Retain permitted (P) status for	FS07(S)	Accept

		'Operation of a public transport interchange'.		
20.35	Auckland Transport	Amend (A6) in Table IXXX.4. 6 Business – Local Centre, to delete Ixxx.6.7 Limited Access Restrictions, from the list of standards to be complied with. Retain controlled (C) status for 'Development of a public transport interchange and associated facilities'.	FS07(S)	Accept
20.36	Auckland Transport	Amend (A7) in Table IXXX.4. 6 Business – Local Centre, to applying a non-complying (NC) activity status for 'Development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'.	FS07(O)	Accept
20.37	Auckland Transport	Amend (A11) in Table IXXX.4. 6 Business – Local Centre, to applying a non-complying (NC) activity status for 'Subdivision not complying with Standard Ixxx6.15 (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'.	FS07(O)	Accept
20.38	Auckland Transport	Amend IXXX.6 Standards (3) as follows: 'Permitted All activities listed in Activity Tables Ixxx.4.1 to Ixxx.4.7 must comply with Standard Ixxx.6.'	FS07(O)	Accept in part
20.39	Auckland Transport	Amend Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities to clarify whether the standard requires any pedestrian and cycle facilities to be provided, or whether it only includes vehicle access restrictions. Amend the title and Ixxx.6.7(3) accordingly.	FS07(Sp)	Accept
20.40	Auckland Transport	Amend the title and purpose statement of Ixxx.6.7 as follows: 'Limited Vehicle Access Restrictions, Pedestrian Connections and Cycle Facilities Purpose: • to avoid direct vehicle access from individual sites onto State Highway One, and the Wider Western Link	FS07(Sp) FS10(S)	Accept

	1	T	1	,
		Road, Green Avenue, and		
		collector roads; and		
		• to have promote safe and		
		efficient operation of transport		
		infrastructure; and		
		• to achieve safe, accessible and		
		high-quality		
		pedestrian and cycle		
		connections within the Precinct		
		and including to the Local Centre		
		and any future public		
		transportation interchange that		
		provides positively for the needs		
		to the local community.'		
20.41	Auckland	Amend Ixxx.6.7 Limited Access	FS10(O)	Accept
	Transport	Restrictions, Pedestrian	FS12(O)	
		Connections and Cycle		
		Facilities, (1) to (4) as follows:		
		'(1) Any new road intersections		
		with State Highway One or the		
		Wider Western Link Road		
		servicing the precinct, shall be		
		generally located as identified as		
		"Access Points" on IXXX.10.3		
		Waimanawa: Precinct Plan 3.		
		(2) Sites that front onto the		
		Wider Western Link Road,		
		Green Avenue and State		
		Highway One must not have		
		direct vehicle access to the road		
		except where required for the		
		public transport interchange. and		
		Sites, other than the public		
		transport interchange, must be		
		provided with access from a rear		
		driveway, rear lanes (access		
		lots) or side roads at the time of		
		subdivision.		
		(3) At the time of adjacent land		
		subdivision and / or		
		development, pedestrian		
		connections, generally as shown		
		in Precinct Plan 3, shall be		
		provided.		
		(4) Residential sites that front a		
		collector road other than the		
		'Green Avenue" as shown on		
		Precinct Plan 3, must not have		
		direct vehicle access to the road		
		and must be provided with		
		access from a rear driveway,		
		rear lanes (access lots) or side		
		roads at the time of subdivision.']

20.42	Auckland Transport	Delete 1xxx.6.8 Wider Western Link Road in its entirety. Retain the non-complying activity status for subdivision and development which does not construct the Wider Western Link Road by applying an non-complying activity status to a 'Subdivision and development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements), as sought elsewhere in this submission.	FS07(O) FS08(S)	Accept
20.43	Auckland Transport	Amend Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, by deleting the third bullet point under the purpose statement as follows: 'To integrate the section of watercourse along the Wider Western Link Road within a wide road berm or as a separate open space integrated with the road berm.'	FS07(O)	Reject
20.44	Auckland Transport	Amend Ixxx.6.14 Greenways - Walking and Cycling Infrastructure, as follows: 'Purpose: To provide for off-road walkways and cycleways which Council wants vested in Council to form part of the public greenway network. (1) Walkways and cycleways that are to be vested in the Council (other than those vested as road) shall be provided within the greenways shown on Precinct Plan 1 and: (a) Shall be constructed either to a walking track standard similar to that constructed in Regional Parks if not part of a vested formed road, or in the case where the greenway is part of a vested formed road, constructed to normal footpath standards as appropriate;	FS07(Sp)	Accept
20.45	Auckland Transport	Amend the title and purpose statement of lxxx.6.15 as follows: 'Transportation Infrastructure	FS06(S) FS07(Sp) FS08(S) FS12(O)	Accept

		Purpose: • To achieve the integration of land use and transportation infrastructure (including walking and cycling). • To ensure transportation infrastructure is appropriately provided for. • To provide a pedestrian and cycle connection to the McKinney Road/ northwards along State Highway One Intersection to the existing urban area.'		
20.46	Auckland Transport	Amend Ixxx.6.15 Transportation Infrastructure, (1) and (2) as follows: '(1) Subdivision and development within the Precinct must not exceed the triggers in Table IXXX.6.15.1 until the identified transport infrastructure upgrades are constructed and operational, The development of any part of the Precinct shall provide the relevant transport infrastructure, including walking and cycling, as indicated in Ixxx10.1 and applying to the development site, in the general location shown on Precinct Plans 1 and 3. (2) Subdivision and development (including construction of any new road) must comply with the standards in Table I4XX.6.4.2.1'	FS07(O)	Accept
20.47	Auckland Transport	Amend (T1) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to set a clear and appropriate trigger for upgrading of the Valerie Close / State Highway 1 intersection.	FS07(O)	Reject
20.48	Auckland Transport	Amend (T2) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to describe the upgrade as follows: 'Upgrading of State Highway One though where it has frontage to the WW South Precinct to an urban arterial standard with active mode facilities'	FS07(Sp)	Accept

00.40	A	A	E000(0)	A
	Auckland	Amend (T2) in Table	FS06(S)	Accept in
	Transport	IXXX.6.15.1 Transportation	FS07(Sp)	part
		Infrastructure Requirements, by		
		deleting the existing trigger for		
		the State Highway 1 upgrade		
		and replacing it with the		
		following:		
		'Any subdivision and/or		
		development:		
		 within the Business - Local 		
		Centre zone;		
		• for a retirement village; or		
		• resulting in a cumulative total of		
		20 residential lots		
		or dwellings within the Precinct.'		
20.50	Auckland	Amend the provisions relating to	FS06(S)	Accept
	Transport	active mode connections along	FS07(Sp)	Accept
	παπορυπ	9		
1		State Highway 1 to:	FS09(Sp)	
]		require pedestrian and cycle facilities to be provided in their	FS12(O)	
		facilities to be provided in their		
1		ultimate form and location as		
		part of the upgrade of State		
		Highway 1 where it has frontage		
		to the precinct		
		 clarify which pedestrian and 		
		cycle facilities are to be provided		
		in an interim or temporary form		
		 require pedestrian and cycle 		
		facilities to be provided along		
		State Highway 1 from the		
		precinct to the northern end of		
		Wech Drive.		
		This is likely to require		
		amendments to Table		
		IXXX.6.15.1(T1), (T3) and (T4),		
		Table IXXX.6.15.2 Note 2, and		
1		possibly Precinct Plan 3		
		Transportation.		
		Require the applicant to provide		
		additional detail to demonstrate		
		that safe pedestrian and cycle		
		facilities can be provided along		
		SH1 from the precinct to the		
		northern end of Wech Drive.		
20.51	Auckland	Amend (T5) in Table	FS06(S)	Accept
	Transport	IXXX.6.15.1 Transportation	FS07(Sp)	'
]	. I	Infrastructure Requirements, by	FS08(S)	
		deleting the existing trigger for	555(5)	
1		the Wider Western Link Road /		
1				
		State Highway 1 intersection and		
		replacing it with the following:		
		'Any subdivision and/or		
		<u>development:</u>		
		• within the Business - Local Centre zone;		

			1	
		 for a retirement village; or 		
		 resulting in a cumulative total of 		
		20 residential lots		
		or dwellings within the Precinct.'		
20.52	Auckland	Amend (T8) in Table	FS07(S)	Accept in
20.02	Transport	IXXX.6.15.1 Transportation	1 007(0)	•
	Transport			part
		Infrastructure Requirements, to		
		describe the transport		
		infrastructure as follows:		
		'Construction of Collector Roads		
		(including Green Avenue)'		
		Consequential deletion of (T7)		
20.53	Auckland	Amend (T9) in Table	FS05(S)	Accent
20.00	Transport	IXXX.6.15.1 Transportation	FS07(O)	/ tooopt
	Transport	• • • • • • • • • • • • • • • • • • •	F307(O)	
		Infrastructure Requirements, to		
		better describe the transport		
		infrastructure upgrade as		
		follows;		Accept Accept Accept Accept
		'Upgrading of Mason Heights		
		including filling in any gaps in the		
		existing footpath network to		
		provide a continuous connection		
		between the precinct and the		
		intersection of Mason Heights		
		with Woodcocks Road'		
20.54	Auckland	Amend (T9) in Table	FS05(S)	Accept
	Transport	IXXX.6.15.1 Transportation	FS07(S)	
	•	Infrastructure Requirements, to	, ,	
		better describe the trigger as		
		follows:		
		'Any subdivision or development		
		with access to frontage to that		
		section of Mason Heights or in		
		the event that Mason Heights is		
		extended or a new road is		
		connected to it within the		
		Waimanawa Precinct.		
20.55	Auckland	Amend the note under Table	FS07(S)	Accent
_0.00	Transport	IXXX.6.15.1 Transportation	. 557 (5)	, 1000pt
	Παποροπ			
		Infrastructure Requirements, as		
		follows:		
		'Note: Development relevant to		
		any of the Standards T6, <u>and</u> T8		
		and T9 only apply to the section		
		of the road adjacent to the		
		development or subdivision		
		area.'		
20 FC	Augldarad		F007/0\	Accept
20.56	Auckland	Amend the title of Table	FS07(S)	Accept
	Transport	IXXX.6.15.2 as follows:		
		' Minimum Road width , Function		
		and Required Design Elements'		
20.57	Auckland	Amend Table IXXX.6.15.2,	FS07(Sp)	Accept
	Transport	including Note 6, to be	()	
	anoport	consistent with the rules in		
	i e	JOHOLOGIE WITH THE TRIES III	l	

	1	To. 1 11 2 = 12 1 1 1 1	1	
		Standard Ixxx.6.7(2) and (4)		
		which applies a vehicle access		
		restriction to Green Avenue and		
		other collector roads.		
20.58	Auckland	Amend Table IXXX.6.15.2, Note	FS07(Sp)	Accept
	Transport	3 to require better provision for		
		active modes along State		
		Highway 1 as described		
		elsewhere in this submission.		
20.59	Auckland	Amend Table IXXX.6.15.2, Note	FS07(S)	Accept
	Transport	4 as follows:		
		Carriageway and intersection		
		geometry capable of		
		accommodating buses. Bus stop		
		form and locations and bus route		
		shall be determined with		
		Auckland Transport at resource		
		consent and engineering plan		
		approval stage.		
20.60	Auckland	Amend Table IXXX.6.15.2, Note	FS07(S)	Accept
	Transport	5 as follows:	FS09(S)	'
		Cycle lane will only be provided		
		Bi-directional cycle facility may		
		be appropriate on the northern		
		side of wWider wWestern ILink		
		Road in the section where road		
		boundary abutting existing		
		stream riparian yard adjoining		
		the Morrison Orchard Precinct.		
20.61	Auckland	Amend Ixxx.7.2(1)(b) as follows:	FS07(S)	Accept
20.01	Transport	'For public transport	. 55. (5)	7.000 p.t
		interchanges, whether safe and		
		efficient vehicle, pedestrian and		
		cyclist access (<u>as relevant</u>) into		
		and within the public transport		
		interchange is achieved.'		
20.62	Auckland	Amend Ixxx.8.1 Matters of	FS07(O)	Accept
20.02	Transport	discretion, (1) as follows:	1 307(0)	Ассері
	Παποροπ	'Subdivision and new buildings		
		prior to subdivision'		
20.63	Auckland	Amend Ixxx.8.1 Matters of	E907(9)	Accept
20.03			FS07(S)	Accept
	Transport	discretion, (1)(b) as follows:	FS08(S)	
		'Transport including:		
		(a) access, walking and cycling		
		infrastructure,		
		(b) traffic generation,		
		(c) access to public transport		
		and parking		
		(d) location and design of the		
		Wider Western Link Road,		
		collector roads, key local roads		
		and connections with		
		neighbouring sites to achieve		
		and integrated street network		

	1			
		and appropriately provide for all		
		<u>modes</u>		
		(e) provision of cycling and		
		pedestrian networks and		
		connections		
		(f) provision of public transport		
		facilities (bus stops and shelters)		
		(g) design and sequencing of		
		upgrades to the transport		
		network.		
20.64	Auckland	Amend Ixxx.8.2 Assessment	FS07(O)	Accept
20.01	Transport	criteria - Restricted Discretionary	1 007 (0)	/ tooopt
	Transport	Activities, (1), as follows:		
		'Subdivision and for new		
20.05	A a l d a . a . al	buildings prior to subdivision'	F007(O)	A t
20.65	Auckland	Amend Ixxx.8.2 Assessment	FS07(O)	Accept
	Transport	criteria - Restricted Discretionary		
		Activities, (1)(a)(ii) as follows:		
		'Subdivision and development		
		layout is consistent with Precinct		
		Plans 1 to 4'		
20.66	Auckland	Amend Ixxx.8.2 Assessment	FS07(O)	Accept
	Transport	criteria - Restricted Discretionary		
		Activities, (1)(c) as follows:		
		'Transport		
		The extent to which Whether:'		
20.67	Auckland	Amend Ixxx.8.2 Assessment	FS07(O)	Accept
	Transport	criteria - Restricted Discretionary	, ,	-
		Activities, (1)(d) Stormwater		
		management, by adding the		
		following:		
		'(ii) The design and efficacy of		
		infrastructure and devices with		
		consideration given to the likely		
		effectiveness, ease of access,		
		operation, ongoing viability and		
		maintenance, and integration		
		-		
		with the surrounding		
		environment including the road		
20.68	Augldond	corridor where relevant'	FC07/C)	Accept
∠∪.08	Auckland	Ixxx.8.2 Assessment criteria -	FS07(S)	Accept
	Transport	Restricted Discretionary		
		Activities, (2)(i) as follows:		
		'The design of the Local Centre		
		shall achieve a connected and		
		functional design that reflects a		
		high quality of architectural		
		design, landscape architecture		
		and best practise urban design		
		principles, including the extent to		
		which a suitable pedestrian and		
		cyclist connection is provided		
		between the Local Centre and		
		any public transport interchange		
	1	· · · · · · · · · · · · · · · · · · ·	1	1

•			1	
		<u>facilities</u> , the land to the west,		
		south and to the pedestrian and		
		cycle crossing at the Wider		
		Western Link Road and State		
		Highway One Intersection.'		
20.69	Auckland	Amend the special information	FS07(O)	Accept
	Transport	requirements under Ixxx.9.1	,	
	'	Transport and safety, by adding		
		the following as clause (2):		
		'Transport Design Report		
		Any proposed new key road		
		intersection or upgrading of		
		existing key road intersections		
		illustrated on the Precinct Plan or		
		otherwise identified in the		
		precinct provisions must be		
		supported by a Transport Design		
		Report and Concept Plans		
		(including forecast transport		
		modelling and land use		
		assumptions), prepared by a		
		suitably qualified transport		
		engineer confirming the location		
		and design of any road and its		
		intersection(s) supports the safe		
		and efficient function of the		
		existing and future (ultimate)		
		transport network and can be		
		accommodated within the		
		proposed or available road		
		reserves. This may be included		
		within a transport assessment		
		supporting land use or		
		subdivision consents.		
		In addition, where an interim		
		upgrade is proposed, information		
		must be provided, detailing how		
		the design allows for the ultimate		
		upgrade to be efficiently		
		<u>delivered.</u>		
		For the avoidance of doubt, the		
		key road intersections for the		
		purposes of this requirement are		
		identified on Precinct Plan 3 as		
		'Indicative Access Points onto		
		WWLR' and 'Indicative WWLR /		
		SH1 Intersection'. In addition the		
		Valerie Close / SH1 intersection		
		is a key road intersection.'		
20.70	Auckland	Amend Ixxx.9.4 Waimanawa	FS07(O)	Accept
_00	Transport	Precinct Plan 1 Spatial		, 1000pt
	Transport	provisions by removing the		
		following information (which		
		already appears on Precinct		
		Plan 3):		
		1 Iaii J <i>)</i> .		

	T		T	1
		Indicative WWLR / SH1		
		Intersection		
		Indicative Future Public		
		Transport Hub		
		Indicative Dedicated On-Road		
		Cycle Path.		
20.71	Auckland	Amend the key for Ixxx.9.4	FS07(Sp)	Accept
	Transport	Waimanawa Precinct Plan 3		
		Transportation, as follows:		
		'Indicative Future Public		
		Transport Hub Interchange		
		(approximately 2100m2)'		
20.72	Auckland	Amend Ixxx.9.4 Waimanawa	FS07(S)	Accept
	Transport	Precinct Plan 3 Transportation,		
		to show the cycle facilities		
		proposed on State Highway 1.		
		Or in the alternative, delete all of		
		the 'Indicative Dedicated On-		
		Road Cycle Path' from Precinct		
		Plan 3 as these can be covered		
		by the requirements in Table		
		IXXX.6.15.1 and Table		
		IXXX.6.15.2.		
20.75	Auckland	Amend Table XXX.X.1 Activity	FS08(O)	Accept
	Transport	table, to include the following as	FS09(S)	'
	'	a non-complying (NC) activity:		
		'Subdivision and development		
		with vehicle access to the Wider		
		Western Link Road'		
20.76	Auckland	Amend the precinct provisions	FS07(O)	Reject
	Transport	applying to weddings and	FS09(O)	'
	•	functions to ensure that transport		
		effects can be appropriately		
		assessed and addressed. This is		
		likely to require (but is not limited		
		to) amendments to Table		
		XXX.X.1 Activity table, and the		
		standards in XXX.6.9 Weddings		
		and functions.		
20.77	Auckland	Delete or amend XXX.5	FS06(S)	Accept
·	Transport	Notification (1) to enable public	FS07(O)	'
		or limited notification of	FS08(S)	
		applications which have a	FS09(O)	
		potential adverse effect on the		
		transport network.		
20.78	Auckland	Amend XXX.6.1 General access	FS07(O)	Accept
	Transport	and traffic generation standard,	FS09(S)	
	7.55	(1), as follows:		
		'All activities shall obtain Vehicle		
		access is limited to State		
		Highway One in accordance with		
		at the Approved Entry Point		
		(AEP) shown on the Precinct		
		Plan.'		

00.70		1 1 1 1000	E007(0)	
20.79	Augkland Augkland	Amend or replace XXX.6.1 General access and traffic generation standard (2), with robust, and enforceable standards which can be easily measured by the Council and applicants and which appropriately address transport effects and transport land use integration and provide for the access to the precinct to be upgraded if required.	FS07(O) FS09(O)	Accept
20.80	Auckland Transport	Amend XXX.6.1 General access and traffic generation standard, by adding a new clause as follows: 'Subdivision and development that has frontage to the Wider Western Link Road must not be provided with vehicle access to that road.'	FS07(O) FS09(O)	Accept
20.81	Auckland Transport	Amend Xxxx8.1 Transportation and Safety by replacing the reference to E27.9 with a special information requirement for a transport assessment which is more specific to the precinct, and includes consideration of the access point on State Highway One. Amend Xxxx8.1 Transportation and Safety as follows: The special information requirements under E27.9 apply. The Council may require applications which affect the transport network to include a transport assessment prepared by a suitably qualified transport planner or traffic engineer. Any upgrading of existing State Highway One access illustrated on the Precinct Plan as the Approved Entrance Point must be supported by a Transport Design Report and Concept Plans (including forecast transport modelling and land use assumptions), prepared by a suitably qualified transport engineer confirming the location and design of any access supports the safe and efficient function of the existing and future (ultimate) transport	FS06(S) FS07(O) FS09(O)	Accept

	T			T
		network and can be accommodated within the proposed or available road reserves. This may be included within a transport assessment supporting land use or subdivision consents. In addition, where an interim upgrade is proposed, information must be provided, detailing how the design allows for the ultimate upgrade to be efficiently delivered.		
21.3	Ash Hames and Fiona Rayner	Amend Policy 16 as follows; (16) Subdivision, use and land development shall avoid direct vehicle access from newly created individual sites on to the Wider Western Link Road and State Highway One [rename to reflect the AT road name eg Great North Road], while allowing direct pedestrian and cycle access.	FS04(O) FS07(O) FS12(Sp)	Accept in part
21.4	Ash Hames and Fiona Rayner	The references to State Highway 1 be updated when the road is reverted to Auckland Transport so there is no confusion with Ara Tūhono.	FS07(S)	Accept
21.5	Ash Hames and Fiona Rayner	Rule Ixxx.6.7 – Limited Access Restrictions, Pedestrian Connections and Cycle Facilities (2) needs to be amended so it is clear that the rule applies only to new sites being created as a result of subdivision and land development within the PPC93 area and associated Precinct. In the Residential - Large Lot zone this rule only appears to apply to Supported Residential Care accommodating greater than 10 people per site	FS04(Op) FS07(O)	Accept in part
24.3	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Update all references to 'State Highway One' in the Precinct Plan to 'Old State Highway One'.		Accept
24.11	KA Waimanawa	Update the Trigger within the third column of Table		Accept

	Limited	IXXX.6.15.1 relating to (T2) with		
	Partnership and Stepping	the following wording: 'As part of the first subdivision for any land: (a) within the		
	Towards Far Limited (The Submitters)	Business – Local Centre zone: or (b) for a retirement village; or (c) for a residential development creating more than 20 residential lots.'		
24.12	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Update the Transport Infrastructure Upgrade within the second column of Table IXXX.6.15.1 relating to (T2) with the following wording: 'Upgrading of old State Highway One though the WW South Precinct to the extent shown on Precinct Plan 3.' Update the Transport Infrastructure Upgrade within the second column of Table IXXX.6.15.1 relating to (T3) with the following wording: 'Construction of the temporary pedestrian/cycle path on old State Highway One from the Wider Western Link Road/old State Highway One Intersection to McKinney Road.' Delete row (T4).	FS04(Op) FS06(S) FS12(S)	Reject
24.13	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Update the Trigger within the third column of Table IXXX.6.15.1 relating to (T2) with the following wording: 'As part of the first subdivision for any land: (a) within the Business – Local Centre zone: or (b) for a retirement village; or (c) for a residential development creating more than 20 residential lots.'		Accept
24.14	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Update the Trigger within the third column of Table IXXX.6.15.1 relating to (T7) with the following wording: As part of the first subdivision for residential development within Waimanawa Valley, as shown on Precinct Plan 3, which has vehicle access to Valerie Close.'		Accept in part
24.15	KA Waimanawa	Update Note 3 to Table IXXX.6.15.2 with the following	FS03(O) FS06(O)	Reject

	Limited Partnership and Stepping Towards Far Limited (The Submitters)	wording: 'Note 3: The shared walking and cycle path provision on old State Highway One will be a temporary cycling and walking facility from the Wider Western Link Road/old State Highway One intersection to the McKinney Road/old State Highway One intersection.'	FS12(S	
27.2	John and Sue Wynyard (Wynyard family)	The Submitter seeks identification of the Wider Western Link Road bridge location. The location put forward in NOR 8 – Wider Western Link Road is supported, and it is sought this location be secured and identified on Precinct Plan 1 – Spatial Provisions.	FS07(S)	Accept in part
31.1	Waka Kotahi NZ Transport Agency	Provide an assessment of the proposal relative to the Future Development Strategy	FS07(O) FS12(O)	Accept
31.2	Waka Kotahi NZ Transport Agency	Provide an assessment of the proposal relative to the Emissions Reduction Plan	FS07(O)	Accept
31.3	Waka Kotahi NZ Transport Agency	Update the ITA and planning provisions to include all required upgrades, including walking and cycling connections to existing paths in the urban area and clarify the extent of intersection upgrades required, including at Valerie Close.	FS07(O) FS12(O) FS13(O)	Accept
31.4	Waka Kotahi NZ Transport Agency	Provide an assessment of the number and location of pedestrian crossings of SH1 required to service this development and update the precinct provisions to reflect the outcomes of this assessment.	FS07(O) FS13(O	Reject
31.5	Waka Kotahi NZ Transport Agency	Amend the precinct provisions to include objectives, policies and rules to manage effects of road traffic noise on future sensitive receivers in the plan change area.	FS07(O)	Reject

Discussion

Auckland Transport

- 275. These submissions, and particularly the submission from Auckland Transport (AT) include a large amount of detail. It is considered most helpful if this is discussed in on a thematic basis rather than working through each submission individually. In addition there a number of submission points which are of an administrative or technical nature that appear to be agreed between the applicant and AT. These are not discussed further.
- 276. The detailed submissions from AT have also been assessed by the Council's Transport Consultant, Mr Peake, in Attachment 1 to his technical memo. I do not repeat this assessment except where there is a difference of opinion between Mr Peake and myself. Some major themes within the AT submission are discussed below.

Consistency with NPS-UD and RPS

277. Submission 20.2 from AT states that;

The plan change will enable development in a location which does not have frequent public transport services and where there is no Auckland Transport funding available to improve the services. For this reason the plan change does not give effect to some NPS-UD and RPS objectives and policies relating to public transport. In particular it will not:

. . .

Assess against the NPS-UD and RPS obs and pols relevant to PT and transport choice.

278. This concern is shared by Mr Peake and remains unresolved. A full assessment against public transport objectives and policies in the higher order plans is considered necessary to understand whether PPC93 gives effect to those documents. Until an analysis is undertaken it is not possible to conclude that PPC93 gives effect to the NPS-US and the RPS.

The appropriate objectives and policies concerning the provision of transport infrastructure

279. The AT submission generally supports enhanced objectives and policies in respect of the provision of transport infrastructure necessary for the development of the plan change area. This is consistent with submissions in respect of other infrastructure generally which are discussed below. I consider that the strengthening of these provisions is warranted given the importance within the higher order plans of integrating development with the provision of infrastructure.

The activity status of transport infrastructure triggers for subdivision and development

280. The AT submission seeks that if the triggers for the provision of infrastructure are not met then any resource consent for subdivision and development should be a non-complying activity. This is consistent with the strengthening of the objectives and policies around the provision of transport infrastructure. This is supported for similar reasons as outline in paragraph 279 above.

Education Facilities

- 281. AT seeks that references to education infrastructure be removed from the list of infrastructure that should be co-ordinated with development in Objective 8 and its associated Policy 12. Mr Peake supports this removal from a traffic perspective.
- 282. This is also discussed below in respect of infrastructure generally. It is considered that at an objective and policy level, at least, the provision of any required schools and other educational infrastructure should be co-ordinated with development, at least in the planning stages. It is recognised that the Ministry of Education is responsible for the provision of schools, and in most cases the ministry will use designations to provide schools. However it will assist community building and the achievement of a well functioning urban environment if there is a degree of co-ordination at planning stages between the Ministry and the developer. It is considered that these submissions should be rejected.

The applicant's role in providing the public transport hub

- 283. In PPC93 as notified Objective 10 is 'To provide for the opportunity for a future public transportation interchange which can be safely accessed by a range transportation modes.' AT has requested a number of detailed changes to this objective including removing the term 'the opportunity' so as to make the objective more directive that such a transport hub should be provided. Mr Peake supports this submission as it would highlight the importance of the need for public transport.
- 284. It is considered that the changes sought by AT are appropriate given the need to effectively provide for public transport and is consistent with the Warkworth Structure Plan. The proposed rewording does not require the applicant to actually provide the facility, which will presumably be provided by AT, but will give greater certainty that land will be available for such a hub. Other changes sought by AT specify the area required (2500m2). This will also give greater certainty about the size requirements although it would assist if AT could provide evidence at the hearing that provides the reasoning behind the need for a 25000m2 site.

Noise

- 285. AT seek that the plan change be amended by including precinct provisions (objectives, policies and rules) within the Waimanawa Precinct to require that future developments and alterations to existing buildings mitigate potential road traffic noise effects on activities sensitive to noise from the existing State Highway 1 arterial and the future Wider Western Link Road arterial. The extent of these provisions are not specified in the submission. Any specific provisions would then have to be set out in evidence.
- 286. There are no such standards generally applying in the AUP, however several different sets of standards have been introduced through private plan changes in other parts of Auckland, for example in Drury. There is variation between these provisions applying to various areas, due to the way in which they have been introduced into the AUP through plan changes and as a result of submissions on plan changes.
- 287. It is my preference that such provision be introduced across the region rather than the continued introduction through submissions on plan changes in order that a co-ordinated set of provisions is provided for the region rather than an in an ad-hoc manner. I consider that this would better provide for integrated

management and would reduce inconsistencies across the AUP. While there is no proposal for a comprehensive district wide plan change for this purpose, the opportunity exists for a private plan change to be proposed to achieve this. The submitter could provide a view on this at the hearing.

Auckland Council

- 288. Mr Peake has provided comments on the relevant submission points from Auckland Council. Mr Peake comments as follows:
 - 5.6 Auckland Council has provided a submission on the precinct provisions for PPC93. The following provides responses to the traffic and transport related requests.
 - 5.7 Submission Points 17.3 and 17.4 request that all activities for subdivision and development should be a non-complying activity where this is non-complying with Standard IXXX.6.8 Western Link Road and IXXX.6.15 Transportation Infrastructure. For consistency, to ensure the WWLR and other transport infrastructure is provided, I support these amendments.
 - 5.8 Submission Point 17.5 requests that non-compliance with Standards IXXX.6.8 Western Link Road and IXXX.6.15 Transportation Infrastructure should be notified. As these pieces of transport infrastructure are necessary to support the plan change, I support this amendment.
 - 5.9 Submission Point 17.6 requests that the triggers in Table IXXX.6.15.1 Transport Infrastructure Requirements be reduced from 20 residential lots to 3 residential lots. The request appears to be made to be consistent with the Medium Density Residential Standard. I consider that the 20 lot threshold is more reasonable for providing significant transport infrastructure to support that development. I recommend declining this request.
 - 5.10 Submission Point 17.7 requests that an additional north-south connection through Waimanawa Valley is provided on Precinct Map 3. It is not clear the purpose of the additional connection. There are a number of north-south roads proposed within the precinct and shown on the map. I recommend declining this request.
- 289. I agree and accept these assessments and conclusions except in reference to submission point 17.6 which relates to extent of development allowed before various transport triggers have effect. I consider that while there may be transport reasons for allowing 20 lots before the provision of infrastructure is required, the way the standard is worded there could be a series of 20 lot subdivisions without providing the upgrades. A 3 lot requirement with some subtle changes to the wording will give greater certainty that the triggers will be reached and as Mr Peake notes is consistent with number of lots that can be established around a permitted development under the MDRS.

Arthur Douglas Brown

290. Mr Brown requests that the alignment of the WWR should connect to SH1 at 1829 SH1. This location is to the north of the plan change area. This location and the road is outside the scope of PPC93.

Ash Hames and Fiona Rayner

291. Mr Peake has assessed these submissions and advised as follows;

Submission points 21.3 and 21.5 seek that existing vehicle access onto SH1 will be retained under the vehicle access restriction standard. It is concurred that it would be appropriate that existing vehicle crossings onto SH1 should be retained as alternative access may not be feasible. I suggest that Objective 16 could be updated to read:

Objective 16: Avoid direct vehicle access from individual sites (except vehicle crossings in existence at the time the Precinct is made operative) onto the Wider Western Link Road

Additionally standard IXXX6.7(2) could be clarified with the addition of the following at the end of the standard

This standard does not apply to any vehicle crossing that exists onto

This standard does not apply to any vehicle crossing that exists onto State Highway 1 at the time the Precinct is made operative.

- 292. I largely agree with the assessment of Mr Peake but recommend slightly different wording changes which would be simpler and with perhaps greater clarity as set out in Appendix 5.
- 293. The submitters also suggest that the term SH1 be amended as SH1 is now located elsewhere. I recommend that this be accepted as it will avoid confusion between the current SH1 and the old SH1.
 - KA Waimanawa Limited Partnerships and Stepping Towards Far Limited (the applicant)
- 294. The applicant has sought a number of changes in respect of the provisions relating to transport.
- 295. Mr Peake comments on these as follows;

Submission point 24.11 seeks to amend the wording of the trigger (T2) in Table IXXX.16.15.1 Transport Infrastructure Requirements as this is open to interpretation. The submitter proposes that the wording be amended to provide more clarity. The requested change is consistent with submission point 20.48 from Auckland Transport and the amendment is supported.

Submission point 24.12 requests amendment to Table IXXX6.15.1 column 2 (T2) and (T3) in relation to the description of transport upgrades for clarity (in combination with an updated Precinct Plan 3) and the deletion of row T4. Amendments to the wording and Precinct Plan 3 would provide clarity of the transport upgrades. Auckland Transport has also requested changes in submission points 20.48 and 20.50 and my preference is for the amendments proposed by Auckland Transport.

Consistent with my recommendations in this report and with other submissions, a pedestrian/cycle crossing facility is required on SH1 to provide a connection across SH1 between the paths on either side of the road.

I would support the deletion of row T4 subject to an appropriate description in T3.

Submission point 24.13 raises concern that the current wording of the trigger within (T5) is open to interpretation. It is proposed to re-word this

section to provide more clarity. The requested change is consistent with submission point 20.51 from Auckland Transport and I support the requested amendment.

Submission point 24.14 requests amendments to the wording of Table IXXX6.15.1(T7) which requires the trigger for the construction of the Green Avenue to be required where there is vehicle access to Valerie Close. The Auckland Transport submission 20.52 requests that the trigger be when there is development with frontage to the road. I consider that a hybrid trigger is required which combines both submission point 20.52 and 24.14 as either could require the construction of the green way. I suggest the following wording to Table IXXX.6.15.1(T7):

As part of the first subdivision for residential development within Waimanawa Valley, as shown on Precinct Plan 3, which has vehicle access to Valerie Close, or development with frontage to the Green Avenue.

Submission point 24.15 requests an update to Note 3 under Table IXXX16.15.2 amending the description of the walking and cycling facility along SH1. The requested amendment only relates to a path north of the Wider Western Link Road. Cycle and pedestrian provision will be required along the upgraded sections of SH1. Therefore the note should be explicit on this matter. The Auckland Transport submission has suggested wording in their submission point 20.58 and this is supported. I recommend that the request be declined in favour of the Auckland Transport submission point 20.58.

296. I agree and accept these assessments and conclusions.

John and Sue Wynyard

297. Mr Peake notes that:

At submission point 27.2, the Submitter seeks identification of the Wider Western Link Road bridge location. The location put forward in the Warkworth NOR 8 – Wider Western Link Road is supported by the submitter, and it is sought that this location be secured and identified on Precinct Plan 1 – Spatial Provisions. For consistency with the NoR 8, it is concurred that there would be merit in identifying the bridge connection on the Precinct Plan 3 if this is within the extent of the precinct area.

298. I agree that this is appropriate to show on Precinct Plan 3 as recommended by Mr Peake. At the time of writing this report, the decision on NOR8 which sets the location of the bridge had been released and is subject to appeal. It is however appropriate to wait until all appeals have been dealt with before showing the final bridge location in the AUP. It is proposed that this be updated at the hearing.

Waka Kotahi NZ Transport Agency

299. Mr Peake has also provided comment on the transport related submission from Waka Kotahi NZ Transport Agency as follows;

Submission point 31.1 requests that an assessment of the proposal relative to the Future Development Strategy should be provided. The FDS has recently been approved and was not assessed in the lodged

documentation. The FDS recommends certain infrastructure to support development in Warkworth South and this should be considered in the assessment. I consider that an assessment of the PPC against the FDS should be provided in evidence.

Submission point 31.2 requests that an assessment of the proposal should be provided relative to the Transport Emissions Reduction Pathway (TERP). I support the request.

Submission point 31.3 requests that the ITA and planning provisions be updated to include all required upgrades, including walking and cycling connections to existing paths in the urban area and clarify the extent of intersection upgrades required, including at Valerie Close. I agree that updates are required to ensure appropriate walking and cycling connections are provided and that upgrades are provided to the Valerie Close intersection with SH1. The request is consistent with submissions from Auckland Transport.

Submission point 31.4 requests that an assessment of the number and location of pedestrian crossings of SH1 required to service this development be provided and that the precinct provisions be updated to reflect the outcomes of this assessment. I agree that crossings will be required across SH1 to provide connections between areas east and west of SH1. Furthermore a crossing will be required to connect across SH1 at the northern end of the interim path on the western side of SH1 by the Morrison Heritage Orchard entrance to provide connectivity between the paths on the east and western sides of the road and for the safe operation of the facility. Crossings along the upgraded SH1 can be determined during subsequent design / consent phases once more information is known about the form of development but I consider the precinct provisions should ensure that these are considered at the time of resource consent.

- 300. I agree and accept these assessments and conclusions.
- 301. Mr Peake does not address submission point 31.5 of the Waka Kotahi submission relating to noise mitigation. This submission point is consistent with submission 20.8 from AT. This is discussed in paragraphs 285-287 above.

Recommendations on submissions

- 302. That submissions 12.1, 17.7, 20.8, 20.10, 20.13, 20.15, 20.43, 20.47, 20.76, 24.12, 24.15, 31.4, and 31.5 be **rejected**.
- 303. That submissions 17.3, 17.4, 17.6, 20.2, 20.3, 20.4, 20.5, 20.6, 20.7, 20.9, 20.11, 20.12, 20.14, 20.16, 20.17, 20.18, 20.19, 20.20, 20.21, 20.24, 20.25, 20.26, 20.27, 20.28, 20.29, 20.30, 20.31, 20.32, 20.33, 20.34, 20.35, 20.36, 20.37, 20.39, 20.40, 20.41, 20.42, 20.44, 20.45, 20.46, 20.48, 20.50, 20.51, 20.53, 20.54, 20.55, 20.56, 20.57, 20.58, 20.59, 20.60, 20.61, 20.62, 20.63, 20.64, 20.65, 20.66, 20.67, 20.68, 20.69, 20.70, 20.71, 20.72, 20.75, 20.77, 20.78, 20.79, 20.80, 20.81, 21.4, 24.3, 24.11, 24.13, 31.1, 31.2 and 31.3 be accepted.
- 304. That submissions 20.23, 20.38, 20.49, 20.52, 21.3, 21.5, 24.14 and 27.2 be **accepted in part** to the extent set out in Appendix 5.

305. Should PPC93 be approved the changes resulting from this recommendation are set out in Appendix 5.

10.3 Submissions concerning infrastructure generally

306. Table 10.3.1

Sub No.	Name of submitter	Summary of relief sought	Further subs	S42A recommend ation
17.1	Auckland Council	Waimanawa Precinct - Amend objective (8) to add the word avoid subdivision and development unless it is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements.	FS03(S) FS05(S) FS06(S) FS07(O) FS08(S) FS11(S)	Accept
17.2	Auckland Council	Waimanawa Precinct - Retain existing non-complying activity status for activities not complying with Standard Ixxx.6.9 Standards for Wastewater and Potable Water Connections and/or Ixxx.6.10 Standards for Stormwater.	FS07(S) FS07(S) FS11(S)	Accept
19.1	Karen and Stefan Richardson	Approve the plan change with the amendments I requested related to the certainty around access and infrastructure provision to the submitters' land referred to as Waimanawa Hills B	FS07(S)	Reject
29.1	Ministry of Education	Amend Objective 10 as follows: (10) Subdivision and development is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure educational facilities) and services required to provide for development within the precinct and future community requirements.	FS07(S)	Reject
29.2	Ministry of Education	Amend Policy 12 as follows ; (12) Require subdivision and development to provide	FS07(S)	Reject

		stormwater, wastewater, potable water, electricity, communication		
		services and educational infrastructure educational facilities in a coordinated		
32.1	Watercare Services Limited	manner. Watercare seeks a decision that ensures that the water and wastewater capacity and servicing requirements of the Plan Change will be adequately met, such that the water and	FS07(O) FS08(S) FS12(S)	Accept
32.2	Watercare	wastewater related effects are appropriately managed. Watercare strongly supports	FS07(S)	Accept
32.2	Services Limited	precinct provisions that require subdivision and development to be coordinated with the provision of adequate water supply and wastewater infrastructure.	FS12(S)	Ассері
32.3	Watercare Services Limited	Watercare supports an activity status of non complying for any subdivision or development that precedes the provision of adequate water supply and wastewater infrastructure.	FS07(S)	Accept
32.4	Watercare Services Limited	Watercare supports Standard 1XXX.6 Wastewater and Potable Water Connections clauses (1) and (2) which require all lots except for those in Residential – Large Lot and Open Space – Conservation zones to be connected to a reticulated wastewater network and potable water network.	FS07(S) FS12(S)	Accept
32.5	Watercare Services Limited	Watercare supports Standard 1XXX.6 Wastewater and Potable Water Connections clause (3) which requires development to be connected to a functioning water and wastewater network prior to the issue of a s224(c) certificate, subject to the following amendment to ensure that the network also has the capacity to serve the proposed development. Ixxx.6.9 Wastewater and Potable Water Connections (3) Prior to the issue of s224(c), the development shall be connected to a functioning water and wastewater network with	FS07(S) FS08(Sp) FS12(S)	Accept

		sufficient capacity to service the proposed development.		
32.6	Watercare Services Limited	To ensure that the precinct description is consistent with the requirements of Standard 1XXX.6 Wastewater and Potable Water Connections and the amendments proposed by Watercare, Watercare seeks the following amendments to the precinct description.	FS05(Sp) FS06(Sp) FS07(O) FS08(Sp) FS12(O)	Accept
		The development controls for the precinct recognise that development of residential lots can occur concurrently with the provision of infrastructure but prior to the issuing of s224(c) certification for subdivision. However, the development controls do require that development is connected to a functioning water and wastewater network with sufficient capacity to service the proposed development prior to the issuing of s224(c) certification for subdivision.		
32.7	Watercare Services Limited	To ensure there is strong and directive policy support for the non-complying activity classification for development and subdivisions that do not comply with Standard 1XXX.6 Wastewater and Potable Water Connections, Watercare seeks the inclusion of the following new policy. IXXX.3 Policies (XX) Avoid subdivision and development progressing ahead of the provision of a functioning water and wastewater network with sufficient capacity to service the proposed development.	FS07(O) FS08(Sp) FS12(O)	Accept
40.1	M A & MG Wilson	The submitters have no objection to Plan Change 93 (Private), provided that there will be no further degradation of telecoms and Internet / broadband supply to our property as a result of the increase in residential and commercial premises within this	FS07(S)	Reject as beyond scope

defined zone i.e. the contention ratio, must be taken into consideration, inclusive of the nearby properties with the	
proposal.	

Discussion

- 307. There are number of themes that come through these submissions.
- 308. The submissions from Auckland Council and Watercare Services Limited generally seek that the provisions within PPC93 that are designed to ensure that infrastructure and development are integrated are strengthened to ensure that development does not take place ahead of the provision of infrastructure. This topic is discussed above in paragraphs 58 onwards.
- 309. The submission from WSL additionally seeks that the sufficiency of the water and wastewater network be assessed at the time of development.
- 310. As discussed above there is a real concern that the water and wastewater networks within Warkworth are not sufficient and will not be sufficient to cater for the development enabled by PPC93 for some time. It is expected that the applicant and WSL will present more detailed evidence concerning this at the hearing.
- 311. It is my view that if PPC93 is approved the provisions that link development with infrastructure need to be robust. The wording suggested by submitters will assist in achieving this. These will also assist in ensuring that the infrastructure is sufficient at the time of development. However as the infrastructure may not be available for some time in the future, it may be appropriate to retain the FUZ rather than providing 'live' urban zonings now.
- 312. The submission from the Ministry of Education seeks that the term "educational facilities" be used instead of "educational infrastructure" within the relevant objectives and policies around the provision of infrastructure in the development of the plan change area.
- 313. While the term 'educational facilities' is used in the national planning standards it is not used in the AUP where the term 'education facilities' is used to include schools. There is some precedent to use the term "infrastructure" in objectives and policies. For example Policy 10 of the NPS:UD uses the defined term 'additional infrastructure' 16 to describe a range of infrastructure not controlled by the local authority. This includes schools. The term educational infrastructure covers a wider range of activities, without detracting from the need to provide schools. For example education facilities does not include pre-schools and does

b. community infrastructure as defined in section 197 of the Local Government Act 2002

95

¹⁶ Defined as; **additional infrastructure** means:

a. public open space

c. land transport (as defined in the Land Transport Management Act 2003) that is not controlled by local authorities

d. social infrastructure, such as schools and healthcare facilities

e. a network operated for the purpose of telecommunications (as defined in section 5 of the Telecommunications Act 2001)

f. a network operated for the purpose of transmitting or distributing electricity or gas

- not include any tertiary education facility. I consider that the most appropriate option is to continue to use the term 'educational infrastructure' or similar term which encompasses a wider range of education provision.
- 314. The submission from Karen and Stefan Richardson seeks that the agreed design, planning, infrastructure, and stormwater management submitted in PPC93 be given greater certainty. It is understood that the submitters have worked with the applicant as a co-operating landowner¹⁷in the development of PPC93 and that their land is included within PPC93.
- 315. If PPC93 is approved the eventual development of the land will be reliant on further design work and resource consents that will also require a degree of cooperation between various land owners. The Council is not party to any agreements between landowners and the formalisation of any agreement within the AUP is not practicable as this would not be sufficiently flexible to allow for changes in landowners and circumstances over time. It is not considered practical to specify how this co-operation should occur within the AUP as land holdings and the nature of any consent requirements may change over time. It is also considered that the subdivision provisions within Chapter E38 are adequate to manage infrastructure co-ordination should it be able to be provided.
- 316. M A & M G Wilson seek that the development of the land in PPC93 not result in reduced internet services for the submitters. The provisions within Chapter E38 Subdivision require that each lot be able to be reticulated for a range of infrastructure including telecommunications. However the actual supply of telecommunication infrastructure is not controlled by the Council and is supplied by the private sector. The AUP does not set standards for the adequacy of internet provision. It is understood that fibre internet is provided in Warkworth and it is considered likely that this will be extended to the plan change area should the land be rezoned for urban uses. It will be up to the internet fibre provider to manage speeds and capacity.

Recommendations on submissions

- 317. That submissions 19.1, 29.1, 29.2 and 40.1 be **rejected.**
- 318. That submissions 17.1, 17.2, 32.1, 32.2, 32.3, 32.4, 32.5, 32.6,and 32.7 be accepted.
- 319. Should PPC93 be approved the changes resulting from this recommendation are set out in Appendix 5.

10.4 Submissions concerning ecology

320. Table 10.4.1

Sub No.	Name of submitter	Summary of relief sought	Further subs	S42A recommend ation
24.6	KA Waimanawa Limited	Reword and update (A4) to 'New reclamation and drainage of a Retained Stream on Precinct		Reject

¹⁷ Application Request p17

-

•	1		T	•
	Partnership	Plan 2, including filling within the		
	and	stream and piping of a stream,		
	Stepping	but excluding drainage works		
	Towards Far	underneath a stream or bridging		
	Limited (The	over a stream' in Table IXXX4.1		
	Submitters)			
24.9	KA	Update standard Ixxx6.12(1) and		Accept
	Waimanawa	Ixxx6.12(2) by removing the		•
	Limited	reference to 'land development'		
	Partnership	within the opening sentence and		
	and	replacing it with 'site		
	Stepping	development'.		
	Towards Far	Update standard Ixxx6.12(1) and		
	Limited (The	Ixxx6.12(2) by removing the		
	Submitters)	reference to 'or along the		
	Submitters)			
		riparian yard' within the final		
		sentence and replacing it with 'or		
24.40	IZ A	within the riparian yard'.	E005(O)	A 00 5 15 4
24.10	KA Wainaanawa	Update standard lxxx.6.14(2)	FS05(O)	Accept
	Waimanawa	with the following wording		
	Limited	'Where the Council does not		
	Partnership	want or is unable to accept		
	and	vesting of the walkway/cycleway		
	Stepping _	and associated riparian yard and		
	Towards Far	stream bank, then there is no		
	Limited (The	requirement to provide the		
	Submitters)	walkway/cycleway'.		
28.1	Department	Undertake further surveying in	FS07(S)	Accept
	of	the PPC site to fully understand	FS12(S)	
	Conservatio	the population size and location		
	n	of long-tailed bats.		
28.2	Department	Insert the requirement for the	FS07(O)	Reject
	of	PPC to ensure developers abide		
	Conservatio	the Department of Conservation		
	n	Protocols for minimising the risk		
		of felling occupied bat roosts.		
28.3	Department	Amend the plan to adequately	FS05(Sp)	Reject
-	of	cover the following issues:	FS07(O)	'
	Conservatio	Zone the Bat Flight Corridor as	FS08(S)	
	n	Open Space – Conservation.	(.)	
		Increase the minimum corridor		
		width to one hundred metres.		
		Require the lighting provisions		
		alongside the bat flight corridor		
		to abide by the Australian		
		Government "National Light		
	1			
1		Dollution Cuidolines for Wildlife"		
		Pollution Guidelines for Wildlife".		
		Require that development in,		
		Require that development in, and adjacent to, the bat flight		
		Require that development in, and adjacent to, the bat flight corridor utilises the Department		
		Require that development in, and adjacent to, the bat flight corridor utilises the Department of Conservation's Protocols for		
		Require that development in, and adjacent to, the bat flight corridor utilises the Department of Conservation's Protocols for minimising the risk of felling		
		Require that development in, and adjacent to, the bat flight corridor utilises the Department of Conservation's Protocols for		

		domestic cats within one kilometre of the bat flight corridor.		
28.4	Department of Conservatio n	Amend the plan to adequately cover the following issues: Require a prohibition in keeping domestic cats within one kilometre of the Avice Miller Scenic Reserve.	FS07(O) FS08(Sp)	Reject

Discussion

321. The submissions from the applicant seek changes to a number of provisions around stream works and riparian margins. In respect of these submissions Mr Statham – Ecologist for the Council has made the following comments.

The current wording potentially suggests that any reclamation or drainage works require consent. The intent of the Rule is to only control reclamation and drainage works within the identified retained streams.

The submission #24.6 seeks, "Reword and update (A4) to 'New reclamation and drainage of a Retained Stream on Precinct Plan 2, including filling within the stream and piping of a stream, but excluding drainage works underneath a stream or bridging over a stream' in Table IXXX4.1".

I disagree with the submission. I have previously stated, para 4.28.1, the NES-F does not provide for a more permissive standard than in a statutory Plan. The applicant is seeking tacit acceptance regarding stream loss, where they have not demonstrated at the Plan Change stage of any functional need for the reclamation of the riverbed in that location. (NES-F reg 57)

Works under or over a stream where it does not require consent for other matters (e.g. vegetation alteration) is unlikely to require consent. Chapter E15, E3 and NES-F already provide for satisfactory statutory matters relating to works in and around streams. The submitter has not provided any evidentiary reporting to support their position.

- 322. I accept the advice of Mr Statham in respect of submission 24.6 and recommend that no change be made to (A4) in Table IXXX4.1.
- 323. The changes proposed in submission 24.9 relate to some minor wording changes that improve understanding of the proposed provisions and these should be accepted if PPC93 is approved.
- 324. The changes proposed in 24.10 is noted as not being supported in Mr McCarten's assessment.
- 325. The submissions from the Department of Conservation (DOC) largely concern the provision of protection mechanisms for bats and the introduction of

- prohibitions on the ownership of cats within 1km of the bat corridors and the Avice Miller reserve.
- 326. Mr Statham discusses the requests for additional bat protection measures in his technical memo. I understand that he is most concerned that further surveys of bat populations (Submission 28.1) are required so that any further restrictions can be fully justified. At this time I understand that this work has not been done. It is considered that this submission should be accepted and additional information should be provided in evidence.
- 327. I am reluctant to recommend that the remainder of the DOC submissions be accepted. There are a number of reasons for this.
- 328. Firstly, a survey of the bat population and its use of corridors does not appear to have been undertaken so there is no real understanding of the areas bats use and the extent to which these are used. The DOC request for a 100m wide corridor that is zoned open space, in my view will require a fuller justification that currently exists. I note also the reluctance of the Council Parks department to define the boundaries of zoned open space at plan change stage.¹⁸
- 329. Secondly it is unclear the extent to which DOC protocols can be used in the AUP. The DOC protocols are not listed in Appendix 17 which contains a list of the documents incorporated by reference. Bats are also already protected by the Wildlife Act 1953. DOC should clarify this at the hearing.
- 330. Thirdly if the DOC protocols are to be included in the AUP it may be preferable that these should be included on a region wide basis and not in one area only. This would require a wider plan change.
- 331. On an interim basis it is considered that the submitter should provide more evidence should be provided about the extent of bat needs within the Plan Change area on which to base decision making.
- 332. In respect of the requested prohibitions on the keeping of domestic cats within 1km of the bat flights or the Avice Miller reserve it is considered that more evidence on the effectiveness of this should be provided. This type of rile has been included with the AUP in the Te Arai North Precinct. Mr Statham supports the restriction, but I consider that additional justification is required, particularly in respect of the use of a 1km figure without specific evidence that this will achieve the protections that such a rule is aimed at achieving. Again I have concerns that this type of provision within a single plan change area is less appropriate than an overall region wide approach.

Recommendations on submissions

- 333. That submissions 24.6, 24.10, 28.2, 28.3 and 28.4 be **rejected**.
- 334. That submissions 24.9, and 28.1 be accepted.
- 335. Should PPC93 be approved the changes resulting from this recommendation are set out in Appendix 5.

-

¹⁸ Specialist memorahun form Gerrard McCarten p15

10.5 Submissions concerning the Morrison Heritage Orchard Precinct

336. Table 10.5.1

Sub No.	Name of submitter	Summary of relief sought	Further subs	S42A recommend ation
17.9	Auckland Council	Morrison Heritage Orchard Precinct - Amend Table XXX.X.1 Activity table, XXX.6. Standards and make consequential amendments to address the cumulative effects of the activities, either in combination or where more than one of the same activity occurs within the precinct.	FS07(O) FS09(Sp)	Accept
17.10	Auckland Council	Morrison Heritage Orchard Precinct - Amend XXX.6. Standards and make consequential amendments by adding provisions that: (i) recognise, maintain and enhance the existing planting, particularly the shelter belt; and (ii) identify the streams within the precinct and the planting on either side.	FS07(O) FS09(O)	Accept
20.73	Auckland Transport	Amend the Morrison Heritage Orchard precinct provisions, including objectives, policies and rules, to more rigorously address transport effects and promote good transport land use integration.	FS07(O) FS09(O)	Accept
20.74	Auckland Transport	Amend the plan change by including precinct provisions (objectives, policies and rules) within the Morrison Heritage Orchard Precinct to require that future developments and alterations to existing buildings mitigate potential road traffic noise effects on activities sensitive to noise from the existing State Highway 1 arterial and the future Wider Western Link Road arterial.	FS07(O) FS09(O)	Reject
41.1	R and T Morrison, D Morrison	In the Morrison Heritage Orchard Precinct amend Table XXX.X.1 (A2) to read One dwelling per site in Activity Areas A, B and C other than as permitted in (A1) above and (A12) of this Table.	FS07(S)	Accept

	15	I		T
41.2	R and T Morrison, D Morrison	In the Morrison Heritage Orchard Precinct amend Table XXX.X.1 (A6) to read One minor dwelling per principal dwelling, excluding dwellings established under (A12) of this Table.	FS07(S)	Accept
41.3	R and T Morrison, D Morrison	In the Morrison Heritage Orchard Precinct amend Table XXX.X.1 (A16) to read New buildings or additions 250m2 GFA or greater in all Precinct Activity Areas.	FS07(S)	Accept in part
41.4	R and T Morrison, D Morrison	In the Morrison Heritage Orchard Precinct amend Standard XXX.6.1(2) to read Activities A3 to A13, excluding produce sales (A7), listed in Table XXX.X.1 above do not either singularly or cumulatively exceed a trip generation threshold of 100 v/hr (any hour).	FS07(S)	Accept in part
41.5	R and T Morrison, D Morrison	In the Morrison Heritage Orchard Precinct amend Standard XXX.6.2 as follows; XXX.6.2. Camping grounds within Precinct Plan Activity Areas A and B (1) Camping ground(s) for a maximum of 50 sites within each either of Activity Areas A and B. (2) Camping ground sites shall not cumulatively exceed 100 sites over both Activity Areas A and B	FS07(S)	Accept in part
41.6	R and T Morrison, D Morrison	In the Morrison Heritage Orchard Precinct amend Standard XXX.6.3 as follows; XXX.6.3. Garden Centre within Precinct PlanActivity Areas A and B (1) The maximum area of a garden centre in including building and outdoor sales and storage areas is 750m2. (2) Only one garden centre may be established in either Activity Area A or B, but not both.	FS07(S)	Accept in part
41.7	R and T Morrison, D Morrison	In the Morrison Heritage Orchard Precinct amend Standard XXX.6.4 as follows; XXX.6.4. Markets (1) The location of the market shall be located within Activity Area B. (2) A The market shall have a maximum of 100 stalls.	FS07(S)	Accept in part

		(3) The trading hours of markets		
		are limited to 7.00am until to		
		11.00pm.		
		(4) Any other activities		
		associated with the market must		
		not occur between midnight and		
		6.00am.		
		(5) Stalls involved in the markets		
		are limited to the sale of food		
		and beverages or items		
		produced by the stall holder		
		·		
		which may include fresh and		
		processed goods, small holding		
		livestock, artwork, crafts and		
		pottery and includes locally		
		made products. This includes		
		shops with an operational		
44.0	D ! T	function (e.g. cheese making).	F007(0)	A 1 '
41.8	R and T	In the Morrison Heritage Orchard	FS07(S)	Accept in
	Morrison, D	Precinct amend Standard		part
	Morrison	XXX.6.5 as follows; XXX.6.5.		
		Produce sales		
		(1) The location of the Orchard		
		produce sales shop shall be		
		located within Activity Area B of		
		the Precinct plan.		
		(2) A The produce shop shall		
		have a maximum of 450m2		
		including building and outdoor		
		sales for the display and sale of		
		produce.		
		(3) The type of produce offered		
		for sale on the site must be		
		confined to the following:		
		(a) fruit, vegetables, plants,		
		eggs, flowers, honey, dairy		
		products, meat, beer, wine,		
		juices.		
		(b) produce or products from on-		
		site primary produce		
		manufacturing.		
		(c) produce and handcrafts not		
		grown or produced on the site or		
		on a site in the locality, shall not		
		exceed 10 % of the GFAproduce		
		display and sales area.		
41.9	R and T	In the Morrison Heritage Orchard	FS07(S)	Accept in
0	Morrison, D	Precinct amend Standard	(-)	part
	Morrison	XXX.6.6 as follows: XXX.6.6.		1,2
		Restaurant and cafe		
		(1) One restaurant and one café		
		may be established in Activity		
		Area B.		
		(2) A restaurant or café shall		
		each provide have maximum		
		cacii provide nave maximum		I

41.10	R and T	seating for a maximum of 120 people. (3) The hours of operation of both a restaurant or and café are limited to 7.00am to midnight.		
41.10		(3) The hours of operation of both a restaurant or and café are		
41.10		both a restaurant or and café are		
41.10				i
41.10				
		In the Morrison Heritage Orchard	FS07(S)	Accept in
	Morrison, D	Precinct amend Standard	1 007 (0)	part
l l	Morrison	XXX.6.7 as follows: XXX.6.7.		F
		Rural tourist and visitor activities		
		(1) Rural tourist and visitor		
		activities for a maximum of 500		
		people cumulatively in Activity		
		Areas A and B.		
41.11	R and T	In the Morrison Heritage Orchard	FS07(S)	Accept in
	Morrison, D	Precinct amend Standard		part
	Morrison	XXX.6.8 as follows: XXX.6.8		
		Visitor accommodation		
		(1) Visitor accommodation (including manager's		
		accommodation) for a maximum		
		of 25 units or 100 people		
		(whichever is greater) within		
		either or both each of Activity		
		Areas A and B.		
		(2) Visitor accommodation shall		
		not cumulatively exceed 50 units		
		or 200 people (whichever is		
		greater) over both Activity Areas		
41.12			FS07(S)	-
	•			part
	MONISON			
		1 ` '		
		semi-permanent marquees.		
41.13	R and T	In the Morrison Heritage Orchard	FS07(S)	Accept in
		Precinct amend Standard		part
	Morrison			
		· · ·		
		1		
		1		
		_		
		Dwellings shall have a maximum		
41.13	R and T Morrison, D Morrison	not cumulatively exceed 50 units or 200 people (whichever is greater) over both Activity Areas A and B. In the Morrison Heritage Orchard Precinct amend Standard XXX.6.9 as follows: XXX.6.9 Weddings and functions (1) Wedding and function activities may occur within either or both Activity Areas A and B. (2) The activity may include use of an existing restaurant / café on the site and temporary or semi-permanent marquees. In the Morrison Heritage Orchard Precinct amend Standard XXX.6.10 as follows: XXX.6.10. Workers accommodation (1) Workers accommodation (1) Workers accommodation with a maximum of 10 dwellings in total in either or both within each of Activity Areas A and B complying with the following: (a) Dwellings shall comply with all the relevant yard setbacks and height standards for buildings in the Zone. (b)	FS07(S)	•

		floor area of 120m2 excluding decks and garaging. The floor area may include a dormitory or individual rooms. (c) The accommodation may accommodate seasonal workers. (2) Workers accommodation shall not cumulatively exceed 20 dwellings over both Activity Areas A and B.		
41.14	R and T Morrison, D	In the Morrison Heritage Orchard Precinct amend Table XXX.X.1	FS07(S)	Accept in part
	Morrison	(A5) to read Markets		part

Discussion

- 337. These submissions concern the Morrison Heritage Orchard Precinct.
- 338. The submissions from Auckland Council seek that the activity table and standards within the Precinct provisions are further refined to address cumulative effects.
- 339. The activity table XXX.X.1 allows a range of activities as permitted activities. The main rule that deals with cumulative effects is general standard XXX.6.1(2) which sets a cumulative trip generation cap of 100v/hr. Mr Peake considers that this is appropriate from a traffic point of view.
- 340. Most of the individual activities have a cap within the standard that applies. It is considered that these caps are reasonably lenient in terms of numbers and some of the wording is confusing where reference is made to Activity Area A and B. Some activities only one such example is allowed but the wording that achieves that is not clear. It is also not clear how the 100v/hr cap can be monitored or complied with.
- 341. The submissions form R and T Morrison, D Morrison largely seek to clarify some the standards to make the limits on activities more certain. This is achieved to some extent through the changes sought, but in some cases appear to increase the extent of activities and in others additional changes could be made to give more certainty in my view.
- 342. The submission point 20.73 from AT states that the precinct provisions do not adequately address traffic and other transport effects including how development will be integrated with effective, efficient and safe transport. None of the objectives and policies include transport matters. A wide range of potential traffic generating activities are provided for as permitted activities. While there are limits on the scale of some of these activities it is not clear that these are sufficient to address cumulative transport effects. The standard relating to access and traffic generation lacks robustness and would be difficult to monitor and enforce.
- 343. As noted above Mr Peake is comfortable with the 100v/hr standard, but I share AT's concern about how this would be enforced and monitored given the activities are largely permitted. I think it would assist if the Precinct included some objectives and policies that gave weight to the access restrictions to the Precinct (i.e. one point only). I consider that it is preferable if the activities within the Precinct (with the exception of one dwelling per site) be made restricted

discretionary activities with the matters of discretion relating to the traffic generation cap and access safety matters. This would enable each activity to be assessed in respect of the cap and if necessary have conditions imposed or be refused consent if the traffic generation cap is not able to be met. The use of a controlled activity status is not appropriate as it may in some cases be necessary to refuse consent. An information requirement rule requiring assessment of the activity together with other consented activities and the cap would also be appropriate. The restricted activity category for infringing the standards is appropriate, but the non-notification standard is not, especially given AT's role as road manager.

- 344. Auckland Transport also request that the noise provision sought elsewhere in PPC93 are also included in this precinct. For the same reasons as set out in paragraphs 285-287 it is considered that this is not appropriate.
- 345. The submission point 17.10 from Auckland Council requests additional standards that recognise, maintain and enhance the existing planting, particularly the shelter belt; and identify the streams within the precinct and the planting on either side. I agree that these are important elements that assist in reinforcing the heritage orchard and efforts should be maintained to retain these. This approach is supported by Ms Howdle in her landscape assessment.

Recommendations on submissions

- 346. That submissions 20.74 be rejected
- 347. That submissions 17.9, 17.10, and 20.73 41.1. 41.2 be accepted
- 348. That submissions 41.3, 41.4, 41.5, 41.6, 41.7, 41.8 41.9, 41.10, 41.11, 41.12, 41.13 and 41.14 be **accepted in part**.
- 349. Should PPC93 be approved the changes resulting from this recommendation are set out in Appendix 5.

10.6 Submissions concerning specific provisions not otherwise addressed

350. Table 10.6.1

Sub No.	Name of submitter	Summary of relief sought	Further subs	S42A recommend ation
17.5	Auckland Council	Waimanawa Precinct - Amend IXXX.5 Notification to require that any application for resource consent for a number of noncomplying activities identified in the submission must be publicly notified:	FS03(S) FS07(O) FS11(S) FS12(O)	Accept
17.8	Auckland Council	Waimanawa Precinct - Amend existing provisions to ensure consistency with drafting in other precincts in the AUP, including standard conventions such as referencing to other parts of the	FS07(O) FS11(S)	Accept

		AUP, and correct all numbering references.		
20.22	Auckland Transport	Amend the activity tables to reduce complexity and repetition so that they are easy for the user to understand.	FS07(O)	Reject
21.1	Ash Hames and Fiona Rayner	Retain Residential Large Lot zoning on submitters land	FS07(S)	Accept
21.2	Ash Hames and Fiona Rayner	Retain Landscape Protection Area and Special yard on submitters' land but that the yard standard should be amended for clarity	FS07(S)	Accept
21.6	Ash Hames and Fiona Rayner	Rule (A3) in Table IXXX.4.2 relating to the Residential – Large Lot zone should apply only to the Residential - Mixed Housing Urban and Residential - Terrace Housing and Apartment Buildings zoned land within PPC93.	FS07(O)	Reject
21.7	Ash Hames and Fiona Rayner	Proposed Precinct Rule Ixxx.6.11 proposes a minimum site size of 1,000m2 in the Eastern Escarpment Area. The Submitter's land is within the Eastern Escarpment Protection Area as shown on Precinct Plan 1 but is also proposed to be zoned Residential – Large Lot which has a minimum site size of 4,000m2. The rule requires clarification.	FS07(S)	Reject
21.8	Ash Hames and Fiona Rayner	Retain the Restricted Discretionary activity status specified for Rule (A10) in Activity Table IXXX.4.1 All zones that alters the activity status for subdivision of parent sites with an area of greater than 1- hectare.	FS07(S)	Accept
21.9	Ash Hames and Fiona Rayner	Rule (A6) in Activity Table IXXX.4.1 is opposed . Restricted Discretionary activity status is appropriate for infringements to the Standards.	FS07(O)	Reject
22.1	Barry Blennerhass ett and Lorraine Margaret Blennerhass ett	That the Plan Change 93 be refused or preferably approved with changes to address matters raised in the submission	FS07(SpOp) FS11(O) FS12(Op)	Reject

	(Blennerhas sett family)			
24.4	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Update right hand column on all Tables from 'Standards to be complied with' to 'Precinct Standards to be complied with'		Accept
24.5	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Delete (A2) – 'New buildings and additions to buildings which meet Standard Ixxx.6.13 High Contaminant Yield Material' from Table IXXX4.1		Accept
24.7	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Reword and update IXXX6(2)(a) bullet points 2 and 3 by removing 'special subdivision control area' and adding 'Landscape Protection Area – Eastern Escarpment'.	FS12(S)	Accept
24.8	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Update IXXX6(2)(a) bullet point 1 by removing reference to A1 and adding reference to (A2) – 'New buildings' and (A3) – 'Additions and alterations to buildings not otherwise provided for'.		Accept
24.16	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Update Ixxx.8.1 Matters of discretion to incorporate or cross reference the matters of discretion from the Local Centre zone being H11.8.1(4). One additional amendment to the Matters of discretion in H11.8.1(4) is proposed which relates to H11.8.1(4)(a)(i) with the following wording: 'the contribution that such buildings make to the attractiveness pleasantness and enclosure of the public space (including the watercourse);'		Accept

24.17	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Updates and amendments to PPC93 to align with the progression and outcomes of PC78.	FS05(S)	Accept
26.1	Guy Matches	That Plan Change 93 – Warkworth South plan change be refused or preferably approved with changes to provisions to address the matters raised in this submission.	FS03(O) FS07(Sp, Op) FS11(O) FS12(Op)	Reject
27.1	John and Sue Wynyard (Wynyard family)	That Plan Change 93 – Warkworth South plan change be approved with changes to provisions to address the matters raised in this submission.	FS07(Sp, Op) FS11(O) FS12(Op)	Reject
39.1	Thompson Road Residents	That PPC93 – Warkworth South plan change be approved with changes to provisions to address the matters raised in this submission.	FS07(Sp)	Reject
39.2	Thompson Road Residents	That a note be added to Precinct Plan 1 – Spatial Provisions to indicate that the Trail to the north of 1768 State Highway is indicative and planned upgrades of Thompson Road to facilitate the trail will be required.		Reject
25.1	Mikel Jon Thorogood (Mike Thorogood)	That Plan Change 93 – Warkworth South plan change be approved with changes to provisions to address the matters raised in this submission (including infrastructure, roading matters in respect of McKinney Road intersection, integrated development and a well functioning urban environment).	FS03(S) FS07(Sp) FS12(Op)	Accept in part

Discussion

351. These submissions address miscellaneous aspects of PPC93.

Auckland Council

352. Submission point 17.5 requests that certain non-complying activity resource consents be identified as requiring public notification as follows;

- 1xxx.6.8 Wider Western Link Road
- Ixxx.6.9 Wastewater and Potable Water Connections
- Ixxx.6.10 Stormwater Management
- Ixxx6.15 Transportation Infrastructure
- 353. These applications are necessary if the various infrastructure required for development is not available. These are core components of the structure of PPC93. If they are not provided it is considered that there will potentially more than minor adverse effects on the environment and inconsistencies with key objectives and policies. Public interest is also likely to be high given these effects and potentially the allocative nature of these consents. A rule requiring these to be notified will assist in ensuring all opinions are able to be heard and the reflects the relative importance of the standards.
- 354. Submission point 17.8 seeks a general tidy up of the provisions to ensure consistency with drafting, referencing and standard conventions across the AUP. This point is accepted in principle but more detail should be provided by the submitter. If PPC93 is approved it can be formatted correctly.

Auckland Transport

355. AT seeks that the tables are amended to reduce complexity and repetition. There are perhaps several ways in which this could be done. AT should include how it wishes this to be done in evidence.

Ash Hames and Fiona Rayner

- 356. The submitters' own land on the southern boundary of the plan change area adjacent to the Avice Miller reserve with access from SH1.
- 357. Submission point 21.1 and 21.2 request that the Residential Large Lot Zone (LLZ) and the Landscape Protection Area and special yard that applies be retained. However the submitters seek consistency between the notation of the yard on Precinct Plan 1 and the standard. I have examined the Precinct Plan 1 contained within PPC93 and find no discrepancy with both referring to a 6m yard.
- 358. Submission point 21.6 request that Rule(A3) in table IXXX.4.2 not apply to the Residential Large Lot zone. This rule relates to compliance with the required transport infrastructure. It is considered that this rule should apply to all development.
- 359. Submission point 21.7 concerns a perceived discrepancy between the minimum subdivision size fin the LLZ and the Eastern Escarpment Area. The Eastern Escarpment Area applies to a range of zones in the south east of the plan change area and not just the LLZ. In accordance with usual practice the most restrictive rule will apply, which in the case of the LLZ will be the LLZ minimum site size of 4000m2. It is considered that no change is required.
- 360. Submission point 21.8 requests that subdivision rule (A10) in activity table IXXX.4.1 be retained. As there is no submission that seeks to have this removed, it should be retained.
- 361. Submission point 21.9 relates to the appropriate activity status for infringements of standards in the LLZ Zone. The notified version of Rule (A6) is that certain

infringements relating to some roading infrastructure and the yard against the Avice Miller Reserve are non-complying activities. Given the importance of these features it is considered that the notified status is appropriate and should be retained.

Barry Blennerhassett and Lorraine Margaret Blennerhassett / Guy Matches

- 362. The submitters own land which is located just outside the boundaries of the plan change area in Mason Heights and Woodcocks Road. The submissions are similar and raise similar issues. The submissions state that the submitters are supportive of PPC93 but raise a number of concerns about PPC93 in respect of infrastructure, urban form, environmental effects and consistency with the overall policy direction for the area.
- 363. The submissions are not specific on what changes are sought to PPC93. It would assist if these could be elaborated on at the hearing
 - KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The applicant)
- 364. Submission points 24.4, 24.5, 24.7 and 24.8 seek minor corrections to wording and cross referencing. These should be accepted.
- 365. Submission point 24.16 relates to matters of discretion for buildings in the Local Centre zone and the addition of one matter for discretion. It is considered that these changes will assist in improving the design of the local centre and should be accepted.
- 366. Submission point 24.17 requests updates to align PPC93 with the MDRS and PC78. At the time of writing PC78 is effectively on hold and there is a degree of uncertainty about is future. In response to this submission it would be prudent to include a section within the Precinct which includes the MDRS provisions within the plan change that would as is the case with other plan changes. This would enable PPC93 to remain consistent with the MDRS if they become operative and is consistent with the approach taken in other private plan changes to the AUP.

John and Sue Wynyard (Wynyard family)

367. The submitters own land in Woodcocks Road immediately to the west of the plan change land. The submission is similar to the submissions from Barry Blennerhassett and Lorraine Margaret Blennerhassett and Guy Matches which are discussed above.

Thompson Road Residents

- 368. The Thompson Road residents own land to the east of the plan change area, most of whom are outside of the plan change area. The submitters are concerned about the indicative off road linkage to the east near the Avice Miller Reserve. They seek additional notification on Precinct Plan 1 that includes upgrades of Thompson Road to facilitate the trail will be required.
- 369. It is considered that the existing indicative notation is sufficient. There can be at this stage no certainty about the exact nature of the route outside of the plan

change area and it is premature to conclude that upgrading of Thompson Road will be required.

Mikel Jon Thorogood (Mike Thorogood)

370. This submission has been considered by Mr Peake in his memo as follows;

Submission point 25.1 requests that PPC93 provides upgrades to the McKinney Road intersection and provides a pedestrian/cycle connection to Wech Drive, if PPC93 proceeds ahead of the McKinney Road precinct. It is concurred that PPC93 should extend the footpath/cycle path to the northern Wech Drive intersection with SH1. I consider that the upgrade for the McKinney Road intersection is required by development on McKinney Road rather than PPC93.

Requested amendments to the precinct provisions by Auckland Transport would address the issue of the footpath/cycle path which would require this to be extended to the northern end of Wech Drive. I recommend the adoption of amendments to the description (and extent) of the footpath/cycle path on SH1 to extend to the northern end of Wech Drive in Auckland Transport submission point 20.50.

371. I rely on Mr Peake's assessment and agree with his recommendations.

Recommendations on submissions

- 372. That submissions 20.22, 21.6, 21.7, 21.9, 22.1, 26.1, 27.1, 39.1, and 39.2, **be rejected**
- 373. That submissions 17.5, 17.8, 21.1, 21.2, 21.8, 24.4, 24.5, 24.7, 24.8, 24.16 and 24.17 **be accepted**
- 374. That submission 25.1 be accepted in part.
- 375. Should PPC93 be approved the changes resulting from this recommendation are set out in Appendix 5.
- 10.7 Submissions seeking that PPC93 be approved.
- 376. Table 10.7.1

Sub No.	Name of submitter	Summary of relief sought	Further subs	S42A recommend ation
1.1	Hugh Briggs	Approve the plan change	FS07(Sp)	Reject
2.1	David Owen Morgan	Approve the plan change without any amendments	FS07(S)	Reject
3.1	Dianne Lillian Morgan	Approve the plan change without any amendments	FS07(S)	Reject
4.1	Dominique Coote	Approve the plan change without any amendments	FS07(S)	Reject

5.1	Louisa Gowing	Approve the plan change without any amendments	FS07(S)	Reject
6.1	Stanley Coote	Approve the plan change without any amendments	FS07(S)	Reject
7.1	Stephen Haycock	Approve the plan change	FS07(S)	Reject
7.2	Stephen Haycock	Bring forward the land release date from that which Council approved in the Future Development Strategy	FS07(S)	Reject
8.1	Warkworth Area Liaison Group (WALG) and One Mahurangi	Approve the plan change with the amendments I requested	FS07(Sp)	Reject
11.1	William Arthur Endean	Approve the plan change without any amendments	FS07(S)	Reject
14.1	Mark Calvert	Approve the plan change without any amendments	FS07(S)	Reject
15.1	Warwick William Scown	Approve the plan change without any amendments	FS07(S)	Reject
16.1	Stevenson Family Trust	Approve the plan change without any amendments	FS07(S)	Reject
18.1	Mahurangi Trail Society Incorporated	Approve the plan change	FS07(S)	Reject
23.1	David Lawrence Morrison	Approve the plan change without any amendments	FS07(S)	Reject
24.1	KA Waimanawa Limited Partnership and Stepping Towards Far Limited	That PPC93 is approved with any amendments necessary to clarify provisions, including those as set out in Attachment A of this submission.		Reject
24.2	KA Waimanawa Limited Partnership and Stepping Towards Far Limited	Any further or alternative relief or any consequential amendments that may be required to address the matters raised in this submission or any other related matters.		Reject
35.1	Bevan Morrison	Approve the plan change without any amendments	FS07(S)	Reject

36.1	Red Bluff investment Itd	Approve the plan change without any amendments	FS07(S)	Reject
37.1	Gumfield Property Ltd	Approve the plan change without any amendments	FS07(S)	Reject
38.1	Kenilworth Orchards	Approve the plan change without any amendments	FS07(S)	Reject

Discussion

- 377. These submissions largely seek that PPC93 be approved as notified without any amendments. The submissions from the applicant (KA Waimanawa Limited Partnership and Stepping Towards Far Limited) seek that PPC93 be accepted with changes sought and any subsequent amendments. The submission from Stephen Haycock also seeks that the land release be brought forward. In respect of that submission, PPC93 essentially does that, so I have included this submission point in this section of the report.
- 378. The preceding discussion on the relevant policy statement and plan provisions, the environmental effects and submissions indicates that it is not appropriate to approve PPC93 as it was notified. Changes to PPC93 are also sought by the applicant and others who have made submissions.
- 379. On the basis that changes are required to PPC93 it is recommended that these submissions be rejected. The submissions from the applicant seeking approval as notified should also be rejected.

Recommendations on submissions

- 380. That submissions 1.1, 2.1, 3.1, 4.1, 5.1, 6.1, 7.1, 7.2, 8.1, 11.1, 14.1,15.1, 16.1, 18.1, 23.1, 24.1, 24.2, 35.1, 36.1, 37.1 and 38.1 **be rejected**
- 381. There are no changes resulting from this recommendation.

11. OVERALL CONCLUSIONS

- 382. Having considered PPC93 and the application material supplied by the applicant, the memoranda from relevant specialists engaged by the Council and the submissions I do not at this time recommend that PPC93 be approved.
- 383. I remain concerned about the following fundamental matters which remain outstanding;
 - a) The extent to which PPC93 is integrated with the provision of infrastructure and in particular the provision of water supply and wastewater disposal and treatment. The provision of the necessary stage 2 treatment plant upgrade is not scheduled until 20240 and the applicant's alternative means of providing infrastructure appear to be at an early stage and without further evidence there is little certainty that this can be provided. While PPC93 does contain triggers that will restrict development before the provision of infrastructure I consider that rezoning land without a clear pathway to achieving development does not represent sustainable management and will not give effect to the

- NPS-UD and the RPS. I consider that subject to recommended changes the provision of roading infrastructure can be provided.
- b) The extent to which PPC93 gives effect to the NPS-UD and the RPS in respect of creation of greenhouse gas emissions noting also that there will be a lack of public transport services available in the short to medium term. The assessment carried out by the applicant are not sufficient to show that PPC93 will give effect to these documents in this regard.
- c) The inconsistency with the Future Development Strategy and the lack of an assessment against that document.
- d) The appropriateness or otherwise of including rural zoning of the Morrison Heritage Orchard within the RUB.
- e) I have identified throughout this report a number of areas where additional assessment is required. This includes the following:
 - Assessment of the National Policy Statement for Indigenous Biodiversity (NPSIB).
 - Assessment of Chapters B4 and B7 of the RPS.
 - Assessment of the Future Development Strategy 2023.
 - Additional assessment of wetlands in response to Mr Statham's concerns.
 - Additional assessment of open space provision in response to the matters raised by Mr McCarten.
 - An explanation of how PPC93 will achieve NDC for stormwater.
- f) In addition to the matters in a, b and c above, a number of additional specific matters have been raised by Council specialists. These include landscape, ecology, stormwater management and open space. Should the commissioners approve PPC93 I have suggested some changes to PPC93 to address these where they are considered to sit within the scope of submissions received but is some instances there are no relevant submissions. I have not suggested changes in respect of these.
- 384. I have attached in Appendix 5 recommended changes to PPC93 as a result of my assessment of the submissions received. I note that this does not encompass changes where the reporting requests that additional detail be supplied in evidence so is at this stage incomplete. At this stage, because I do not recommend that PPC93 be approved, these changes are not a recommendation from me, but are a useful summary of how PPC93 could be changed if the matters set out above were resolved or if the Commissioners otherwise find that the PPC93 can be approved.
- 385. I anticipate that the Commissioners will set an evidence exchange timetable prior to the hearing. That will give the applicant and submitters the opportunity to respond to matters raised in this report. It is therefore likely that an addendum s42A report will be produced that will address additional analysis or changes to PPC93 suggested in the evidence.

12. SECTION 32AA ANALYSIS OF RECOMMENDED CHANGES

386. S32AA of the RMA requires a further analysis of any recommended changes to be undertaken. Given my conclusions above this assessment may be undertaken as part of the addendum report as I have not at this stage made recommendations for change.

13. INTERIM RECOMMENDATION

387. That the Hearing Commissioners decline PPC93.

15. SIGNATORIES

	Name and title of signatories
Author	David Wren – Planning Consultant 3 September 2024
Reviewer / Approver	Peter Vari – Team leader Planning P Vari 4 September 2024

Appendix 1 – Plan Change 93, As Notified

Appendix 2 – Section 32 Report



Appendix 4 – Submissions

Appendix 5 – Potential Changes

Amendments are shown with text to be deleted as struck through and text to be added as underlined.

Appendix 6 – Specialist Technical Memos

APPENDIX 1

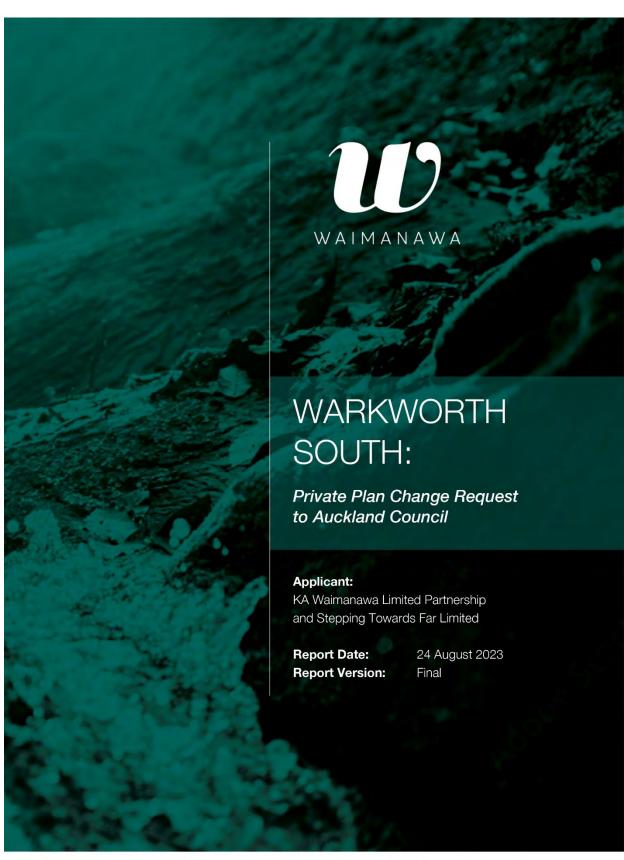
PLAN CHANGE 93, AS NOTIFIED

This attachment has not been re-produced in this agenda.

The Notification materials are available here:

https://www.aucklandcouncil.govt.nz/have-your-say/hearings/find-hearing/Pages/Hearing-documents.aspx?HearingId=835

APPENDIX 2 SECTION 32 REPORT







Contents

1.	Private Plan Change Request	6
2.	Executive Summary	9
3.	Introduction and the Applicants	13
	The Plan Change Request	13
	The Purpose of the Plan Change	13
	The Applicants	14
	KA Waimanawa Limited Partnership	14
	Stepping Towards Far Limited	14
	The Plan Change Area and Property Details	14
	Infrastructure Agreement	17
	Notification	18
4.	Current Zonings under the AUP	19
5.	The Auckland Plan, Future Urban Land Supply and the Warkworth Structure Plan	21
	The Auckland Plan 2050 and The Future Urban Land Supply Strategy ("FULS")	21
	The Warkworth Structure Plan	23
6.	The Vision and Principles for the Development of Warkworth and Warkworth South	28
	The Waimanawa Vision Document	38
	Morrison Heritage Orchard	40
7.	Relevant National Policy Statements and the Auckland Regional Policy Statement	41
	The National Policy Statement on Urban Development (NPS-UD)	41
	Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021	49
	National Policy Statement for Freshwater Management 2020 (NPS-FM)	53
	New Zealand Coastal Policy Statement 2010 (NZCPS)	55
	National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Huma 2011	
	National Policy Statement for Highly Productive Land 2022 (NPS-HPL)	56
	The Auckland Regional Policy Statement	57
8.	Cultural Values Assessment	63
9.	The Proposed Planning Framework and Plan Change	65

	Purpose of the Plan Change	65
	AUP Provisions	65
	Overview of the Plan Change	67
	Waimanawa Precinct	69
	Precinct Objectives and Policies	70
	Zonings and Standards	71
	Notification	78
	Matters of Control and Assessment Criteria	79
	Matters of Discretion and Assessment Criteria	80
	Waimanawa Precinct Plan	81
	Morrison Heritage Orchard Precinct	81
11.	The Regional Stormwater Network Discharge Consent	84
12.	Assessment of Actual or Potential Effects on the Environment	85
	Mana Whenua Values	85
	Land Supply and Economic Matters	85
	Urban Design	86
	Visual and Landscape Assessment	87
	Ecological Assessment	88
	Archaeological Assessment	91
	Arboricultural Assessment	92
	Engineering and Site Servicing	92
	Land Contamination	94
	Integrated Transportation Assessment	95
	Health Impact Assessment	97
	Reverse Sensitivity and Potential Effects on Residential Amenity	97
	Natural Hazards	97
13.	Statutory Assessment	99
	Information Requirements for a Private Plan Change Request	101
	Part 2 of the Act	101
14.	Section 32 Assessment	105

	Introduction	105
	Section 32 Evaluation	105
	Legislative tests	105
	Objectives the Most Appropriate Way to Achieve Part 2 of the Act	106
	Provisions Most Appropriate Way to Meet the Objectives	113
	Providing for Growth Including Zoning	113
	Rural Urban Boundary (RUB)	126
	Precinct Provisions	130
	Landscape Provisions	133
	Ecological Provisions	137
	Open space and walkway/cycleway network	145
	Stormwater management	147
	Transport Provisions	152
	Local Centre	159
	Auckland-wide provisions relied on	163
	Notification	165
15.	Consultation Outcomes	168
	Mana Whenua	168
	Rodney Local Board	169
	Auckland Council	169
	Healthy Waters	170
	Supporting Growth Alliance (AT/AC/NZTA)	171
	Watercare Services Ltd	172
	Ministry of Education	172
	Matakana Coast Trail Trust	173
	One Mahurangi	173
	Adjoining Residents	173
	Mahurangi Sports Collective	174
	Landowners within the Plan Change Area	174
	Warkworth Area Liaison Group	174

I	Key Consultation Outcomes	. 174
16.	Conclusion	176
Figi	ures	
Figu	re 1 Plan change area and precinct boundaries	
Figu	re 2 Title structure within the plan change area	
Figu	re 3 AUP Planning Map (Plan Change Boundary shown as the Red Line)	
Figu	re 4 Development Sequencing for Warkworth (from Map 2 of the FULS)	
Figu	re 5 The Warkworth Structure Plan Map for the Area	
Figu	re 6 Natural Wetlands (Yellow) within the Plan Change Area	
Figu	re 7 AUP Map with Proposed Zones	
Figu	re 8 The Plan Change Superimposed Over the Warkworth Structure Plan	
Figu	re 9 Morrison Heritage Orchard Precinct Plan	
Figu	re 10 100 Year Flood Plain Extent	
Figu	re 11 Proposed Precinct Plan – Transport	
Figu	re 12 Road Hierarchy Waimanawa Valley	
Figu	re 13 Road Hierarchy Waimanawa Hills	

1. Private Plan Change Request

To: Auckland Council

Private Bag 92300

Victoria Street West, Auckland 1142

Attn. The Manager – Planning North/West and Islands

This is a Private Plan Change Request by K A Waimanawa Limited Partnership and Stepping Toward Far Limited for a comprehensive rezoning and the introduction of precinct provisions for Waimanawa (comprising of Waimanawa Valley and Waimanawa Hills) and the Morrison Heritage Orchard areas.

Plan Change Site Address:

43 Mason Heights

49 Mason Heights

Lot 6 Mason Heights

1684 State Highway One

1684A State Highway One

1711 State Highway One

1723 State Highway One

1738 State Highway One

1765 State Highway One

1768 State Highway One

1773 State Highway One

8 Valerie Close

30 Valerie Close

36 Valerie Close

46 Valerie Close

83 Valerie Close

123 Valerie Close

125 Valerie Close

127 Valerie Close

Applicant's Name:

KA Waimanawa Limited Partnership and Stepping Towards Far Limited

Address for Service:

Osborne Hay (North) Limited, PO Box 16, Warkworth 0941

Attn. David Hay

Email: david@osbornehay.co.nz

Phone: 027 425-0234

Tattico Limited, PO Box 91562, Victoria Street, Auckland 1142

Attn: John Duthie

Email: john.duthie@tattico.co.nz

Phone: 0274 924 387

Locality Description:

Refer to Figure One.

Legal Description of Land:

Refer to Appendix Three.

Current Auckland Unitary Plan Operative in Part Zoning:

Future Urban, Open Space – Conservation and Rural – Rural Production.

Brief Description of the Plan Change:

Private Plan change request to rezone approximately 159ha of Future Urban, Open Space – Conservation and Rural – Rural Production zoned land to a mix of residential, business, open space and rural zones through the introduction of two new precincts – Waimanawa and Morrison Heritage Orchard.

Introduction of the SMAF1 Control over the full Plan Change area.

Plan Change Name:

Warkworth South

2. Executive Summary

This is a private plan change to the Auckland Unitary Plan – Operative in Part ("AUP") request by KA Waimanawa Limited Partnership and Stepping Towards Far Limited and supported by nine co-operating landowners in the Warkworth South area. The plan change seeks re-zoning of approximately 159 ha of Future Urban, Open Space – Conservation and Rural – Rural Production zoned land on either side of the current State Highway One ("SH1"), south of Warkworth. SH1 in this location will covert to an Urban Arterial Road upon the opening of the new Ara Tūhono – Puhoi to Warkworth Motorway which is currently expected in 2023.

A range of residential, open space, rural and business zones are being sought. The plan change request includes the creation of two new precincts – "Waimanawa" and "Morrison Heritage Orchard". This plan change and the precinct provisions generally align with the Warkworth Structure Plan including providing for the Wider Western Link Road ("WWLR").

Figure One shows the land subject to the request and the boundaries of the two precincts. Figure Two shows the current title structure within the plan change area. The landholding details are included in Appendix Three.

The development of the Waimanawa Vision (included in Appendix Two) and this plan change has been led by the two key landowners, KA Waimanawa Limited Partnership and Stepping Towards Far Limited. The Morrison Family have provided the input for the Morrison Heritage Orchard Precinct. The other landowners within the plan change area have been kept informed of the investigations and development of the plan change through the process. A number of these landowners are actively in support and form part of the cooperating landowners group.

The Warkworth Structure Plan was finalised in June 2019. This plan change request proposes a similar mix of high, medium and low-density zonings signalled in the Warkworth Structure Plan. A local centre and open spaces are proposed which also reflects the Warkworth Structure Plan. The WWLR identified in the Warkworth Structure Plan has been provided for, although it now follows a different alignment to reflect topography, to keep it within land under the control of the KA Waimanawa Limited Partnership, the proposed location of the open spaces and to provide a buffer between the Morrison Heritage Orchard and future urban development.

The Future Urban Land Supply Strategy of 2017 identified the Warkworth South area as being development ready for urban activity in the timeframe of 2028-2032.

This private plan change takes a substantial portion of that Warkworth South area and rezones it for urban development. This proposal is supported by the ability to fund and provide the necessary infrastructure for development. Effectively this will see the land intended for future urban development in 2028 now available for housing some three years earlier in 2025.

The key elements of this plan change request are:

- a) Recognising the importance of the two upper reaches of the Mahurangi River to the environment and particularly the current and future amenity of this valley as it is urbanised.
- b) Recognising the importance of a number of tributaries to the Mahurangi River within the plan change area by identifying and protecting key watercourses which traverse the subject land and feed the upper reaches of the Mahurangi River.
- c) Recognising the importance of the northern escarpment (including existing vegetation) to the character and visual amenity of the area by protecting it from over-development through the Residential Large Lot zoning and a Landscape Protection Area control.
- d) Recognising the importance of the eastern escarpment to the character and visual amenity of the area by protecting it from over-development through setting a minimum lot size and a Landscape Protection Area control.
- e) Recognising the Avice Miller Reserve and protecting it by limiting the density of residential development alongside it.
- f) Recognising the importance of and providing for the proposed WWLR.
- g) Assisting in delivering on the key planning principles identified in the Warkworth Structure Plan including providing quality connected residential neighbourhoods to support the planned growth of Warkworth in accordance with the Structure Plan and enabling a range of housing typologies to encourage a diverse community.
- h) Managing stormwater in such a way as to ensure stormwater treatment is achieved prior to discharge and to avoid the risk of increasing the downstream flood hazard.
- Creating a series of green networks primarily based on existing watercourses and enhancing public access to and within this green network and particularly along the upper reaches of the Mahurangi River.
- j) Creating a range of lot densities to promote a range of housing typologies to ensure an efficient use of the land resource in a manner which results in a liveable community that is sympathetic to the natural topography and features.
- k) Providing for a local centre to meet the needs to the new community and which is accessible and close to the future public transportation interchange, the future active recreational open space and Morrison Heritage Orchard.
- I) Providing for a series of open spaces to provide for a range of passive and active recreational activities to meet the needs of the future Warkworth South community.
- m) Providing for a range of infrastructure required for both the development of Waimanawa and then the urban development of the remainder of the Warkworth South area.

- n) Providing for the Morrison Heritage Orchard through a bespoke precinct that provides for limited development of the Orchard to enable the Orchard to evolve over time and to meet the needs of the community as a local destination while also providing for very limited residential development.
- o) Providing an opportunity for a future public transport interchange.

The key similarities between the plan change request and the Warkworth Structure Plan are:

- Morrison Heritage Orchard is being provided for through a specific precinct.
- The proposed Open Spaces identified in the precinct plan 4 reflect the location of the future esplanade reserves and open spaces alongside other watercourses.
- The range of residential zonings shown in the Warkworth Structure Plan are being provided for (except for Residential – Mixed Housing Suburban), although the boundaries of each of the zonings has been refined to reflect the possible future roading network and topography.
- The open space area west of Morrison Heritage Orchard is provided for.
- The northern escarpment area is proposed to be zoned Residential Large Lot with specific revegetation and building external finishes controls to reflect the identification in the Structure Plan of this area needing "further landscape protection controls". This is a qualifying matter.
- The eastern escarpment area is proposed to be zoned Residential Single House with a minimum lot size, building height and revegetation controls to reflect the identification in the Structure Plan of this area needing "further landscape protection controls". This is a qualifying matter.

The key differences between the plan change request and the Warkworth Structure Plan are:

- The WWLR (a future arterial) has been shown in the location of the indicative collector road. The alignment of the WWLR has been modified to reflect topography, to retain it within land currently under the control of the KA Waimanawa Limited Partnership, traffic safety reasons and to provide a buffer between future urban development and Morrisons Heritage Orchard.
- As a result of the change in alignment of the WWLR, the Local Centre has shifted to the north and remains adjacent to the intersection of the WWLR with the Local Centre. The public transport interchange is proposed to be to the immediate west of the Local Centre and adjacent to the WWLR.
- The requirement to implement the medium density residential standards under the National Policy Statement on Urban Development 2020 (amended in 2022) and to identify any qualifying matters.

The management of streams varies from the Structure Plan. The plan change request proposes:

- The identification of those permanent streams which are to be retained;
- The status of applications to modify these protected streams is a "non-complying activity"; and

 Other streams are subject to normal plan controls and applications to modify these streams are a "restricted discretionary activity."

The plan change request comprises:

- a) Requested plan change (included in Appendix One).
- b) Planning Report by Osborne Hay (North) Ltd and Tattico Ltd (this report).
- c) Masterplan and Urban Design Report by Reset Urban Design Ltd (Appendix Two).
- d) Visual and Landscape Assessment by Reset Urban Design Ltd (Appendix Four).
- e) Engineering and Infrastructure Assessment by Maven Associates (Appendix Five).
- f) Geotechnical Assessment by LDE (Waimanawa Valley and 1768 State Highway One) (Appendix Six).
- g) Geotechnical Assessment by CMW Geosciences (Waimanawa Hills) (Appendix Six).
- h) Land Contamination Report by LDE (Waimanawa Valley) (Appendix Seven).
- i) Land Contamination Report by Focus Environmental Services Limited (Waimanawa Hills) (Appendix Seven).
- j) Integrated Transport Assessment by Traffic Planning Consultants Limited (Appendix Eight).
- k) Ecological Baseline Assessment by Bioresearches Ltd (Appendix Nine).
- I) Assessment of Economic Effects by Market Economics Limited (Appendix Ten).
- m) Archaeological Assessment by Clough and Associates (Appendix Eleven).
- n) Arborist Report by CWAL (Appendix Fourteen).
- o) Stormwater Modelling Report by Maven Associates (Appendix Fifteen).
- p) Soil and Resources Report by Hanmore Land Management (Appendix Sixteen).

A cultural values assessment has been prepared for the plan change and provided by the Manuhiri Kaitiaki Charitable Trust and is included in Appendix Twelve.

A draft Stormwater Management Plan for the Warkworth South plan change area is included in Appendix Thirteen.

3. Introduction and the Applicants

Under Clause 21 of Schedule 1 of the Resource Management Act 1991 ("**the Act**"), any person can request a change to a district or regional plan (including a regional coastal plan). Clause 22 of Schedule 1 of the Act states that the plan change request must be made to the appropriate local authority in writing and:

- Explain the purpose and reasons for the plan change request; and
- Contain an evaluation report prepared in accordance with section 32 of the Act for the plan change request.

Where environmental effects are anticipated, the plan change request shall describe those effects, taking into account Clauses 6 and 7 of Schedule 4, in such detail as corresponds with the scale and significance of the actual or potential environmental effects anticipated from the implementation of the change, policy statement or plan.

This Planning Report has been prepared in support of a private plan change request to Auckland Council ("**Council**") by KA Waimanawa Limited Partnership and Stepping Towards Far Limited ("**the Applicant**") to the Auckland Unitary Plan – Operative in Part ("**AUP**").

The Plan Change Request

The private plan change request seeks:

- a) Rezoning of approximately 159 ha of current Future Urban zoned land and a small area of Rural –
 Rural Production zoned land to a range of residential, rural, business and open space zonings;
- b) The retention of a small areas of Open Space Conservation zoning; and
- c) Introduction of the SMAF1 Overlay.

The private plan change request is by:

a) KA Waimanawa Limited Partnership and Stepping Towards Far Limited

The private plan change request is supported by nine co-operating landowners.

The Purpose of the Plan Change

The purpose of the plan change is to re-zone land in Warkworth South to:

- (a) Provide for the continuation and expansion of the Morrison Heritage Orchard and further development of this site with supporting activities and limited residential development.
- (b) Enable the urban development of the remainder of the area (referred to as Waimanawa) to proceed generally in accordance with the outcomes sought through the Warkworth Structure Plan.

The plan change is focussed on those planning zones, objectives, policies and rules which are essential to allow for the development of the land and its shift from rural activities to urban (except for Morrison Heritage Orchard).

The plan change follows the standard approach of introducing precincts into the AUP for development of greenfields and currently Future Urban zoned land and for specific sites which have a unique land use activity (for example, the Morrison Heritage Orchard).

The Applicants

KA Waimanawa Limited Partnership

Classic Group has partnered with the New Zealand Super Fund to form the KA Waimanawa Limited Partnership to progress this private plan change in conjunction with Stepping Towards Far Limited and to develop that land on the western side of SH1 owned by KA Waimanawa Limited Partnership. KA Waimanawa Limited Partnership purchased this land in 2021 from Endean Farms Limited and has agreements in place for the future purchase of additional land owned by Endeans Farms Ltd.

The Classic Group undertakes both land development and construction.

Stepping Towards Far Limited

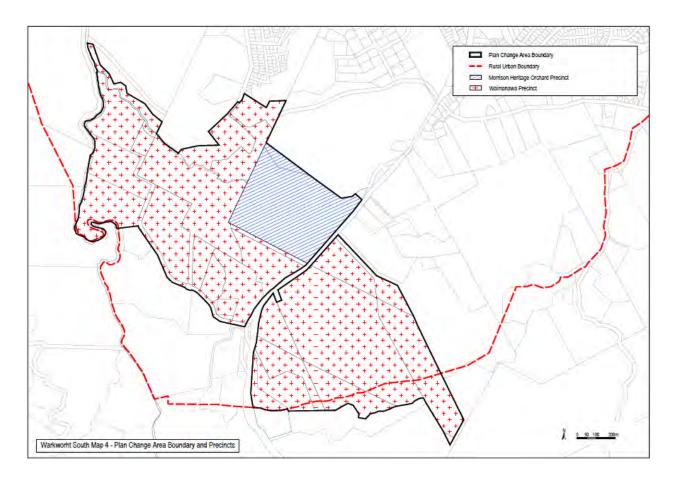
Stepping Towards Far Limited has signed the Sale & Purchase Agreement with the current owner of the land, Thriving Development Limited. Stepping Towards Far Limited has the right to develop the land. The land is at 1738, SH1, Warkworth, which is approximately 46.5h on the eastern side of SH1. In addition, they have partnered with adjoining landowners to incorporate an additional approximately 15ha into the plan change area.

Stepping Towards Far Limited will partner with a development and construction company for the development of their land.

The Plan Change Area and Property Details

Figure 1 shows the plan change area and the boundaries of the two precincts (Waimanawa and Morrison Heritage Orchard).

Figure 2 shows the landholdings with the Plan change area:



• Figure 1 Plan change area and precinct boundaries



• Figure 2 Title structure within the plan change area

The land holdings details are included in Appendix Three.

The following landowners are identified as cooperating landowners at the time of the preparation of this report:

- The Morrison family (1765 and 1773 SH1). The Morrison family own and operate Kenilworth
 Orchard on this property and have done since it was established in 1935. The family is seeking to
 retain the orchard and expand it over time and have prepared the Morrison Heritage Orchard
 precinct provisions for the plan change.
- Endeans Farms Limited and C. H. Endean and W. A. Endean (40, 46, 83 and 123 Valerie Close).
- D. L. Morgan and D. O Morgan Limited (8 Valerie Close).
- L. and R. R. Crosswell (30 Valerie Close).
- J. W. and L. E. Gowing (83 Valerie Close).
- A. J. and H. G Miles (127 Valerie Close).

- K. G. and S. N. Richardson (1768 SH1).
- F. A. and K. C Hames (1684A SH1).

At this stage, each landowner may develop their property independently. However, all co-operating landowners understand the importance and benefit of a joint plan change request.

The plan change does include other properties that are not part of the cooperating landowner group. In some cases, the property is currently subject to a sales and purchase agreement and the parties are not in a position at the time of the lodgement of this plan change to confirm they are a cooperating landowner. In other areas, the plan change incorporates other properties so that the Waimanawa precinct has a logical boundary in terms of the existing roading network, to avoid isolating parcels of land and to connect to the current edge of urban development on Mason Heights. In the case of these additional properties, this plan change request generally adopts the Warkworth Structure Plan indicative zonings. These additional properties are:

- 1684 SH1 (Lot 1 DP 119449)
- 43 Mason Heights (Lot 5 DP 150976)
- Unnumbered Mason Heights (Lot 6 DP 150976)
- 50 Mason Heights (Lot 2 DP 336865)
- 125 Valerie Close (Lots 2 and 4 DP 344489)

In this report the area of Waimanawa west of SH1 is referred to as "Waimanawa Valley" and the land to the east of SH1 is referred to as "Waimanawa Hills". The area to be covered by the proposed Morrison Heritage Orchard precinct is referred to as the Morrison Heritage Orchard.

At the time of the completion of this report, a new title (Lot 1 DP 563173) for 1773 SH1 had just been issued. Those plans in the proposed plan change which show the underlying zoning will need to be updated to identify this new title prior to the notification of the plan change and/or updating of the AUP.

Infrastructure Agreement

The following infrastructure will be funded by the developers as part of the development of Waimanawa. The developers are currently in negotiations with Council on an infrastructure funding agreement ("**IFA**"). It is anticipated that this will be completed prior to any hearing on this Plan Change. An IFA will ensure that all relevant infrastructure required for any stage of the project is in place prior to residential connections for that stage.

- The WWLR (to a collector standard) (through the Waimanawa Precinct).
- The new Warkworth South water reservoir.

- The new wastewater pump station(s).
- The upgrading of that part of the current SH1 through the plan change area to an urban arterial standard.
- The construction of a pedestrian/cycle path (on the eastern side) between the northern end of that section of the current SH1 to be upgraded through to the intersection McKinney Road/SH1.
- The construction of a pedestrian/cycle path (on the western side) between the northern end of that section of the current SH1 to be upgraded through to the new entrance into the Morrison Orchard.
- The installation of the wastewater and potable water pipes from the current urban area to the new pump stations and water reservoir respectively.
- The provision of land for the Waimanawa Wetland Reserve and the Endeans Farm Recreational Park.
- Provision for land for a future public transport interchange adjacent to the new local centre is being
 provided for to preserve the land required by Auckland Transport in the future for public transport
 and bus layover. Following feedback from Auckland Transport, it is confirmed this will not be a park
 and ride facility.

Various open space areas will be vested in Council through future subdivisions.

The IFA does not form part of this plan change, but the assessment by Maven sets out the infrastructure works required as part of the urban development of Waimanawa. The IFA sets out the funding commitment to achieve this infrastructure.

Notification

The Act allows for private plan change requests to be processed on a non-notified, limited notified or fully notified basis depending on the nature of the plan change.

This plan change encompasses a significant area of land, which is owned by a number of different landowners. The plan change will result in a significant change in land use, but in a manner which generally reflects the Warkworth Structure Plan. It is reasonable to expect that the wider Warkworth community has an interest and a stake in how Warkworth growth is planned for and managed and the environment, amenity and character outcomes to be achieved. This would include the plan change area.

Taking this into account, the applicants are requesting full notification of the plan change.

4. Current Zonings under the AUP

Under the AUP, the area subject to the Plan change is zoned Future Urban except for a small area of Open Space – Conservation Zone on Lot 3 DP 344489 (which reflects that this lot is an esplanade reserve vested in Council) and Rural – Rural Production (on the eastern edge of Waimanawa Hills). The current Future Urban zoning reflects that Council identified this area as being suitable for urbanisation as part of the 'RUB location' discussions considered during the Independent Hearing Panel process for the AUP. The appropriateness for urban development of this area was then further supported by its inclusion in the Warkworth Structure Plan and the indicative urban zonings for the area.

The complete area is covered by the High-Use Aquifer Management Areas Overlay - Mahurangi Waitemata (the light blue dots).

An area of Natural Stream Management Areas Overlay (dark blue dots) covers part of the Mahurangi River.

A Significant Ecological Areas Overlay (SEA_T_2367) covers part of 83 Valerie Close (as well as a number of other properties outside the Plan change area). This SEA is listed for factors 1, 2 and 3 (representativeness, threat status and rarity and diversity).

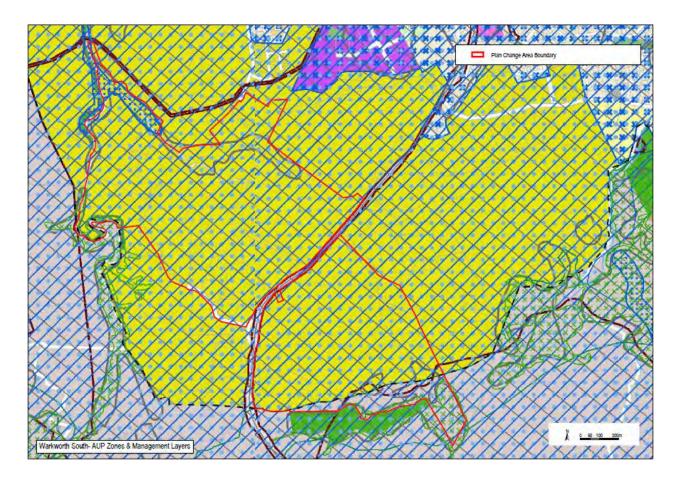
The full plan change area is covered by the Macroinvertebrate Community Index – Native or Macroinvertebrate Community Index – Rural controls.

The current SH1 is designated by NZTA (Designation 6763 – SH1), but the plan change does not seek to alter this designation or the land within the designated corridor.

No change to the Designation - 7501, Telecommunication and radiocommunication and ancillary purposes, (Spark New Zealand Limited) which covers a small part of Waimanawa Hills is proposed.

The area is predominantly covered by the Macroinvertebrate Community Index – Rural with the remainder of the area covered by the Macroinvertebrate Community Index – Native.

The area is not within a Treaty Settlement – Statutory Acknowledgement Area.



• Figure 3 AUP Planning Map (Plan Change Boundary shown as the Red Line)

5. The Auckland Plan, Future Urban Land Supply and the Warkworth Structure Plan

The Auckland Plan 2050 and The Future Urban Land Supply Strategy ("FULS")

The Auckland Plan 2050 is the long-term spatial plan to ensure Auckland grows in a way that will meet the opportunities and challenges of the future. The Auckland Plan identifies Warkworth as a growth node. It is intended that the Warkworth township provides a range of services to the surrounding rural areas. Significant future employment growth is anticipated alongside residential growth.

The Council adopted the FULS in 2017 which identifies the phasing for release of land for urban development. This FULS was released prior to the release of the National Policy Statement on Urban Development 2020 ("NPS-UD") and remains a non-statutory document.

Significant residential and employment growth is expected over the next 30 years in Warkworth with around 1100 hectares earmarked as future urban land. This can accommodate approximately 7,500 additional dwellings which equates to an additional 20,000 people.

The Warkworth South area, including the area subject to this plan change, is identified in the 2028-2032 tranche of land to be development ready (that is zoned and ready for urban development). The timing of development within the Warkworth Growth Node is shown on Figure Four below. It is reiterated that this map was prepared prior to the release of the NPS – UD and it is understood that Auckland Council intends to review in the future the FULS taking account of the NPS – UD and infrastructure funding capacity. Under the FULS there is no linkage between the development of the Warkworth South area and the provision of the potential southern interchange on the Ara Tūhono – Puhoi to Warkworth Motorway.

The FULS splits Warkworth into three growth areas – Warkworth North, Warkworth South and Warkworth North-East. Warkworth North was due to be development ready by 2022.

The re-zoning of the Warkworth North area through PC25 (Warkworth North Precinct) and PC40 (Clayden Road Precinct) has now been completed. As at March 2023, bulk earthworks for the residential development are well underway in both the Warkworth North and Clayden Road Precincts. This Plan Change will not impact on those developments.

Warkworth North-East is due to be development ready by 2037. At the time of preparing this document, no proposed plan changes had been lodged for re-zoning in this area. No reasons have been identified why this Plan Change will impact on the timing of the development of Warkworth North-East.

It is recognised that in the event that this plan change is operative by the end of 2023, theoretically development could commence by the 2024/2025 earthworks season. At this stage it is understood that the upgraded Warkworth wastewater network will be operational by early 2025 which would set the earliest time when housing could be connected to the wastewater network. This is about three years prior to the FUL's identifying that this area is to be zoned and ready for urban development. The development of Warkworth South is consistent with the overall sequence of development in Warkworth outlined in the FULS and it will

not impact on the possible timing of the other plan changes that maybe required for the urban development of the remainder of Warkworth South. Given the location of the key infrastructure required for Warkworth South being within the Waimanawa area, it is both logical and necessary that this area is subject to the first proposed plan change in Warkworth South. As it takes a number of years to prepare and make operative a plan change to allow development ready for house construction, it is appropriate to commence the plan change process a number of years prior to the FULS identified "development ready" date. As an example, the plan change process for Clayden Road (PC40) commenced with the lodgement of the plan change in 2019 and the first residential site should be ready for a house in late 2023. The process for Warkworth North (PC25) has taken significantly longer with the plan change being lodged in 2018 with no residential lots yet available for house construction. The Clayden Road process took approximately four years with no appeals. Warkworth North has so far taken five years with appeals. Based on the FULS, Warkworth South is to be development ready in five years.

It is considered that the potential early development of this land does not impact the integrity of the Auckland Plan and the FULS for the following reasons:

- 1 There remains a significant shortage in housing stock in Auckland and there is no indication that the current housing short-fall will be fully met prior to 2025.
- 2 The FULS has not been updated to reflect the instruction of the NPS-UD (including the new urban development intensification requirements), the impacts of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 or the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021. The current accuracy or integrity of the FULS is therefore uncertain and it may not now reflect the actual timing required to meeting the housing demand for the Auckland community.
- The Warkworth potable water supply has now been upgraded by Council and the required potable water supply is available.
- 4 The funding of the upgrading of the Warkworth wastewater network (including the new main Warkworth wastewater pump station and the construction of the pipeline to the Snells Beach wastewater treatment plan) has been confirmed with construction underway and with the upgrading being operational by early 2025.
- The opening of the Ara Tūhono Puhoi to Warkworth Motorway and the transition of the current SH1 to an urban arterial is currently planned for 2023. There is no suggestion of any risk of the current SH1 still being used as SH1 by the time the development of Waimanawa proceeds.

The required bulk infrastructure required for the development of Warkworth South will be available by early 2025. The development of Waimanawa provided for under this plan change request would then provide for the potable and wastewater connections and infrastructure required for the development of the wider Warkworth South area. The wastewater pumping station(s) and potable water reservoir required to service the whole Warkworth South area is to be located within the Waimanawa Precinct. To provide for this infrastructure at the start of the urban development of Warkworth South, development needs to commence

in the location of this infrastructure so it can be provided. Therefore, development of Warkworth South needs to centre around the key infrastructure (including the future SH1/WWLR intersection) and to expand out to meet the current urban edge near McKinney Road. The NPS-UD allows for such a development pattern for situations like this.

No infrastructure constraints or other constraints have been identified which would prohibit the practical and efficient development of Waimanawa so that the first houses can be occupied by early 2025.



• Figure 4 Development Sequencing for Warkworth (from Map 2 of the FULS)

Part of rationale for the sequencing of growth in the FULS, was to ensure the Council could provide the necessary infrastructure services to new development areas as part of the rezoning.

This land area will be development ready some three years prior to the intention within the FULS. However, the nature of this proposal is that the full infrastructure to service the development is provided as part of the plan change. This enables land to be released sooner than the current strategy.

The Warkworth Structure Plan

A prerequisite to release of land for growth is to undertake detailed structure planning. This structure planning is the means with which this growth is planned for in Auckland. The Council describes structure planning as to "refine the staging and timing of development and identify the mix and location of housing, employment, retail, commercial and community facilities" (from the Auckland Plan 2050 website).

Council commenced the most recent Warkworth Structure Plan process in 2017 with a range of background studies being undertaken. This was followed with a period of public feedback, limited community Structure Plan workshops and a report back to the community on the result of the workshops.

Following this a draft Structure Plan was released for consultation with public feedback being considered by Council through early 2019. The final Warkworth Structure Plan was adopted by the Council on 4 June 2019, and it remains the current non-statutory advisory document for the urban planning of Warkworth.

Two private plan changes (PC25 and PC40) have so far been made operative to give effect to parts of the Warkworth Structure Plan. To date Council has not initiated any plan changes to give effect to other areas of the Structure Plan and it is understood that Council has no plans at this stage to initiate any plan changes to give effect to the Structure Plan.

Figure Five is the Structure Plan map for the proposed plan change area. The Structure Plan shows the plan change area as a mix of terrace housing and apartment buildings, mixed housing urban, mixed housing suburban and large lot residential zones as well as an area of business – local centre zoning. An indicative new arterial road (the WWLR) as well as a collector road is shown. Areas of future esplanade reserve, open space and protection areas along with indicative greenway routes are included. The Morrison Orchard is shown as "Morrison's Heritage Orchard". The northern and eastern escarpment areas are shown as areas for further landscape protection controls.

This plan change has been developed to align with the final Warkworth Structure Plan but taking account of the outcomes of the various specialist studies which have more closely investigated the land holdings, road alignments, topography, natural features and possible zonings.

The key similarities between the plan change request and the Warkworth Structure Plan are:

- Morrison Heritage Orchard is being provided for through a specific precinct.
- The proposed Open Space areas shown on Precinct Plan 4 reflect the location of the future esplanade reserves and open spaces alongside other watercourses. At the recommendation of Auckland Council Officers, these open spaces have not been zoned on the proposed zoning map, which will provide for a degree of flexibility for the final open space boundaries at the time of subdivision.
- The range of residential zonings shown in the Warkworth Structure Plan are being provided for, although the boundaries of each of the zonings has been refined to reflect the possible future roading network and topography.
- The open space area west of Morrison Heritage Orchard is provided for.
- The northern escarpment area is proposed to be zoned Residential Large Lot with specific revegetation and building external finishes controls to reflect the identification in the Structure Plan of this area needing "further landscape protection controls". This is now a qualifying matter.
- The eastern escarpment area is proposed to be zoned Residential Single House with a minimum lot size, building height and revegetation controls to reflect the identification in the Structure Plan of this area needing "further landscape protection controls". This is now a qualifying matter.

The key differences between the Plan change request and the Warkworth Structure Plan are:

- The WWLR (a future arterial) has been shown in the location of the indicative collector road. The
 alignment of the WWLR has been modified to reflect topography, to retain it within land currently
 under the control of the KA Waimanawa Limited Partnership, traffic safety reasons and to provide
 a buffer between future urban development and Morrisons Heritage Orchard.
- As a result of the change in alignment of the WWLR, the Local Centre has shifted to the north and remains adjacent to the intersection of the WWLR with SH1. The public transport interchange is proposed to be to the immediate west of the Local Centre and adjacent to the WWLR.
- The requirement to implement and/or reflect the National Policy Statement on Urban Development 2020 (NPS-UD) updated in May 2022 and amendments to the Act arising from the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021. In particular, the use of the Residential – Mixed Housing Suburban Zone is no longer an option in the plan change, and qualifying matters where the medium density residential standards do not apply need to be identified.
- The extent of Terrace House & Apartment Building zone ("THAB") is increased and in a modified location. The principle of focusing THAB zoning around the local centre and intersection with SH1 is continued. The shifting of the intersection has resulted in the corresponding shifting of the THAB zone.

The management of streams varies from the Structure Plan. The plan change request proposes:

- The identification of those permanent streams which are to be retained;
- The status of applications to modify these retained streams is a "non-complying activity"; and
- Other streams are subject to normal plan controls and applications to modify these streams are a "restricted discretionary activity."

Since the Warkworth Structure Plan was adopted the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 ("Freshwater Regulations") have come into effect. At the current time these regulations prohibit the reclamation of any natural wetland except in specific circumstances set out in the Freshwater Regulations. The natural wetlands on the site have been mapped and Figure 6 identifies those natural wetlands which at the current time cannot be reclaimed except for specific works. The Waimanawa Wetland is a constructed wetland and is not subject to the same restrictions under the Freshwater Regulations.

The Warkworth Structure Plan does not identify any linkage between the provision of the future Ara Tūhono – Pūhoi to Warkworth Motorway southern interchange (south facing ramps only) and the timing of the rezoning and urbanisation of the Warkworth South area. Although the Structure Plan addresses the Ara Tūhono – Pūhoi to Warkworth Motorway southern interchange (south facing ramps only), the Structure Plan

is clear that this is only a potential southern interchange and the future urbanisation of Warkworth is not dependant on it.

With the opening of the Ara Tūhono – Pūhoi to Warkworth Motorway, the current SH1 will revert to an Urban Arterial under the control of Auckland Transport. The opening of the Motorway will see a drop in traffic volumes along the current SH1 through the plan change area by an estimated 40%. This significantly increases the local traffic capacity for SH1 through the Warkworth South area and to Warkworth. In addition, the physical form of the road will change over time to reflect its status as an Urban Arterial with it being two-lane with cycle and pedestrian paths. With these changes, the current SH1 will provide a strong and direct linkage from Waimanawa to the existing Warkworth urban area including Mahurangi College, the Warkworth town centre, the temporary Warkworth park and ride (and transportation hub) and the existing and future business areas.

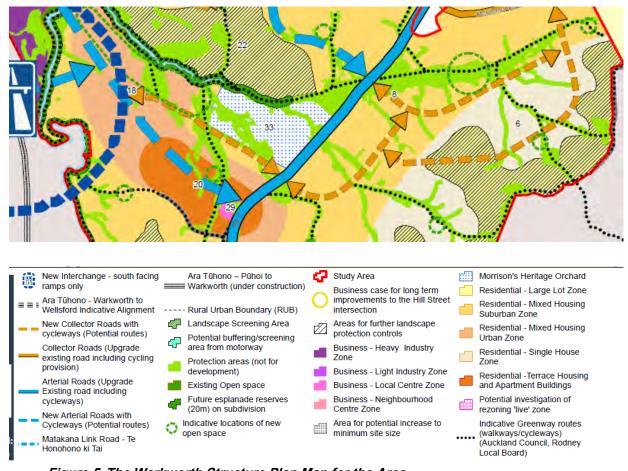
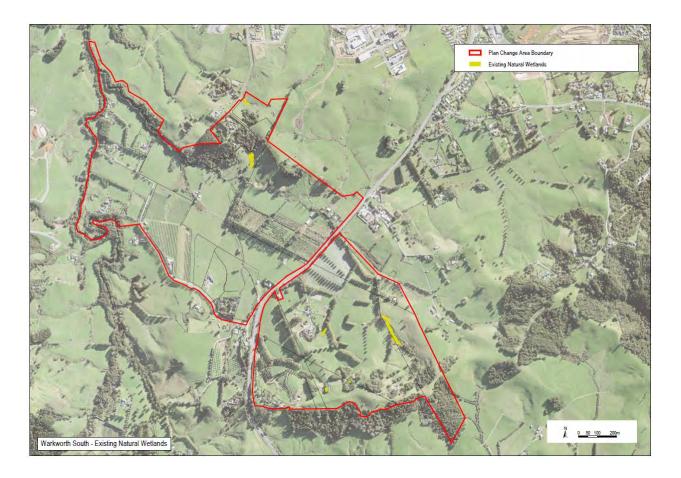


Figure 5 The Warkworth Structure Plan Map for the Area



• Figure 6 Natural Wetlands (Yellow) within the Plan Change Area

6. The Vision and Principles for the Development of Warkworth and Warkworth South

Through the Warkworth Structure Plan process Council distilled a vision and seven planning principles for Warkworth. The following is an outline of this vision and principles, as outlined in the Warkworth Structure Plan and a description of how this plan change adopts and/or responds to these.

The vision for Warkworth is:

"Warkworth is a satellite town that retains its rural and natural character. It is centred around the Mahurangi River and has easy walking and cycling access around the town. There are a variety of high-quality residential neighbourhoods. Warkworth is largely self-sufficient with plenty of employment, education, shopping and recreation opportunities. Transport and other infrastructure are sequenced to support Warkworth's planned growth".

The plan change responds to this vision by enabling the development of a high-quality residential neighbourhood through:

- Providing for a planning framework that provides for and focuses on urban development around a series of parks along the southern reaches of the Mahurangi River.
- Providing for a pedestrian and cycle network that provides for accessibility both within Waimanawa and to the wider Warkworth area.
- Provides for the protection of the southern reaches of the Mahurangi River and public access to and along these reaches.
- Provides for a mix of residential zoning which will promote a range of housing typologies.
- Provides for the efficient provision of that infrastructure required for the development of both Waimanawa and the wider Warkworth South area.
- Reflects that the current SH1 is to revert to an urban arterial.

The seven principles outlined in the Warkworth Structure Plan are:

The Mahurangi River is the jewel in Warkworth's crown

(i) Protect the Mahurangi River from the effects of urbanisation as a matter of paramount importance in the development of the Future Urban zone.

The Plan change area encompasses the two upper reaches of the Mahurangi River. As the adjoining land is subdivided in accordance with the proposed zoning then esplanade reserves alongside the Mahurangi River will need to be vested in Council. At that stage, the walkways along the River within the esplanade reserves are developed and also vested in Council. There is currently no public access along these upper

reaches of the Mahurangi River and the re-zoning then development of the adjoining land will provide this public access to these very scenic sections of the Mahurangi River while also protecting the extensive riparian vegetation.

The plan change seeks to manage water quality entering the key tributaries and the upper reaches of the Mahurangi River through adopting SMAF1 controls and implementing water quality measures (such as stormwater ponds).

(ii) Use the development of the Future Urban zone to improve the health and quality of the Mahurangi River wherever possible.

Under the plan change, water quality in the Mahurangi River will benefit from:

- The retirement of farmland and a former vineyard which will reduce nutrients and sedimentation entering the local stream network.
- A treatment train approach for stormwater entering the streams and river. This includes the potential for on-site retention and detention and the creation of wetlands to treat stormwater.
- The creation of esplanade reserves and the protection of the existing vegetation within the reserves at the time of subdivision.
- (iii) Treat all the tributaries in the Future Urban zone as being vital to the health of the Mahurangi River.

The plan change request identifies those watercourses to be retained.

For those tributaries to the upper reaches of the Mahurangi River which are to be retained, then riparian planting (within open spaces or as part of a riparian yard or esplanade reserve) will enhance the ecological health and amenity of these watercourses over time.

For those watercourses where consent is required for their removal or modification, then off-set mitigation will be required with this expected to be undertaken within the Warkworth South catchment.

Character and identity

(iv) Celebrate Warkworth's heritage, both Māori and European, and its relationship with mana whenua.

The Morrison Heritage Orchard Precinct both protects and celebrates the Morrison Heritage Orchard and the orcharding history of Warkworth and surrounds.

The Cultural Values Assessment prepared by the Ngāti Manuhiri Charitable Trust provides a detailed outline of the history of the wider area and provides a number of recommendations to recognise the cultural footprint of Ngāti Manuhiri within the future development of this area. These recommendations are addressed further later in this report.

The importance of the Mahurangi River both for Māori and Europeans is well known and documented. Through the existing Warkworth township, the history of the Mahurangi River is documented with information boards. Public access along the Mahurangi River has been significantly improved in recent years with further plans to increase public access along the different stretches of the River between Falls Road and Scotts Landing. This plan change provides the opportunity to provide public access to and along the upper reaches of the Mahurangi River which is currently not accessible to the public. Over time and as the urban development of Warkworth continues, a pedestrian link along the Mahurangi River between the Warkworth township and Waimanawa may be achievable.

The plan change is cognisant that when future consent applications are made, the Te Aranga principles will apply. The plan change therefore responds to the relevant principles in the following way:

(a) Whakapapa

In the development of the streams and open spaces and in actions such as street naming, appropriate naming and "story telling" will be used. This occurs at the development stage where consultation with the Manuhiri Kaitiaki Charitable Trust is expected to continue to occur in terms of developing the open spaces and naming.

(b) Taiao

The landscaping over time (including riparian yards and open spaces areas) is expected to use a range of native plant species that naturally occur in the Mahurangi area. Landscaping requirements for riparian yards and/or esplanade reserves are commonly stipulated through the subdivision consent process.

(c) Mauri Tu

This principle relates to the protection of environmental health. This will be achieved by:

- Integration of the stream network and the upper reaches of the Mahurangi River with the proposed zoning layout and future development;
- Protection of existing bush and in particular the vegetated banks of the upper reaches of the Mahurangi River and the bush on the northern escarpment; and
- Ensuring that roofing materials are chosen to minimise heavy metal runoff into the stormwater system.

(d) Mahi Toi

With the more detailed design stages coming up through future resource consent applications, there are opportunities to respond to cultural aspects.

(v) Retain the current town centre as the focal point and 'beating heart' of Warkworth.

A local centre, to service the Warkworth South area, is proposed adjacent to the intersection of the WWLR and SH1, as indicated in the Warkworth Structure Plan. This is a local centre only and will not incorporate

a large retail focus. The total retail floor area is expected to be in the vicinity of 10,000m² and, based on similar local centres in Auckland, is likely to include cafes, convenience stores, healthcare facilities, pharmacy and gyms. The proposed area of Local Centre zoning also includes the area for the future public transport interchange.

This local centre will not detract from the existing Warkworth Town Centre and this is confirmed in the Economic Assessment (Appendix 10).

(vi) Protect the views from the current town centre to the bush clad northern escarpment of the Mahurangi River and the rural views out from the Future Urban zone that contribute to Warkworth's rural character.

Given the location of the plan change south of the current town centre, this proposal does not impact on the current views from the town centre to the northern escarpment on the opposite side of the Mahurangi River.

The plan change, to highlight that Warkworth is a satellite town within a rural setting, seeks to retain the historic Morrison Orchard through a site specific precinct which provides for the orcharding to continue and activities on the site to evolve over time. This Orchard will be viewed from many locations within the plan change area and will form part of the central focal point of Warkworth South along with the local centre and the active open space area.

Rural views to the south and west will be retained although it is recognised that the land to the immediate south is also zoned Future Urban and is highly likely to be urbanised in the future.

(vii) Apply lower density residential zones to areas valued for their landscape and character.

The areas identified in the Warkworth Structure Plan as "Areas for Further Landscape Protection Control" are proposed to be covered by separate landscape protection controls for the northern and eastern escarpments. The purpose of these controls is to protect landscape features on key upper portions of the precincts and to promote revegetation of the two escarpments. The northern escarpment area is to have a Residential – Large Lot zoning while the eastern escarpment area is to have a Residential – Single House with both landscape protection controls also having additional development standards to achieve their purpose. The implementation of a low density zoning will limit the amount of development which can occur, which is the key method to limit changes to the escarpment landform.

(viii) Use the Future Urban zone efficiently to protect against the need for further urban expansion into Warkworth's valued rural hinterland.

The plan change provides for the planned urbanisation of Future Urban Zoned land. The rural urban boundary on the eastern side of the plan change area is just to the west of Avice Miller Reserve. There is no sound planning justification to retain this small width of land up to Avice Miller Reserve as rural and the proposed Residential – Single House zoning therefore extends up to the boundary of the Avice Miller Reserve and extends just beyond the rural urban boundary.

A place to live and work

(ix) Provide a range of housing options in Warkworth so that it is a place for people to live at all stages of life.

The plan change provides for a range of zones from Rural – Mixed Rural to Residential – Terrace Housings and Apartment Buildings which will provide for a diverse range of lots sizes and therefore potential housing typologies. This suite of zonings provides an opportunity for a range of different housing options which in turn will help create a diverse community (including providing for different housing choices as residents requirements change as they progress through life).

(x) Provide new local employment areas (e.g. small centres, industrial areas) so people can work locally in Warkworth.

Place of employment patterns are changing rapidly with many people now having the opportunity to work from home either part of full-time. Housing designs are now reflecting this, and it would be reasonable to expect that some of the designs incorporated in the future development of Waimanawa will provide work from home features.

The local centre will provide for some local employment opportunities as well as the activities within the Morrison Heritage Orchard as it is further developed.

The Structure Plan does not indicate other business zones apart from the Local Centre within the plan change area so no other business zones have been provided for. However, there are efficient transportation connections to the current industrial areas within Warkworth and likewise there will be a direction connection along the current SH1 to the new business area in the Clayden Road precinct.

(xi) Plan to enable development of the Future Urban zone to be sustainable, including having a compact urban form, providing local employment options, enabling extensive active and public transport routes, and minimising discharges to air and water bodies.

It is considered that the plan change provides the framework for enabling the development of this part of the Future Urban zone in a sustainable manner. In particular:

- The provision of a range of zones including the Residential Terrace Housing and Apartment Building Zone which allows for more intensive residential development close to the future public transport interchange and local centre. It is recognised that owing to topographical and visual sensitivity constraints, certain areas have been proposed to be for the less intensive Residential Large Lot zone, but overall the plan change provides for a compact urban form.
- With the provision of the future open spaces, a local centre and Morrison Heritage Orchard, residents' day to day social and recreational requirements will be provided for within the plan change area.
- Local employment opportunities will arise at the future local centre and Morrison Heritage Orchard and there are good transportation links to the main business areas in Warkworth. In addition, with

changing working patterns, many of the future housing designs are expected to provide for work at home options.

- The WWLR is provided for in general accordance with the Warkworth Structure Plan. This is one of the key future arterial routes in Warkworth and may provide a future connection to the motorway network. The conversion of the current SH1 to an urban arterial will improve the transportation link to the current Warkworth urban area.
- A stormwater treatment train approach is being proposed.
- (xii) Design the Future Urban zone to be able to adapt to the effects of climate change.

The flood modelling which has been undertaken takes account of climate change. Given the location of the area, no consideration to future sea level rise is required.

(xiii) Protect and enhance existing bush/natural areas and create ecological corridors linking the Future Urban zone to other ecological areas.

A greenway network is proposed which will provide for a range of pedestrian connections (and in some cases possible cycle connections) along the watercourses and the upper reaches of the Mahurangi River.

On the eastern side of the plan change area, the creation of new bush reserves will provide for the enhancement of the Avice Miller Reserve as well as the protection of the stream corridors flowing down from the elevated areas to the east and connection eventually down to the upper reaches of the Mahurangi River.

The existing covenanted areas on the northern escarpment will continue to be protected and are joined to the existing vegetated banks of the upper reaches of the upper Mahurangi River which will be protected over time as esplanade reserves as the area is subdivided (with one section of esplanade reserve currently existing). As land downstream from the plan change area is developed it is expected that esplanade reserves will also be required which over time will provide for a protected ecological corridor along the full length of the Mahurangi River from its upper reaches in this plan change area through to the Mahurangi Harbour.

A well-connected town

(xiv) Use the development of Warkworth's growth areas to help address Warkworth's existing road congestion through integrated land use and transport planning and new infrastructure.

The roading network within and servicing Warkworth is changing rapidly with the development of the Ara Tühono – Puhoi to Warkworth Motorway and the Matakana Link Road, both due to open in 2023 and well before the commencement of the development of Waimanawa. In addition, funding is now being finalised for the upgrading of the Hill Street Intersection. Significant changes to traffic flows along the current SH1, and including through the plan change area, will therefore occur.

With the opening of the Motorway, the current SH1 will change to an urban arterial. Over time, the section of SH1 south of Warkworth within the current Future Urban zoned area will be transformed so it includes pedestrian and cycle paths and an urban speed limit. This will significantly improve the transportation connection from the plan change area to the current Warkworth urban area (including to the town centre, local schools, employment areas and recreational facilities such as the Warkworth Showgrounds). The infrastructure funding to give effect to the plan change includes upgrading that section of SH1 through the plan change area and the provision of a new foot and cycle path from the northern end of the plan change area to the existing footpath at the southern end of the current Warkworth urban area.

The Warkworth Structure Plan indicates a future arterial (the WWLR) through the plan change area and this is being provided for and will be constructed to a collector road standard as part of the development of the western side of Waimanawa. The general route of the WWLR has been confirmed with Supporting Growth who are in the process of preparing Notices of Requirements to Designate the proposed WWLR/SH1 intersection and that section of the WWLR to the west of the Waimanawa Precinct. Agreement is still to be reached on the exact extent of the WWLR/SH1 intersection designation.

(xv) Provide convenient, segregated, and safe walking and cycling routes through the Future Urban zone connecting residential areas with key locations (e.g. schools, parks, centres), and the existing town, and to regional walking/cycling routes.

Within the plan change area, walking and cycling is provided for within the new roading network and walking trails within the green network. This will provide both good internal connectivity (to the local centre, Morrison Heritage Orchard and open spaces) as well as recreational opportunities including a connection into the Avice Miller Scenic Reserve.

As outlined above, a new walking and cycling connection is proposed along the current SH1 which will provide a direct and easy walking and cycling connection from Waimanawa to the Warkworth town centre, Mahurangi College, Warkworth Primary School and various recreational facilities within Warkworth.

A walking trail through the northern escarpment (which in part will follow the future accessway required to provide access to houses in this area) is proposed to provide a connection to Mason Heights and the north-western area of Warkworth. This provides an alternative pedestrian connection to Mahurangi College, Warkworth Primary School and to the Mitre 10 /Glenmore Drive business areas. The future development of this track also contributes to a walking loop around Warkworth for recreational purposes.

The WWLR will include a pedestrian/cycle path and will again contribute to the overall future walking/cycling network within Warkworth as the current future urban areas are developed.

Discussions have been held with the Matakana Coast Trail Trust. A potential pedestrian and cycle link can be provided through the eastern side of the plan change area alongside the Avice Miller Scenic Reserve if this is determined as the most appropriate route for the future trail as it traverses south from Thompson Road to SH1 (near the location of the Honey Centre).

(xvi) Provide convenient, high quality public transport routes through the Future Urban zone (connecting to the rest of Warkworth, the surrounding rural settlements, and Auckland).

The existing SH1 will revert to an urban arterial at the time the new Motorway is opened. The new southern gateway into Warkworth will be just south of the Valerie Close intersection. As part of the development of Waimanawa, speed calming methods on SH1 will be implemented along with an upgrading of the Valerie Close intersection. As an urban arterial its function to provide an efficient transportation route through Warkworth will be retained, but pedestrian and cycling options will now be provided for.

The WWLR is bring provided for in general accordance with the Warkworth Structure Plan (although further to the north) and will form part of the new arterial roading network within Warkworth and potentially a future connection at a southern interchange with the new Motorway.

The future transport interchange can be provided for adjoining the local centre and the WWLR if and when the requirement for this interchange is confirmed and funded by Council/Auckland Transport, and the indicative location of this is shown on the Precinct Plan.

Quality built urban environment

(xvii) Design the Future Urban zone to enable high-quality and integrated urban development that reinforces the town's identity.

The plan change is intended to deliver this objective.

The plan change has been developed based on the vision of "Creating a welcoming residential community with a range of engaging facilities set upon a series of parks along the southern reaches of the Mahurangi River." This is provided for in part through the proposed position of the recreational and wetland parks, the current and future esplanade reserves along the upper reaches of the Mahurangi River (which will include walkways) and the development of Morrison Heritage Orchard in accordance with its precinct.

Taking account of the above, the proposed route of the WWLR, the proposed zonings (with their relevant objectives, policies and rules) and the proposed precinct plans it is considered that the plan change will achieve this objective and provides a planning framework to create a neighbourhood with a high level of amenity.

(xviii) Locate higher density residential areas around appropriate amenities.

The areas of Residential – Terrace Housing and Apartment Building zoning is adjacent to the Local Centre zone (with part on the opposite side of SH1), fronts part of the WWLR and is either located opposite to or has good pedestrian connections to the future recreational park.

The location of this zoning is generally consistent with the Warkworth Structure Plan.

(xix) Provide well located and accessible areas of open space linked by a green network of walking and cycling trails along the streams.

This plan change is characterised by the high proportion of open space being identified in the precinct plans. The open space will provide for a mix of conservation, informal recreation and sports and active recreation uses to reflect both the existing environment or proposed future use. Many of these open spaces, part of which form the green network, are intended to include pedestrian or pedestrian/cycle paths and provide a well-connected network through the plan change area. In particular, the greenway network flows down the valley from the Avice Miller Scenic Reserve on the elevated eastern boundary down through to and along the upper reaches of the Mahurangi River.

A proposed suburban recreational park (Endeans Farm Recreational Park) is located adjacent to Morrison Heritage Orchard and will provide for recreational facilities, which will complement the main Warkworth recreational facility (the Warkworth Showgrounds). Adjacent to this park will be the Waimanawa Wetland Park which encompasses part of the existing constructed wetland and which will also now provide a stormwater treatment and retention purpose.

The existing areas of covenanted bush will be retained on the northern escarpment and over time the area of vegetation on this escarpment is expected to increase as that area is developed into Residential - Large Lot zones and a specific planting rule is proposed for that area.

Although it is to remain in private ownership and is to be zoned largely Rural – Mixed Rural, the Morrison Heritage Orchard will in effect be a form of open space with the precinct providing for the retention and expansion of the orchard and the development of complimentary facilities such as a café/restaurant. Being located opposite the future local centre and adjacent to the recreational park, Morrison Heritage Orchard will be a central feature and focus within Warkworth South and connected in terms of vehicle, cycle and pedestrian access to both Waimanawa and the wider Warkworth South area when it is developed.

Infrastructure

(xx) Plan for infrastructure (transport, water, etc) to be ready before new houses and businesses are built in the Future Urban zone.

Waimanawa will be the first stage of development of the Warkworth South area and within it will be the key infrastructure required for the development of Warkworth South. In summary:

- The existing SH1 is to be converted to an urban arterial standard and a pedestrian/cycle path formed from the northern end of the plan change area to connect to the pedestrian path network on SH1 near the McKinney Road intersection.
- The WWLR is to be provided for in general accordance with the Warkworth Structure Plan. It is to be formed to a collector road standard but the width of land to be vested is to allow for a future upgrade to an arterial road standard.
- Potable water will be provided via the installation of a new main pipe from Warkworth and the
 construction of a new water reservoir within the eastern part of the plan change area. The potable
 water network for Waimanawa will then be developed from the reservoir as the area is developed.
 This reservoir is sized to cater for the full Warkworth South area which it is to service in the future.

- A new wastewater pumping station is to be installed on the western side of the plan change area and will connect via a new rising main along SH1 to the existing Warkworth wastewater network (near the Grange on SH1). An alternative option being investigated is that two smaller pump stations will be constructed with one on either side of the SH1. The wastewater pumping station(s) will be designed so it can cater for the full Warkworth South area it is to eventually service although this may involve expanding parts of the wastewater station over time as wastewater volume increases as other parts of Warkworth South develop. The wastewater network within Waimanawa will be installed as the area is developed.
- Stormwater management can be provided for within the plan change area and will be developed over time as the different stormwater catchments within Waimanawa are developed.
- In respect to the areas to be zoned Residential Large Lot, these will be self-servicing in terms of on-site rainwater harvesting and wastewater treatment and disposal.
- A minor extension of Mason Heights is required to service the area at the end of Mason Heights.
 The area of Residential Mixed Housing Urban will be serviced in terms of potable water, wastewater and stormwater through the extension of existing services within Mason Heights.
- Morrison Heritage Orchard is to remain self-servicing in terms of potable water, wastewater treatment and disposal and stormwater management.

An infrastructure funding agreement for the provision of infrastructure is to be entered into with Council and the relevant Council Controlled Organisations. It is recognised that the control and management of water is currently subject to proposed changes and therefore the party who agreement of these matters is to be entered may change through the process. No changes to how water services are physically provided in Warkworth are expected to occur with the currently proposed reforms.

(xxi) Provide for social and cultural infrastructure (i.e. libraries, halls, schools, community meeting places) to support the needs of the community as it grows.

Within the plan change area certain social infrastructure are likely to be developed such as local shops, cafes and a pre-school within the Local Centre. The Morrison Orchard Precinct provides for markets and cafes/restaurants and it is understood planning for these facilities is already underway by the landowner.

The new Endeans Farm Recreational Park will provide for a significant local recreational facility which will complement the Warkworth Showgrounds. The Waimanawa Wetland Reserve along with the other conservation reserves will contribute to the local informal recreational assets.

The Ministry of Education has been consulted through the plan change process and continue to have a strong interest in acquiring land and developing a primary school close to the recreational park. At the time of preparing this plan change the Ministry of Education did not have the funding assigned to undertake a detailed site analysis and then land acquisition but it is understood that this is likely to be progressed within the next few years.

Social infrastructure such as churches are not provided for through the plan change process, but it is not uncommon for religious organisations to identify and acquire land for future facilities prior to full land development and then obtaining the relevant resource consents once the land is ready for development and there is demand for the facility.

Warkworth itself currently has a range of social and cultural infrastructure including the recently renovated town hall, the Warkworth Library, the old and new Masonic Halls and the Council Offices. In addition, there are a number of private facilities used for social and recreational purposes including the Warkworth Scout Hall, Warkworth Bowling Club, the RSA and a number of churches with halls. These facilities are all accessible from Waimanawa.

The Warkworth Showgrounds is the main recreational facility for Warkworth and continues to be developed to reflect the increasing and changing population. The construction of a multi-purpose facility within the Showgrounds is expected to be commenced shortly. A private swimming complex (the Northern Arena) is planned for within the Clayden Road Precinct adjacent to the Warkworth Showgrounds. The Warkworth Showgrounds will be accessible from Waimanawa with a direct route along SH1.

Overall, a number of social, cultural and recreational facilities have been or are being expanded and upgraded to reflect the current and planned growth of Warkworth. The plan change itself provides for additional recreational facilities while private social and cultural facilities such as churches, cafes, and preschools are expected to develop over time within Waimanawa as demand dictates. The Ministry of Education continues to express its interest in a new primary school site within Waimanawa but does not currently have the funding to confirm then acquire a site. The Plan Change does not prohibit in any way the Ministry of Education identifying and purchasing a site in the future.

Summary

The plan change, through the incorporation of the Waimanawa and Morrison Heritage Orchard Precincts, is generally consistent with and gives effect to the Warkworth Structure Plan. The principles of the Warkworth Structure Plan have been carried forward into the plan change as appropriate and formed the basis for the initial vision document for Waimanawa which the plan change has been built on.

The Waimanawa Vision Document

The impetus for the exploration of the plan change arose from landowners bring approached by a range of different government and non-government parties investigating the area for schooling, parks, roads and other facilities. The former main landowner (Endeans Farm Ltd) was concerned that there was a significant risk of an uncoordinated approach being taken by the various parties and that a more detailed planning framework was required for this area to coordinate the different requirements.

In addition, landowners have been involved in a range of environmental rehabilitation projects over many years including riparian planting and the creation of a wetland and there was a desire to protect these (in full or in part). Furthermore, the upper reaches of the Mahurangi River provide a very scenic outlook with the watercourses themselves having swimming holes for informal use and with the riparian bush being mature in many areas and lending itself to bush walking with the establishment of trails. The Mahurangi

River is regarded as a taonga and the treatment of its upper reaches has impacts further down the River and through to the Mahurangi Harbour.

The valley has a whole has a predominantly northly aspect and compared to much of Warkworth a gentle topography which makes it attractive for residential development. The visually contained valley, the areas of native bush, the aspect and the watercourses have the potential to create a residential area which a high natural amenity.

These matters formed the basis for the initial investigation for the urban development of Waimanawa.

As the first stage of the development of this plan change request, a draft Vision Document ("Warkworth South (Waimanawa) – Vision Document") was prepared which followed the relevant principles of the Warkworth Structure Plan, reflected the existing environment and adopted best practice urban design principles. This Vision has been refined through the consultation and plan change request process and the current version is in Appendix Two.

This document outlines the vision for Waimanawa, identifies the key elements of the area, the goals for the urban development of Waimanawa and provides the indicative development concept, road cross-sections and zoning plan.

The vision for Waimanawa is:

Creating a welcoming residential community with a range of engaging facilities set upon a series of parks along the southern reaches of the Mahurangi River.

The six goals to achieve this vision are:

- Protect and enhance the distinctive existing environment including natural streams, wetlands, vegetation and ecological corridors.
- Follow natural contours and integrate with surrounding neighbours, watercourses and transportation network.
- Create a distinctive and self-contained community providing high quality residential development and parks with a focus on sustainability.
- Create an integrated transport network with emphasis on walking and cycling access, pedestrianoriented streets and greenways.
- Provide for retail, cafe, supermarket, gym, pharmacy, healthcare to meet the needs for local residents.
- Provide a series of quality open spaces and amenities easily accessible for all.

It is considered that the plan change and in particular the provisions of the Waimanawa Precinct give effect to and allows for the development of Waimanawa in a manner which meets these six goals and therefore achieve the vision.

Morrison Heritage Orchard

The Morrison Heritage Orchard was identified at the start of the visioning process as being an important cornerstone for the future Warkworth South community. At that same time, the owners of Morrison Orchard were developing their ideas for the future sustainable development of Morrison Orchard in a manner where an economic orchard facility will be retained and expanded through the introduction of complementary activities such as a market and café/restaurant.

Consultation was initiated at a very early stage with Morrison Orchard representatives, and it was determined that it was appropriate for the Morrison Heritage Orchard to have a separate bespoke precinct. This was to be incorporated in the same plan change as Waimanawa given their proximity to each other and similar development timeframes as well as the need to address transportation linkages and reverse sensitivity matters.

The vision and purpose of the Morrison Heritage Orchard Precinct is to enable the ongoing operation and expansion of the existing Morrison Orchard as a heritage rural land use, by permitting the ongoing use of the site for both traditional orchard and other rural productive land use activities, and complementary tourist and visitor activities including an orchard shop, a market, restaurant / café as well as playground, wedding venue and similar social activities.

7. Relevant National Policy Statements and the Auckland Regional Policy Statement

The National Policy Statement on Urban Development (NPS-UD)

The National Policy Statement on Urban Development 2020 (NPS-UD) came into force on the 20th of August 2020. The NPS-UD provides direction to decision-makers under the Act on planning for urban environments. The NPS-UD sets out objectives and policies that apply to all decision-makers when making planning decisions that affect an urban environment.

Of importance to this plan change is that Policy 8, which is addressed further below, had immediate effect from the date that the NPS-UD came into force.

In terms of hierarchy, the NPS-UD sits above the AUP and non-statutory regional documents such as the FULS and non-statutory planning documents such as the Warkworth Structure Plan.

The following is an assessment of the relevant objectives and policies of the NPS-UD in respect to the plan change.

Objective 1:

New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future

<u>Assessment</u>

The plan change covers an area currently zoned as Future Urban (except for a small area of Open Space – Conservation and Rural – Rural Production) and therefore has been identified by Council for urban development. Since the introduction of this zoning, Council has progressed the development of the Warkworth Structure Plan which is to guide the development of Warkworth in a manner where Warkworth continues to be a well-functioning urban environment. In addition, over time to reflect the planned expansion of Warkworth, there has been on-going or planned development of upgrading of infrastructure, and social and recreational facilities along with significant changes to the roading network.

The proposed plan change is generally consistent with the Warkworth Structure Plan and provision is being made for the required infrastructure for the urban development of Warkworth South.

On this basis it is considered that the proposed plan change gives effect in part of Objective One in terms of the continued expansion of Warkworth as a well-functioning urban environment.

Objective 4:

New Zealand's urban environments, including their amenity values, develop and change over time in response to the diverse and changing needs of people, communities and future generations.

<u>Assessment</u>

Warkworth has been identified as one of two satellite towns in Auckland and the Future Urban zoning of

large tracts of land around Warkworth reflects this. Significant transformation of the Warkworth urban

environment is occurring including re-zoning of land from Future Urban to a range of residential, open space

and business zonings around the periphery of Warkworth. To date these changes are largely consistent

with the Warkworth Structure Plan, although recognising that the detailed planning undertaken during the

plan change development process often leads to refined zoning boundaries and road locations etc to better

reflect existing environmental factors including topography and good urban design principles.

The area covered by the plan change will undergo significant transformation as the plan change is given

effect to, but this is consistent with the Auckland Plan, the AUP and the Warkworth Structure Plan. This

change also reflects the on-going demand for housing in Auckland and the growing popularity of Warkworth

as a satellite town within Auckland (which is likely to be further enhanced with the opening of the Ara Tūhono

- Puhoi to Warkworth Motorway).

Policy 10:

Tier 1, 2 and 3 local authorities

(a) that share jurisdiction over urban environments work together when implementing this National Policy

Statement: and

(b) Engage with providers of development infrastructure and additional infrastructure to achieve

integrated land use and infrastructure planning; and

(c) Engage with the development sector to identify significant opportunities for urban development.

Assessment:

The plan change area has already been zoned for Future Urban and this plan change now provides for the

appropriate zonings and precinct specific rules to allow for the development of this area (including Morrison

Heritage Orchard).

Consultation with infrastructure providers has been undertaken through the plan change development and

an infrastructure package funding agreement is being developed to provide for the funding and provision of

the required infrastructure for Waimanawa. Much of this infrastructure is also required for the future

development of the remainder of the Warkworth South area.

Housing Affordability

Objective 2:

Planning decisions improve housing affordability by supportive competitive land and development markets.

<u>Assessment</u>

A range of zonings are proposed which provide for a diversity of lot sizes and housing typology options which then provide different price points for housing to suit different sectors of the community.

It is recognised that for this plan change, significant funding for the required infrastructure is having to be met though the development of the lots and this adds further costs to the land development and the subsequent housing costs. However, this cost cannot be avoided if the required infrastructure is going to be provided for in an efficient and timely manner to meet the needs of the community.

Policy 1:

Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:

- a. have or enable a variety of homes that:
 - i. meet the needs, in terms of type, price, and location, of different households; and
 - ii. enable Māori to express their cultural traditions and norms; and
- have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and
- c. have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and
- d. support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and
- e. support reductions in greenhouse gas emissions; and
- f. are resilient to the likely current and future effects of climate change.

Assessment:

It is considered that the plan change will:

- Through the implementation of a range of zonings, a range of housing typologies can be provided for which will meet different needs of the community in terms of both type of house and price. The requirements of the Resource Management (Enabling Housing Supply and Other Matters)
 Amendment Act 2001 have been taken account of in the proposed rules.
- The development of Waimanawa will provide further choice to current and future residents of Warkworth as to where they can live within Warkworth. The aspect and natural environment of Waimanawa is quite different from those areas covered by the Clayden Road and Warkworth North Precincts. This itself will also result in a further degree of hosing choice in terms of typology and price to the Warkworth market.

- Waimanawa has also been designed, in conjunction with Morrison Heritage Orchard, to be largely self-contained so that the majority of residents immediate needs (social, recreational, business) can be met within the two precincts. In particular, the provision of a variety of open spaces and Morrison Heritage Orchard provides a greater range of passive recreational opportunities than most other areas within Warkworth. This greater degree of self-containment can aid in the reduction of reliability of car transportation for residents which is positive in terms of reducing greenhouse gas emissions. Overtime, the provision of a public transport interchange within Waimanawa and any future connection to the Motorway by a southern interchange also has the potential to reduce reliance on private car travel.
- The location of the plan change area, the change of SH1 to an urban arterial, the opening of the Ara Tuhono Puhoi-Warkworth Motorway and the proposed internal transportation networks will ensure Waimanawa is both internally well-connected as well as having safe and efficient connections to the remainder of Warkworth and further afield. It is recognised that at the current time due to both a mixture of topography and current roading forms, cycling is not an efficient or preferred transportation method within Warkworth. The development of SH1 as an urban arterial (with a pedestrian/cycle path) and the proposed pedestrian/cycle path connection to Warkworth has the opportunity to change this significantly particularly given the relatively flat topography of SH1 between Waimanawa and the northern end of Warkworth. In effect, SH1 over time will become the key cycle and pedestrian spine through Warkworth for access to schools, recreational facility and the town and the development of that part of SH1 through Waimanawa and the pedestrian/cycle connection from the northern end will contribute significantly to this.
- The re-zoning of Waimanawa provides further development opportunities within Warkworth and, depending on development time, may provide further choice to residents on where to reside (and therefore increase the pricing competitively of land and housing development).
- Flood modelling has been undertaken and this has taken account of climate change. The
 development of Waimanawa can be undertaken where flood risk is avoided, and downstream flood
 risks are not magnified.

Treaty of Waitangi

Objective 5:

Planning decisions relating to urban environments, and FDSs, take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi)

Policy 9:

Local authorities, in taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) in relation to urban environments, must:

(a) involve hapū and lwi in the preparation of RMA planning documents and any FDSs by undertaking effective consultation that is early, meaningful and, as far as practicable, in accordance with tikanga Māori; and

(b) when preparing RMA planning documents and FDSs, take into account the values and aspirations of hapū and lwi for urban development; and

(c) provide opportunities in appropriate circumstances for Māori involvement in decision-making on resource consents, designations, heritage orders, and water conservation orders, including in relation to sites of significance to Māori and issues of cultural significance; and

(d) operate in a way that is consistent with Iwi participation legislation.

Assessment:

Council engaged with Mana Whenua during the Warkworth Structure planning process and prepared the "Engagement Summary on Draft Plan" (May 2019).

The applicant for this plan change then independently engaged with the Manuhiri Kaitiaki Charitable Trust who have subsequently prepared a Cultural Values Assessment which is included in Appendix 12. To date, Ngāti Manuhiri are generally supportive of the proposed Plan Change and have made a number of recommendations which are addressed later in this report and which will further enhance the future development and assist with minimising adverse effects on the natural environment while recognising the cultural footprint of Ngāti Manuhiri in this area.

Local Authority Decisions

Objective 6:

Local authority decisions on urban development that affect urban environments are:

(a) integrated with infrastructure planning and funding decisions; and

(b) strategic over the medium term and long term; and

(c) responsive, particularly in relation to proposals that would supply significant development capacity

Assessment

In considering the proposed plan change, it is considered that the plan change can be approved in terms of the matters covered under Objective 6 for the following reasons:

• The plan change is generally consistent with the Warkworth Structure Plan.

- Although the live zoning may make the land available for development prior to the timing in the nonstatutory FULS, the timing difference is not significant and the proposed infrastructure funding package will ensure that the required infrastructure is in place to support the urban development.
- The infrastructure being provided as part of the development of Waimanawa is the key infrastructure required to be implemented for the remainder of the urban development of Warkworth South. Given the necessity to provide this key infrastructure (ie the water reservoir and wastewater pump stations) along with the local centre and the public transportation interchange all within Waimanawa, it is both appropriate and necessary for this area to be re-zoned first and to allow for that development to proceed before the land to the immediate north is re-zoned and developed. The plan change process can take a considerable time and therefore the necessity to commence this plan change process now to ensure that the land is development ready in an appropriate timeframe (and generally consistent with the FULS).
- The proposed plan change provides for significant urban development capacity including approximately 1600 lots/apartment units.

Policy 6:

When making planning decisions that affect urban environments, decision-makers have particular regard to the following matters:

- (a) the planned urban built form anticipated by those RMA planning documents that have given effect to this National Policy Statement
- (b) that the planned urban built form in those RMA planning documents may involve significant changes to an area, and those changes:
 - (i) may detract from amenity values appreciated by some people but improve amenity values appreciated by other people, communities, and future generations, including by providing increased and varied housing densities and types; and
 - (ii) are not, of themselves, an adverse effect
- (c) the benefits of urban development that are consistent with well-functioning urban environments (as described in Policy 1)
- (d) any relevant contribution that will be made to meeting the requirements of this National Policy

 Statement to provide or realise development capacity
- (e) the likely current and future effects of climate change.

Assessment:

In considering the proposed plan change, it is considered that the plan change can be approved in terms of the matters covered under Policy 6 for the following reasons:

- The plan change is generally consistent with the Warkworth Structure Plan.
- Although the live zoning may make the land available for development prior to the timing in the nonstatutory FULS, the timing difference is not significant and the proposed infrastructure funding package will ensure that the required infrastructure is in place to support the urban development.
- The urban development of Waimanawa will result in significant change to the existing environment.
 The proposed plan change will give effect to the vision for Waimanawa and provides the framework for the development of a well-functioning residential urban area with high amenity.
- Consideration has been given to climate change (and flooding in particular) in the preparation of the plan change.

Policy 8:

Local authority decisions affecting urban environments are responsive to plan changes that would add significantly to development capacity and contribute to well-functioning urban environments, even if the development capacity is:

- (a) unanticipated by RMA planning documents; or
- (b) out-of-sequence with planned land release.

<u>Assessment</u>

This plan change will add significantly to the available residential development capacity of Warkworth (approximately 1600 residential lots and apartment units) and will contribute to Warkworth continuing to be, and maturing, as a well-functioning urban environment. The plan change is generally consistent with the Warkworth Structure Plan and which plans for the growth of Warkworth to become a satellite town within Auckland as identified in the Auckland Plan.

The FULS has identified that this part of Warkworth is to be development ready by 2028-2032. In the event this plan change is approved then the area should now be development ready by early 2025. Although this is earlier than the FULS, with an infrastructure funding agreement in place, there is no reason why this part of Warkworth cannot now developed. It is confirmed that neither the Warkworth Structure Plan or the FULS requires the possible future Southern Interchange to be built prior to Warkworth South being developed and the development of Warkworth South itself does not require the Southern Interchange. At the time of preparing this plan change there was no confirmation that the Southern Interchange was to be constructed.

As the proposed water reservoir and pumping station(s) are required for the development of the wider Warkworth South area, it is both practical and efficient to allow for the development of Waimanawa first to allow for this infrastructure to be constructed. Urban development in Warkworth South will then expand outwards including to the north where it will join with the existing Warkworth urban edge in this location (which itself is expanding south in parts).

New Zealand's urban environments

Objective 8:

New Zealand's urban environments:

- (a) support reductions in greenhouse gas emissions; and
- (b) are resilient to the current and future effects of climate change

Policy 1:

Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:

- (a) have or enable a variety of homes that:
 - (i) meet the needs, in terms of type, price, and location, of different households; and
 - (ii) enable Māori to express their cultural traditions and norms; and
- (b) have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and
- (c) have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and
- (d) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and
- (e) support reductions in greenhouse gas emissions; and
- (f) are resilient to the likely current and future effects of climate change.

Assessment:

The proposed plan change is consistent or achieves Objective 8 and Policy 1 for the following reasons:

- A suite of residential zones are proposed which will provide for a range of lots sizes and therefore housing typologies.
- In accordance with the Warkworth Structure Plan, a local centre is being provided for in terms of zoning. No other business zones are being provided for within this plan change as they are provided for elsewhere in Warkworth in accordance with the AUP.
- Strong transportation links are proposed within Waimanawa and linking Waimanawa to Warkworth and to the wider area.

This plan change provides for an additional approximately 1600 lots and apartment units. This will
significantly increase residential lot availability in Warkworth and provides for a different residential
environment than the residential areas being developed in the Clayden Road and Warkworth North
Precincts.

• Waimanawa will be largely self-sufficient in terms of local recreational and social requirements and will have a good pedestrian/cycle connection to the Warkworth town centre, Mahurangi College and various recreational and social facilities within Warkworth. It is also expected that many houses will be designed to provide for work at home options. Overall, these will contribute to a residential development which is less reliant on vehicular transportation.

 Consideration has been given to climate change (and flooding in particular) in the preparation of the plan change.

Summary

Approving this plan change would give effect to the NPS-UD. In particular, it will provide for a significant increase in residential development capacity within Warkworth in accordance with the Warkworth Structure Plan. The proposed infrastructure package would provide for the necessary infrastructure to provide for both the development of Waimanawa and also the wider Warkworth South area. It is considered that the proposed plan change will allow for the development of a well-functioning urban area which will contribute positively to Warkworth as an expanding, maturing and well-functioning urban environment.

Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021

In August 2022, the Council promoted PPC 78 and other associated plan changes, to give effect to the Resource Management (Enabling Housing Supply & Other Matters) Amendment Act 2021 and the National Policy Statement on Urban Development.

This plan change has been promoted consistent with those new enabling provisions within plan change 78.

This private plan change request adopts the standard zones and applies them as appropriate to the area. It should be noted that the new Medium Density Residential Standards ("MDRS") provisions supersede the zoning, particularly the Mixed Housing Suburban zone as depicted in the Warkworth Structure Plan.

The MDRS sets development standards in the core zones.

This plan change is consistent with the zones and activity standards and assessment criteria that sit alongside those zones. The precinct provisions adopt those objectives, policies, activities, notification of provisions, standards and assessment criteria. The precinct does provide additional controls and, in a limited number of cases, replacement controls for the underlying zoning and where required these are identified as qualifying matters.

Consequently, this plan change is fully consistent with the Amendment Act.

Evaluation of Qualifying Matters

This section evaluates the proposed qualifying matters in terms of s77J and 77L.

The proposed qualifying matters are underlined with the evaluation of them then undertaken.

A more restrictive front yard rule for residential sites adjacent to the WWLR and Green Avenue.

The purpose of this front yard control (3m rather than the MDRS 1.5m) is:

- to promote the development of the front yards for outdoor use; and
- to promote passive surveillance along the adjoining road.

Given the importance to provide safe pedestrian and cyclist connections within Warkworth South, the promotion of passive surveillance is considered appropriate in terms of good urban design and outcomes. This is consistent with Policy 3 introduced under the MDRS provisions.

This qualifying matter has no impact on the residential yield. If this qualifying matter was not adopted, then houses could be constructed 1.5m further towards the front boundary. This would allow for larger houses but would not result in the ability to increase the number of houses on one lot. This qualifying matter is therefore not considered to be contrary to the MDRS.

A more restrictive rear yard in part of the Residential – Mixed housing Urban Zone to provide for a Bat Flight Corridor.

This area is immediately adjacent to the right branch of the Mahurangi River that runs along the western boundary of Waimanawa Valley. Under the MDRS, a 1m rear yard would apply. The purpose of this rear yard control is:

To provide an unobstructed flight corridor for Bats.

The flight corridor could be defined as part of the bat habitat and therefore it is an area that benefits from s6(c) of the Act.

A 1m rear yard would not achieve an adequate width for the bat flight corridor. The alternative options of providing a road along the future esplanade reserve or to increase the width of the esplanade reserve to incorporate the bat flight area could result in a reduction of residential yield. In addition, the provision of a road in this location would conflict with the intent to provide a bat flight corridor and Auckland Council may not want to accept additional land for esplanade reserve.

This is a very unique situation and in order to avoid potential adverse effects on bats it is considered that the use of this rear yard control is an appropriate planning tool and is not contrary to the MDRS.

A reduced density with larger lot sizes is expected within this area even if no bat flight corridor proposed. We consider the impact on the lot yield regarding this qualifying matter is negligible.

A more restrictive rear yard in part of the Residential -Single House Zone adjoining the Avice Miller Reserve.

A more restrictive rear yard rule for residential sites adjacent to the Avice Miller Reserve is proposed (3m rather than 1m).

The purpose of this rear yard control is:

to provide a buffer adjacent to the Avice Miller Reserve.

This buffer will assist in the protection of the adjoining significant indigenous vegetation within the Avice Miller Reserve and reduce the risk of adverse effects on the visual character of this Reserve.

This qualifying matter has no impact on the residential yield. If this qualifying matter was not adopted, then houses could be constructed 2m further towards the rear boundary and it is unlikely this would result in additional houses being constructed on each lot. This qualifying matter is therefore not considered to be contrary to the MDRS.

Residential - Single House zoned area - western part (adjacent to Avice Miller Scenic Reserve): and;

A more restrictive minimum lot size in the Residential – Single House zone;

<u>and</u>

A more restrictive maximum height limited in the Landscape Protection Area (Eastern Escarpment).

The purpose of the landscape protection area controls (eastern escarpment) where the Single House zone is applied is:

- to protect landscape features on key upper portions of the precinct.
- to promote revegetation of the eastern escarpment

This area is steep and has limited development potential due to this topography. It also sits adjacent to Avice Miller Reserve and is locally prominent. The more restrictive minimum lot size reflects these matters and reflects more appropriately what could practically be constructed while allowing extensive revegetation which will contribute positively to the visual catchment, the amenity of the area and ecological linkages with the Avice Miller Reserve.

The masterplan proposed yield for the area (5.23ha) within the existing Rural Urban Boundary is 23 lots. Much of this area contains fragments of indigenous vegetation and has undulating/moderately steep contours. The gross developable area that excludes the bush to be protected/covenanted is approximately 2.41ha. If 25% of the gross developable area is assumed to accommodate roads the net developable area would be approximately 1.81ha which would enable around 60 lots based on a net lot size of 300m². However, given the complex combination of

undulating topography and fragments of native vegetation, the number of lots is likely to be further decreased. It is considered that the lot yield that may be generated within this area is likely to be around 40 if not subject to the qualifying matter.

Residential - Single House_Zoned Area - eastern part:

The masterplan proposed yield is 18 lots including 1 lot beyond the RUB. The land area within the RUB is approximately 3.08 ha. The topography rises steeply towards the eastern boundary and the bush area beyond the RUB. The gross developable area that excludes the proposed esplanade reserve and the bush to be protected/covenanted is approximately 2.44ha. If 25% of the gross developable area is assumed to accommodate roads the net developable area would be approximately 1.83ha which would enable around 61 lots based on a net lot size of 300m². However, given the steeply sloped landform, the number of lots is likely to be further decreased. It is considered that the lot yield that may be generated within this area is likely to be around 40 if not subject to the qualifying matter.

Overall, the qualifying matters proposed on the Residential – Single House area would result in reduced number of residential lots from approximately 80 to 41.

The more restrictive height limit does not impact on the expected yield.

A more restrictive minimum landscaping requirement in the Landscape Protection Areas (Northern and Eastern Escarpments).

A 75% and 50% of the net site area for landscaping (for northern and eastern escarpments respectively) are proposed. This compares to the MDRS 20% requirement. Both escarpments are steep, visually prominent and adjoin or contain significant vegetation. Given the limited development potential of these areas due to topography, their visual prominent and the ecological gains that could be achieved by re-vegetation, it is considered that these are unique factors which support the more restrictive landscaping requirements.

This qualifying matter has no impact on the residential yield.

Differing riparian yards and planting requirements alongside some streams.

The MDRS does not specify any requirement for riparian yards and the MDRS 1m yard would apply on residential lots. The Waimanawa Precinct introduces a riparian yard requirement for those areas where a width of riparian planting is to be provided but is to be retaining within the lot which is to be sold rather than vested in Council.

Under 77I(a) this is a qualifying matter to give effect to matter of national importance that decision makers are required to recognise and provide for under section 6 of the Act. The relevant matter is in s6(a) being; "(a) the preservation of the natural character of the coastal environment (including the coastal marine area),

wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:"

The streams (and required riparian yards) are indicatively mapped on Precinct Plan 1. The qualifying matter seeks to manage the adverse effects that urban development has on existing streams. The rule has the effect of preventing development in close proximity to streams and requires appropriate planting and ensure that the natural character and water quality within the streams are maintained.

This qualifying matter has no impact on the residential yield.

If Council is often the opinion that these are not qualifying matters then the applicant is comfortable to remove these controls from the Plan Change and instead rely on the standard MDRS provisions. However, we consider that this would result in a lesser planning and urban design outcome.

National Policy Statement for Freshwater Management 2020 (NPS-FM)

The NPS-FM came into force on the 3rd of September 2020 and replaced the National Policy Statement for Freshwater Management 2014. It was amended in December 2022.

Objective

- (1) The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:
 - (a) first, the health and well-being of water bodies and freshwater ecosystems
 - (b) second, the health needs of people (such as drinking water)
 - (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

Policies

Policy 1:

Freshwater is managed in a way that gives effect to Te Mana o te Wai.

Policy 2:

Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.

Policy 3:

Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.

Policy 6:

There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.

Policy 7:

The loss of river extent and values is avoided to the extent practicable.

Policy 9:

The habitats of indigenous freshwater species are protected.

Policy 15:

Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.

Assessment

The proposed plan change is consistent with the NPS - FM and in particular:

- The vision for Waimanawa reflects the importance of the upper reaches of the Mahurangi River and the plan change has been developed to ensure that Waimanawa faces, respects and protects the River.
- The NPS FM directs regional councils to provide for the integrated management of freshwater and the use and development of land in whole catchments, including the interactions between freshwater, land and associated ecosystems. It directs regional councils to set up a planning structure which provides for this integrated management, and this is achieved in the AUP (and in particular in Chapters E1 and E3). This plan change operates within the framework of these objectives and policies. Changes put forward in this plan change relates to the activity status and therefore the process through which future resource consent applications are dealt with. Very broad matters of discretion and assessment criteria are introduced to enable adequate and appropriate control.
- The primary streams (including the upper reaches of the Mahurangi River) within the plan change area are identified for retention in the Precinct Plan. The streams themselves and the future riparian areas (either in the form of esplanade reserves, strips or riparian yards) are to be protected and, where required, enhanced. Although the riparian margins along the upper reaches of the Mahurangi River are well vegetated and riparian planting has been established elsewhere in recent years, the conversion of much of the land from pastoral farming to urban will have environmental benefits. Furthermore, overtime the riparian margins will be protected either through esplanade reserves, esplanade strips or riparian yards. The identified high-quality environments are being protected.
- Some watercourses have been identified which may require future modification or reclamation to
 provide for the safe and efficient urban development within Waimanawa. These works would
 require resource consent and any future applications would be subject to assessment under the

Precinct Plan and the Auckland wide provisions. Matters to be assessed could include ecology, base flows, management of water flow, riparian planning and in some cases off-site off-setting or compensation.

- No natural wetlands are proposed to be removed and existing natural wetlands will be preserved and can be protected through future subdivisions. A constructed wetland has been developed within Waimanawa over recent years and it is proposed that this is retained in part and incorporated into the stormwater management system. Depending on the final design of the WWLR, some modifications to this wetland will be necessary to achieve an efficient and practical alignment.
- A treatment train approach for stormwater management is proposed to ensure run-off into the upper reaches of the Mahurangi River are appropriately treated. This will ensure the water quality objectives of E1 and E2 of the AUP are achieved.
- No water use allocation is sought. Waimanawa will be serviced by a potable water supply from the existing Warkworth potable water network.
- No changes to the regional provisions of the AUP are proposed.
- Overall, it is considered that the approach taken will enable for the efficient development of a wellfunctioning environment while protecting and enhancing the existing freshwater network within the Waimanawa catchment.

New Zealand Coastal Policy Statement 2010 (NZCPS)

While the proposed plan change area does not have direct frontage to the coastal environment, stormwater discharges from the plan change will occur into the upper reaches of the Mahurangi River, which lead into the Mahurangi Harbour. Therefore, the provisions that relate to ecological sustaining ecosystems, indigenous biodiversity, Mana Whenua, enhancement of public walking access, protection of values of the coastal environment, (Objectives 1, 3, 4, 6 and the associated policies 1, 2, 4, 7, 11, 18, 19, 21 and 23) have some relevance to the plan change.

In particular:

- Given the location of the plan change area there will be no effect on the natural character, integrity, form, functioning and resilience of the coastal environment.
- The creation of esplanade reserves and walkways along the upper reaches of the Mahurangi River is a further step in providing for public access along the Mahurangi River down to the Mahurangi Harbour.
- The implementation of the greenway network and riparian planting will assist with the connection of
 existing areas of vegetation (some of which are protected as reserves or under covenants) with the
 upper reaches of the Mahurangi River and assist with improving indigenous biodiversity.

- The implementation of the stormwater treatment train will protect the water quality of the upper reaches of the Mahurangi Harbour and again contribute to the overall improvement of the health of the Mahurangi River. The Mahurangi River and Harbour has suffered water quality issues over time with the Mahurangi Action Plan being implemented to improve water quality. This is being undertaken through riparian planting, the planned closure of the Warkworth wastewater treatment plant and the conversion of pasture to urban or other uses along with the continued implementation of stormwater treatment methods in the Warkworth urban area.
- Future bulk earthworks for the urban development of Waimanawa will require a range of resource consents. The requirement for the implementation of appropriate sediment and erosion control plans to limit sediment discharges into the upper reaches of the Mahurangi River will be imposed.

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011

This NES came into effect on 1 January 2012 and provides a nationally consistent set out of planning controls and soil contaminant values. It ensures that land affected by contaminants in soil is appropriately identified and assessed before it is developed, and if necessary the land is remediated, or the contaminants contained to make the land safe for human use.

The Preliminary Site Investigation prepared by LDE for Waimanawa Valley (Appendix Seven) has confirmed that the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) apply to land within the subject site and would be triggered by any future development undertaken at the subject site. This will be addressed as part of any future resource consent applications to develop the site in the future. No areas of significant contamination which may limit or prohibit future urban development were identified.

The Detailed Site Investigation prepared by Focus Environmental Services Ltd for Waimanawa Hills (Appendix Seven) has confirmed that no areas of significant contamination which may limit or prohibit future urban development have been identified. A Site Management Plan should be prepared for any future earthworks.

National Policy Statement for Highly Productive Land 2022 (NPS-HPL)

The NPS-HPL comes into force on the 17th October 2022.

The plan change area has a mix of class 3 and 4 soils. A site-specific soil classification assessment has been undertaken and is included in Appendix 16. This assessment has identified only approximately 3.92ha of the Waimanawa Precinct as being prime soil and this equates to around 3% of the Waimanawa area.

The plan change area has been identified in the FULS as suitable for commencing urban development within the next ten years. Nevertheless, it is understood that an assessment of the plan change in terms of the objective and policies of the NPS-HPL is required.

2.1 Objective

Highly productive land is protected for use in land-based primary production, both now and for future generations.

2.2 Policies

Policy 1: Highly productive land is recognised as a resource with finite characteristics and long term values for land-based primary production.

Policy 4: The use of highly productive land for land-based primary production is prioritised and supported.

Policy 5: The urban rezoning of highly productive land is avoided, except as provided in this National Policy Statement.

Policy 7: The subdivision of highly productive land is avoided, except as provided in this National Policy Statement.

Policy 8: Highly productive land is protected from inappropriate use and development.

<u>Assessment</u>

The urban development of this land is not contrary to the NPS-HPL for the following reasons:

- The area has already been identified for urban development through the AUP.
- Only a very small percentage of the Waimanawa Precinct has been identified as prime soil and this
 is split over two areas. Given the very small area of prime soil, it could not support an independent
 economic land based primary production use.
- The two areas of prime soil are isolated and there is no indication that the wider area should be protected from urban development and utilised for land based primary production activities.

The Auckland Regional Policy Statement

The proposed plan change gives effect to the Auckland Regional Policy Statement (which forms part of the AUP), as required by s74(2) and s75(3) of the Act. The proposed changes introduced under Proposed Plan Change 80 are underlined.

In particular the following Auckland Regional Policy Statement objectives are relevant:

(i) Objective B2.2.1(1A) (introduced by Proposed Plan Change 80).

"A well-functioning urban environment that enables all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future."

(i) Objective B2.2.1(1):

"A quality compact urban form and well-functioning environment that enables all of the following:

- (a) a higher-quality urban environment;
- (b) greater productivity and economic growth;
- (c) better use of existing infrastructure and efficient provision of new infrastructure;
- (d) improved and more effective public transport;
- (e) greater social and cultural vitality;
- (f) better maintenance of rural character and rural productivity; and
- (q) reduced adverse environmental effects; and
- (h) improves resilience to the effects of climate change.

This plan change meets this objective by:

- providing for the planning framework to create a high quality, well-functioning diverse urban environment within this portion of Warkworth South;
- providing for an efficient use of land for urban purposes and associated economic benefits;
- providing for the efficient use of the existing SH1 when it reverts to an urban arterial upon the opening of the Ara Tūhono Puhoi to Warkworth Motorway;
- providing for the key infrastructure required for the urban development of Warkworth South including a new water reservoir, a new wastewater pumping station(s), associated main lines and part of the WWLR;
- providing within Waimanawa social vitality through a broad range of housing choice and living environments while also contributing to the range of housing choices and living environments in Warkworth;
- retaining a compact form with the plan change area being within the area predominantly zoned as Future Urban; and
- managing adverse effects on the environment as outlined in the rest of this section 32 analysis.
- (ii) Objective B2.2.1(3):
 - "Sufficient development capacity and land supply is provided to accommodate residential, commercial, industrial growth and social facilities to support growth."
 - The plan change area is currently predominantly zoned Future Urban and has been identified for residential use in the Warkworth Structure Plan. It is recognised that the potential development ready date is prior to the date given in the FULS but in this case the required infrastructure is being

or can now be provided at an earlier date and there are no other physical restrictions for the urban development of this part of Warkworth South.

- This proposed zoning is generally consistent with the indicative zoning given in the Warkworth Structure Plan and in particular provides for a mix of residential zones while also providing for a local centre.
- A new recreational park is proposed which will complement the Warkworth Showgrounds but provide facilities at the smaller scale required to service the immediate community and any future school.
- The Ministry of Education continues to have an interest in establishing a school within Waimanawa but at the time of preparing this report, did not have the funding in place to undertake the required site selection process then property acquisition. The plan change does not prohibit in any way the Ministry of Education establishing a school at a later date within Waimanawa.

(iii) Objective B2.2.1(4):

"Urbanisation is contained within the Rural Urban Boundary, towns, and rural and coastal towns and villages."

- The plan change area is fully within the rural urban boundary except for a very small area on the eastern boundary. It is recognised that the zoning of the Morrisons Heritage Orchard Precinct will be Rural Mixed Use even though the land is within the rural urban boundary. Given the existing use which the Morrison Heritage Orchard seeks to protect and enhance, the rural zoning is considered appropriate to achieve the outcomes being sought for the Precinct.
- Within the area outside the RUB, an estimated one additional residential lot will be created, although a small number of lots are likely to saddle the RUB. In addition, the new Watercare water reservoir is likely to be in this location given the elevated position of the land. Taking account of the topography of the area, existing property boundaries and the presence of the Avice Miller Reserve, it is considered that the proposed extension of the urban extent over this RUB in this location will not impact on the integrity of the RUB and the proposed re-zoned of this area remains consistent with the RPS. It is noted that the RUB normally follows cadastral boundaries. The subject land is an exception to this practice as the RUB has followed the ridgeline as opposed to the cadastral boundary adjoining the Avice Miller Reserve. The proposed zoning follows the general practice of following cadastral boundaries in this specific location.

Objective B2.2.1(5):

"The development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages is:

(a) integrated with the provision of appropriate infrastructure; and

(b) resilient to the effects of climate change."

- The proposed infrastructure package which will be delivered as part of the development of Waimanawa provides the necessary infrastructure. The Warkworth potable water network has recently been upgraded to provide for the growth of Warkworth. The upgraded wastewater network for Warkworth has been funded and is expected to be operational by early 2025.
- The plan change provides for that part of WWLR which goes through it.
- The plan change recognises that the existing SH1 will become an urban arterial road and the
 infrastructure funding package will provide for the upgrading of this section of SH1 through the plan
 change area and a pedestrian/cyclist connection through to the current Warkworth footpath network
 (which at that time is expected to be in the vicinity of the McKinney Road/SH1 intersection).
- Consideration has been given to climate change in the development of the plan change.

Objective B3.2.1(1):

"Infrastructure is resilient, efficient and effective."

• The proposed infrastructure package will provide for the efficient and effective servicing of Waimanawa. The infrastructure being provided will need to be designed to Council standards and accepted by Council, Watercare and/or Auckland Transport. It can therefore be assumed it will be designed and constructed to an appropriate standard so that its operation is resilient.

Objective B3.2.1(4) and (5):

- "(4) The functional and operational needs of infrastructure are recognised.
- (5) Infrastructure planning and land use planning are integrated to service growth efficiently."
 - The location of the proposed reservoir and wastewater pumping station(s) is driven both by topography and accessibility. The proposed location of these facilities are considered to be appropriate and reflect their functional and operational requirement.
 - The provision for and alignment of the WWLR has been refined to reflect local topography and to provide for a more efficient route and better urban design outcome.
 - The first stage of the development of Waimanawa will include the construction of the reservoir and wastewater pumping station(s) and the first part of the WWLR (from the SH1 end). The local infrastructure network can then be developed in stages as the development of Waimanawa proceeds.

Objective B7.2.1(1):

"Areas of significant indigenous biodiversity value in terrestrial, freshwater, and coastal marine areas are protected from the adverse effects of subdivision use and development."

- The existing bush protection covenants within the plan change area are not affected by the plan change and these areas have been incorporated into proposed Open Space areas.
- The vegetated riparian margins of the upper reaches of the Mahurangi River will be protected at the time of subdivision as esplanade reserves.
- A greenway network has been proposed which will include a mixture of open spaces and riparian yards. These will contribute to the protection and enhancement of the existing watercourses and minor wetlands.

Objective B7.3.1:

"Degraded freshwater streams are enhanced."

"Loss of freshwater systems is minimised."

"The adverse effects of changes in land use on freshwater are avoided, remedied or mitigated."

The objectives are supported by a range of policies relating to integrated management of land use and freshwater systems (Policy B7.3.2(1)), and the management of freshwater generally (Policy B7.3.2(2)-(6)).

In terms of these matters:

- The Auckland-wide objectives and policies on water quality and lakes, streams, rivers and wetlands apply to the two precincts.
- Full infrastructure/services are provided in terms of water supply, stormwater and wastewater to
 minimise the risk of untreated or contaminated discharges into the upper reaches of the Mahurangi
 River. The exception to this is the land within the proposed Residential Large Lot and Rural –
 Mixed Rural zones. However, the minimum lot size required in these zones ensures that adequate
 wastewater treatment and disposal and stormwater disposal can be undertaken on future sites.
- The stormwater catchment management plan sets out a treatment train process for stormwater to ensure that discharge of contaminants are appropriately managed and controlled.
- The assessment process for any works that impact streams is addressed in the matters of discretion and assessment criteria.
- Primary streams are identified for protection and enhancement. Over time a mix of esplanade reserves, esplanade strips and riparian yards will provide for the enhancement and protection of riparian vegetation.

- The same methods relating to the protection of the other streams as set out in the Auckland-wide provisions apply.
- The Regional Policy Statement has identified the Mahurangi Harbour as an area degraded by human activities. The transition of Waimanawa from a predominantly pastoral use to an urban use, the implementation of the stormwater treatment train and the enhancement and protection of riparian margin will improve water quality run-off into the upper reaches of the Mahurangi River. This will, in part, contribute to the overall improvement in the water quality of the Mahurangi River which flows into the Mahurangi Harbour.

8. Cultural Values Assessment

The Manuhiri Kaitiaki Charitable Trust (for Ngāti Manuhiri) was consulted at a very early stage of the preparation of the plan change. As the first step, it was confirmed that from an iwi perspective there were no known issues which would prevent the future development of this area or matters which may limit further development. The Mahurangi River is recognised as a taonga and this was recognised in the Vision for Waimanawa. The name Waimanawa itself means source or origin of water/life and Ngāti Manuhiri supported the use of this name for this area. This reflects that this valley is the source of the upper reaches of the Mahurangi River.

A Cultural Values Assessment was commissioned from the Trust to both provide guidance and to assess the proposal and this is included in Appendix Twelve. This Assessment concludes:

"The Manuhiri Kaitiaki Charitable Trust supports the proposed plan change, in principle, as long as the recommendations set out herein below are provided. This cultural values assessment indicates that the plan change has the potential to impact the Ngāti Manuhiri Settlement Trust cultural values discussed but that with proper mitigation these impacts can be avoided or limited to an acceptable level. The issue is not whether activities such as residential development and urbanisation should be discouraged, but rather a balancing act between protecting the mauri, cultural values, management of taonga natural resources, providing opportunities for Māori, the need for the natural resource and protecting our whenua for future generations."

The Assessment provides a number of recommendations a number of which have been included in the masterplan design which forms the basis for the proposed plan change. In summary these are:

- 1 Significant areas of native vegetation have been identified and are being retained. This includes the established riparian planting along the two arms of the Mahurangi River.
- A small number of natural wetlands have been identified and are being retained. Likewise, the wetland constructed by a former landowner is also to be largely retained (although some modifications to it will be required to accommodate the final design of the WWLR).
- 3 Specific consideration has been given to the development around the Avice Miller Reserve to avoid adverse effects on this Reserve while also now providing public access to it.
- A greenway network through the sites is proposed, generally following the various watercourses and this will be planted up as these areas are subdivided then developed. There will be a range of mechanisms requiring the maintenance and protection of these areas in the future. Planting in these areas will use native plants.
- A stormwater treatment train is proposed to ensure all stormwater from the future urban development is treated prior to discharge into the Mahurangi River. The retirement of farming from this valley, the retention and enhancement of riparian planting and the implementation of the stormwater treatment train should have a long-term positive effect on the water quality of the upper reaches of the Mahurangi River.

- A walking network will be developed through the site (and in many cases following the watercourse) and a pedestrian/cycle connection through to Warkworth along SH1 is proposed.
- In terms of wastewater, the development will be fully serviced and connected to the Warkworth wastewater network. For the small number of large residential and mixed rural lots, these will have on-site wastewater treatment and disposal and at the time of resource consent they will need to show that these on-site systems comply with TP58. This will require the discharge fields to be setback from any watercourse/wetland to ensure there is no discharge into these waterbodies.

A number of recommendations relate to the on-going design then development stages. In respect to these it is noted:

- 1 KA Waimanawa Limited Partnership and Stepping Towards Far Ltd are agreeable to the Trust providing the appropriate tikanga, review of plans and cultural/environmental monitoring for the project particularly at the start and during the bulk earthworks.
- 2 KA Waimanawa Limited Partnership and Stepping Towards Far Ltd are open to discussing future road and reserve names with the Trust.
- 3 KA Waimanawa Limited Partnership and Stepping Towards Far Ltd will investigate possible design features to be incorporated including signage through Waimanawa explaining the history of the wider area and the history of Ngāti Manuhiri. There is an opportunity for this history to be provided chronologically down and through the valley along the walkways.
- 4 An Accidental Discovery Protocol will be developed for the bulk earthworks stage.
- Robust sediment and erosion control plans will be prepared for the bulk earthworks and will be forwarded to the Trust as part of the on-going liaison during the consenting stages. The standard kauri dieback and myrtle rust protocols will be adopted (and are likely to be conditions of consent).
- A series of management plans (planting, pest management, tree protection etc) will be prepared during the design stages and forwarded to the Trust as part of the on-going liaison during the consenting stages.
- A range of instruments will be used for the future protection of vegetation including esplanade reserves, reserves and covenants on titles. This will be addressed in detail at the subdivision consenting stage.

9. The Proposed Planning Framework and Plan Change

Purpose of the Plan Change

The purpose of the plan change is to rezone the land in part of the Warkworth South area through the introduction into the AUP of two new precincts:

- (i) Waimanawa; and
- (ii) Morrison Heritage Orchard.

These two precincts will enable development to proceed generally in accordance with the outcomes sought through the Warkworth Structure Plan. This development may be staged, depending on the provision of infrastructure and market demand. The use of precincts enables the Council to introduce specific controls for this part of Warkworth.

The plan change follows the standard planning approach for development of a greenfield area and for Future Urban zoned land under the AUP and incorporates existing zonings already used in the AUP.

The requested plan change is included in Appendix One.

AUP Provisions

The AUP is structured into Auckland-wide, zone and precinct provisions.

The Auckland-wide provisions apply across Auckland and are the underpinning planning framework of the AUP. These Auckland-wide provisions supersede zoning and precinct provisions. No changes to the Auckland-wide provisions apply to the plan change area are being sought.

One additional "control" is being added – the SMAF1. The addition of this control for stormwater management is consistent with the Council approach when re-zoning Future Urban zoned land for residential development. The SMAF rules in the AUP set a high but appropriate approach to stormwater management, urban development within greenfield areas.

SMAF1 requires appropriate on-site detention and retention of stormwater prior to discharging into the public stormwater network (which is to be developed as part of the urban development of this area). This will ensure an appropriate level of stormwater management is achieved both within future individual sites and the area as a whole.

The inclusion of this overlay requires that the provision of E10 Stormwater management area – Flow 1 and Flow 2 apply. This will ensure that the following objectives and policies under E10 will be achieved:

10.2. Objective

(1) High value rivers, streams and aquatic biodiversity in identified urbanised catchments are protected from further adverse effects of stormwater runoff associated with urban development and where possible enhanced.

E10.3. Policies

- (1) Manage stormwater runoff from impervious areas in Stormwater management area Flow 1 and Flow 2 areas to minimise the adverse effects of stormwater runoff on rivers and streams to retain, and where possible enhance, stream naturalness, biodiversity, bank stability and other values.
- (2) Require stormwater hydrology mitigation in Stormwater management area control Flow 1 and Flow 2 areas where there are:
 - (a) new impervious areas;
 - (b) redeveloped impervious areas; or
 - (c) entire sites where the area of development or redevelopment comprises more than 50 per cent of the site area.
- (3) Recognise that there may be limitations to the hydrology mitigation that can practicably be achieved in some circumstances, particularly in association with redevelopment, including:
 - (a) space limitations;
 - (b) requirements to provide for other utility services; and
 - (c) the function of roads as overland flow paths conveying stormwater runoff from surrounding land uses which the road controlling authority has limited ability to control.

Figure Seven shows the AUP Map with the existing and proposed zones, controls and overlays for the plan change area (except for the SMAF 1 notation which applies).

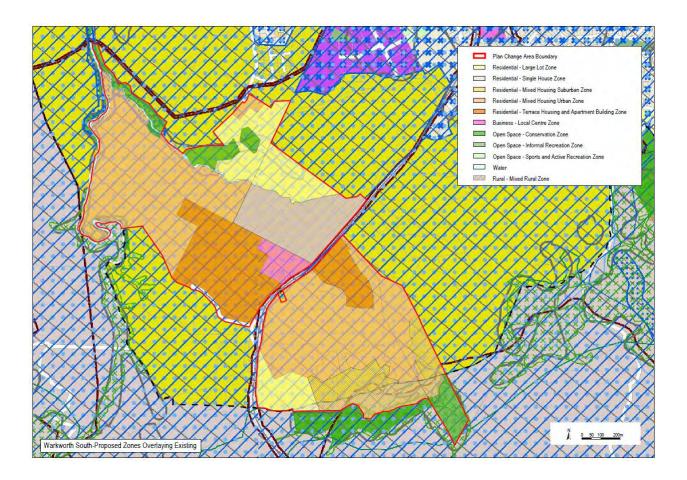


Figure 7 AUP Map with Proposed Zones

Two precinct plans are introduced:

- (i) Waimanawa (which is comprised of five separate precinct plans); and
- (ii) Morrison Heritage Orchard.

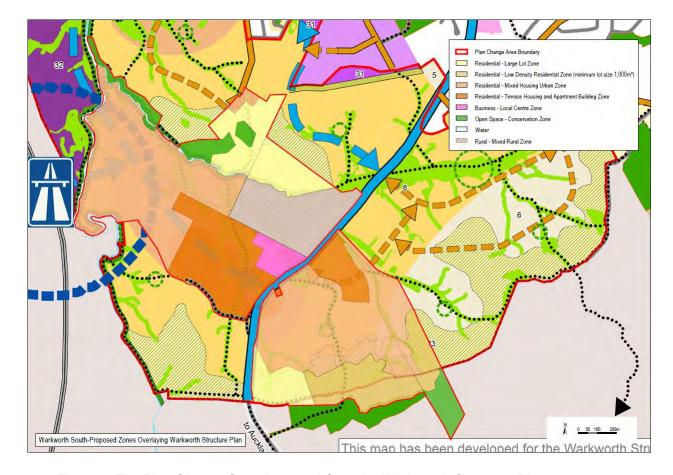
The zonings used in the precincts are those used in the AUP. The zones objectives, policies, activity status, standards, matters of discretion and assessment criteria apply unless otherwise stated in the precinct provisions. For example, the precinct provisions are exceptions or additions to the zone provisions. No changes to the existing zoning provisions in the AUP are proposed.

A very small area zoned Open Space – Conservation is being retained. This is an existing esplanade reserve.

Overview of the Plan Change

The plan change is generally aligned with the Warkworth Structure Plan. The plan change has been developed from a detailed analysis of the land (including a range of specialist studies) and the vision for the two precincts. This analysis is summarised in this report and the technical reports forming part of this request. The two precincts are further described below.

Figure Eight shows the proposed plan change superimposed over the Warkworth Structure Plan Land Use Map.



• Figure 8 The Plan Change Superimposed Over the Warkworth Structure Plan

The plan change reflects the Warkworth Structure Plan by providing for:

- The Morrison's Heritage Orchard through a specific precinct.
- A series of open spaces identified in the precinct plans.
- The greenway routes.
- A Business Local Zone adjoining the current SH1 and the future WWLR.
- A range of residential zones within the Waimanawa Precinct.
- A Rural Mixed Use zoning for much of the Morrison Heritage Orchard Precinct.
- Recognising that the current SH1 will be a future Arterial Road.
- Providing for the WWLR.

The plan change differs from the Warkworth Structure Plan by:

• Modifying the alignment of the proposed WWLR (an arterial road).

 Modifying the location of the Business – Local Centre zone to reflect the new location of the WWLR and SH1 Intersection.

• Retention of some but not all watercourses.

The extent and boundaries of the different zones.

Waimanawa Precinct

The Waimanawa Precinct will provide for residential growth in the Warkworth South area while also

providing for a range of open spaces and a local centre.

The majority of the precinct is within a shallow west-east valley with the upper eastern reaches of the Mahurangi River on the valley floor and with the current SH1 traversing north-south through the middle of the precinct. To the west of SH1, the precinct is on a generally low to gentle contoured valley with two

branches of the upper Mahurangi River within the valley floor. The land gently rises towards Valerie Close

to the south while the northern side of the valley rises steeply and is vegetated in areas.

To the east of SH1 the precinct sites on a low to moderate contoured catchment which rises gently then

more steeply to the east where it abuts in part the Avice Miller Scenic Reserve on its eastern edge.

The topography and the watercourses provide a unique opportunity within Warkworth for a residential

community within a contained valley and focused along a series of open space areas which adjoin and

incorporate the watercourses. With the existing surrounding roading network, the opening of the Motorway in 2023 and the future development of the WWLR, the future urban development is well-connected to both

the existing Warkworth urban area and to the wider Auckland region.

The development of this precinct will create a range of lot sizes providing for different housing typologies

focused on a series of open spaces while responding to the topography of the precinct. This will result in a

walkable community within a high amenity urban area with enhanced landscape and environmental

outcomes.

A range of zonings apply within the Waimanawa Precinct. The zonings are:

Business – Local Centre

Residential – Large Lot

• Residential - Single House

Residential – Mixed Housing Urban

Residential – Terrace Housing and Apartment Buildings

• Open Space – Conservation

There are three key open space areas within the Waimanawa Precinct. These are:

- The Endeans Recreational Park; and
- The Waimanawa Wetland Park; and
- The Mahurangi River Esplanade Reserves (which will be formed as adjoining land is subdivided).

In addition, a series of smaller reserves are proposed through the precinct to create a greenways network. These open space areas provide a chain of connected open space areas through the reserve and are to be developed over time to provide for a range of environmental, social and accessibility outcomes.

Provision is made for a local centre designed to be a focal point for the community through providing services to the southern Warkworth community and yet be complementary to the Warkworth town centre. This local centre will be designed to be the gateway to Warkworth from the south and to reflect its location opposite the Morrison Heritage Orchard. The local centre is to be both accessible and functional for the local community.

The WWLR is to be an arterial road linking up the current SH1, the possible future Southern Interchange and Woodcocks Road. Construction of part of the WWLR to a collector road standard will be integrated with subdivision and development within the Waimanawa Precinct.

Precinct Objectives and Policies

The objectives and policies complement the existing relevant zoning objectives and policies in the AUP but provide a specific focus on the outcomes being sought within the Waimanawa Precinct. The proposed objectives and policies draw from the Warkworth Structure Plan but are also consistent with those in the new precincts being established in Warkworth. The objectives and policy framework drive the form and quality of the urban development within the Precinct and therefore focus on:

- Urban growth focuses on the open spaces (which includes the upper reaches of the Mahurangi River).
- Creating a well-functioning urban environment.
- Housing typology and diversity.
- Provision of open spaces (including esplanade reserves and riparian yards) and social infrastructure.
- The provision of a local centre.
- · Creating an accessible urban area.
- Timing and the provision of infrastructure.
- Protection and enhancement of identified natural features.

- Stormwater management.
- Limiting vehicle access from individual sites to the WWLR, Collector Roads and SH1.

Zonings and Standards

A range of zones are provided for within the Waimanawa Precinct. These zonings generally reflect the intended future use of the area but the Open Space - Conservation Zone has been used in some cases to reflect the existing environment.

Each zone provides for different activities. The precinct provisions provide only a limited number of additional activities to those already provided for under the AUP. The purpose for these additional provisions is it:

- Address stormwater quality.
- Provide for the protection of the identified high value protected streams.
- Provide for the protection of identified significant areas of vegetation.
- Limits development within identified special yards.
- Provides for public walkways within riparian yards.
- Provides for development in accordance with the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021.
- Provides for development controls to protect the eastern and northern escarpments.
- Provides for the use of the existing former Ransom Vineyard building for a restaurant, cafe or as an educational facility.
- Provides for the construction and use of a public transport interchange.
- Provides for the construction of a wastewater pump station(s) and potable water reservoir for Warkworth South.

The following is a description of the zonings to be used and the reasons for this. Under each zoning it is confirmed if the zone standards in the AUP apply and if additional standards are introduced in addition to or in substitution for the zone standards.

Business - Local Centre Zone

The AUP provides the following zone description of the Business – Local Centre Zone (H11.1):

This Business – Local Centre Zone applies to a large number of small centres throughout Auckland. The centres are generally located in areas of good public transport.

The zone primarily provides for the local convenience needs of surrounding residential areas, including local retail, commercial services, offices, food and beverage, and appropriately scaled supermarkets. Large-scale commercial activity requires assessment to ensure that a mix of activities within the local centre is enabled. The expansion of local centres will be appropriate if it provides greater social and economic well-being benefits for the community. Provisions typically enable buildings up to four storeys high, enabling residential use at upper floors.

New development within the zone requires assessment so that it is designed to a high standard which enhances the quality of the centre's streets and public open spaces.

The Warkworth Structure Plan envisaged a local centre being located at the corner of SH1 and the future Arterial Road from the west (now referred to as the WWLR). The plan change has located this Local Centre zone at this intersection which is now further to the north than proposed in the Warkworth Structure Plan. This has allowed for the WWLR to boarder the Morrison Heritage Orchard and the proposed open space areas and provides for a more appropriate location for the intersection in terms of traffic planning and safety.

The Local Centre Zone will cover an area of approximately 3.38ha and will provide for the establishment of a range of commercial services, food and beverage, community facilities, and small-scale offices and retail.

The area is flat and lends itself to a small-scale development. The retention of the watercourse which runs through the zone provides an opportunity for this watercourse to be incorporated into the design of the local centre and to enhance the outdoor amenity of this centre.

Locating the local centre in this location provides the opportunity for it to be part of the visual and physical gateway into Warkworth from the south. The main vehicular access into the local centre can be provided off the WWLR. Good pedestrian and cycle connections to the local centre can be achieved from all directions.

The future public transport interchange can be located on the WWLR adjacent to the local centre which will further enhance the role of the local centre. The Local Centre zoning has been applied to the proposed location of this southern public transport interchange.

The location of the local centre will also enhance its role as a social hub for Warkworth South as it is opposite the Morrison Heritage Orchard and to the east of the future recreational park.

The location of the local centre means it can be constructed at an early stage of the development of Waimanawa and construction will not be delayed by the development of intervening land.

All new buildings within this zone require resource consent.

The zone standards in the AUP apply. The following additional standards are introduced in addition to or in substitution for the zone standards:

 A 10m esplanade reserve requirement on either side of the watercourse which flows through the Local Centre Zone.

 A minimum 4m wide riparian planting along and on the southern side of the watercourse which runs between the proposed WWLR and the Morrison Heritage Orchard boundary.

Limited access restrictions and pedestrian connections (along SH1 and the WWLR).

Residential - Large Lot

The AUP provides the following zone description of the Residential – Large Lot Zone (H1.1):

The Residential – Large Lot Zone provides for large lot residential development on the periphery of urban areas. Large lot development is managed to address one or more of the following factors:

• it is in keeping with the area's landscape qualities; or

• the land is not suited to conventional residential subdivision because of the absence of reticulated services or there is limited accessibility to reticulated services; or

 there may be physical limitations to more intensive development such as servicing, topography, ground conditions, instability or natural hazards where more intensive development may cause or exacerbate adverse effects on the environment.

 To manage existing or potential adverse effects, larger than standard site sizes are required and building coverage and impervious surface areas are restricted.

The proposed areas of Residential – Large Lot reflect the general area for this zoning shown in the Warkworth Structure Plan. This area (approximately 14ha) includes the northern escarpment and over to Mason Heights where the area is both visually sensitive and the steep topography will make any higher density residential zoning difficult, and a block in the southern part of the precinct adjacent to SH1 and the Avice Miller reserve.

This is the lowest density residential zoning. The proposed location for this zone is appropriate as it reflects the challenging steep topography, provides greater protection to the more elevated and visual areas of Waimanawa and provides an appropriate interface between more intensive zonings and areas of established vegetation. In the case of the southern block it also reflects transport access constraints.

The zone standards in the AUP apply. The following additional standards are introduced in addition to or in substitution for the zone standards:

Landscape Protection Area Control (Northern Escarpment)

Residential - Single House

The residential Single House zone description is:

H3.1. Zone description

The purpose of the Residential – Single House Zone is to maintain and enhance the amenity values of established residential neighbourhoods in number of locations. The particular amenity values of a neighbourhood may be based on special character informed by the past, spacious sites with some large trees, a coastal setting or other factors such as established neighbourhood character. To provide choice for future residents, Residential – Single House Zone zoning may also be applied in greenfield developments.

To support the purpose of the zone, multi-unit development is not anticipated, with additional housing limited to the conversion of an existing dwelling into two dwellings and minor dwelling units. The zone is generally characterised by one to two storey high buildings consistent with a suburban built character.

Approximately 14.48 ha of this zoning is provided for on the eastern flank of the plan change area and adjoining the Avice Miller Reserve. This reflects in part the Structure Plan which has also identified this area as a potential landscape screening area. This zoning is considered appropriate in this location owing to the topography, the visual prominence of the eastern escarpment and the proximity of the Avice Miller Reserve. Specific landscape protection controls are proposed for parts of this Zone which require a minimum landscaped area (50%), a limitation on building height and a minimum lot size of 1000m².

The zone standards in the AUP apply. The following additional standards are introduced in addition to or in substitution for the zone standards:

- Landscape Protection Area Controls (Eastern Escarpment)
- Special Subdivision Control (Eastern Escarpment)
- Special Yard: Avice Miller Reserve
- Special Height Limits

Residential - Mixed Housing Urban

The AUP Provides the following zone description of the Residential – Mixed Housing Urban Zone (H5.1):

The Residential – Mixed Housing Urban Zone is a reasonably high-intensity zone enabling a greater intensity of development than previously provided for.

Over time, the appearance of neighbourhoods within this zone will change, with development typically up to three storeys in a variety of sizes and forms, including detached dwellings, terrace housing and low-rise apartments. This supports increasing the capacity and choice of housing within neighbourhoods as well as promoting walkable neighbourhoods, fostering a sense of community and increasing the vitality of centres.

Up to three dwellings are permitted as of right subject to compliance with the standards. This is to ensure a quality outcome for adjoining site and the neighbourhood, as well as residents within the development site.

Resource consent is required for four or more dwellings and for other specified buildings in order to:

- achieve the planned urban built character of the zone;
- achieve attractive and safe streets and public open spaces;
- manage the effects of development on adjoining neighbouring sites, including visual amenity, privacy and access to daylight and sunlight; and
- achieve high quality on-site living environments.

The resource consent requirements enable the design and layout of the development to be assessed; recognising that the need to achieve quality design is important as the scale of development increases.

The Structure Plan provides for a significant area of this zoning in the Warkworth South area and this is reflected in this precinct with the plan change providing for approximately 74.2 ha of this zoning, within both Waimanawa Valley and Waimanawa Hills.

This is a higher density zoning and has been applied to land adjacent to the Residential - Terrace Housing and Apartment Buildings zone with appropriate topography. On the western side of SH1, the more elevated areas of this zoning will have key views to the north over the valley to the northern escarpment, Morrison Heritage Orchard and in some cases beyond. The lower areas will have views over the esplanade reserves, the new parks and across to Morrison Heritage Orchard.

On the eastern side of SH1 this zoning has applied in the lower flat areas of the valley and alongside the watercourses.

In all areas, the existing topography will allow for relatively easy development of the land and easy future pedestrian and cycle accessibility.

The zone standards in the AUP apply.

Residential - Terrace Housing and Apartment Buildings

The AUP provides the following zone description of the Residential – Terrace Housing and Apartment Buildings (H6.1):

The Residential – Terrace Housing and Apartment Buildings Zone is a high-intensity zone enabling a greater intensity of development than previously provided for. This zone provides for urban residential living in the form of terrace housing and apartments. The zone is predominantly located around metropolitan, town and local centres and the public transport network to support the highest levels of intensification.

The purpose of the zone is to make efficient use of land and infrastructure, increase the capacity of housing and ensure that residents have convenient access to services, employment, education facilities, retail and entertainment opportunities, public open space and public transport. This will promote walkable neighbourhoods and increase the vitality of centres.

The zone provides for the greatest density, height and scale of development of all the residential zones. Buildings are enabled up to five, six or seven storeys in identified Height Variation Control areas, depending on the scale of the adjoining centre, to achieve a transition in height from the centre to lower scale residential zones. This form of development will, over time, result in a change from a suburban to urban built character with a high degree of visual change.

Standards are applied to all buildings and resource consent is required for all dwellings and for other specified buildings and activities in order to:

- achieve the planned urban built character of the zone;
- achieve attractive and safe streets and public open spaces;
- manage the effects of development on adjoining sites, including visual amenity, privacy and access to daylight and sunlight; and
- achieve high quality on-site living environments.

The resource consent requirements enable the design and layout of the development to be assessed; recognising that the need to achieve a quality design is increasingly important as the scale of development increases.

This zone also provides for a range of non-residential activities so that residents have convenient access to these activities and services while maintaining the urban residential character of these areas.

The Warkworth Structure Plan indicates this zoning around the Local Centre zone and this is reflected in the plan change with approximately 25.4haha of this zoning being provided on both sides of the SH1 in the vicinity of the proposed local centre.

This zoning provides for the most intensive residential development and the Warkworth Structure Plan shows that this zoning is to be predominantly in the Warkworth South area which reflects the flatter topography in this area compared to other parts of Warkworth. The final mix of apartments and terrace housing cannot be determined at this stage and it will largely be driven by market demand. At the current time, Warkworth has a very limited amount of terrace housing and no apartments (except for a retirement complex). The market could therefore be viewed as immature in this respect and, as has been viewed in other parts of Auckland, there is likely to be a rapid transition to demand for terrace housing in Warkworth once this typology has been established and is understood by the community. The demand for apartments is unknown at the current time for Warkworth but is likely to be far less than for terrace housing.

The location of this zoning ensures that future residents have very good accessibility to the local centre (and any future public transport interchange), parks, the greenway network and also Morrison Heritage Orchard. There is also good vehicle connections onto the WWLR and SH1 which provides an efficient connection to the remainder of Warkworth and beyond.

The zone standards in the AUP apply.

Open Space - Conservation

The AUP provides the following zone description of the Open Space – Conservation Zone (H7.4.1):

The Open Space - Conservation Zone applies to open spaces with natural, ecological, landscape, and

cultural and historic heritage values. These areas include volcanic cones, bush reserves, headlands, natural

wetlands and coastline and play an important role in protecting and increasing the populations of threatened

and endangered species. They also include some of the most pristine beaches and coastlines that provide

opportunities for informal recreation.

The Open Space – Conservation Zone also applies to cemeteries that are no longer operational to recognise

their cultural heritage values.

To protect the values of the zone, recreation activities and development are limited in scale and intensity.

Buildings and activities provided for relate to conservation, land management, recreation, education, park

management and visitor information.

Activities in the zone need to be managed to ensure Mana Whenua values are maintained, and that adverse

effects on scheduled Sites and Places of Significance to Mana Whenua are avoided.

The Warkworth Structure Plan identifies areas a series of areas generally alongside watercourses as

"protection areas (not for development)" and "Future esplanade reserves (20m) on subdivision". The plan

change has similarly zoned the land alongside the Mahurangi River Corridor, a number of permanent

streams and areas already covenanted for bush protection as Open Space - Conservation. These areas

are generically referred to as the Mahurangi River Corridor.

In accordance with the objectives and policies of this zone, the intent is for these areas to either be planted

over time or, where there is existing vegetation, to protect this vegetation. Greenway routes are provided

for within some of these areas.

The vesting of land for esplanade reserves or esplanade strips will occur at the time of subdivision.

The zone standards in the AUP apply.

Precinct Wide Standards

The following bespoke standards are proposed for the Waimanawa Precinct and which may cover more

than one zone:

Special Yard: Green Avenue and WWLR

Special Yard: Avice Miller Reserve

Special Yard: Bat Flight Corridor

Landscape Protection Area Controls (Northern Escarpment)

- Landscape Protection Area Controls (Eastern Escarpment)
- Limited Access Restrictions, Pedestrian Connections and Cycle Facilities
- WWLR
- Wastewater and Potable Water Connections
- Stormwater Management
- Special Subdivision Control Area in the Landscape Protection Area Eastern Escarpment
- Riparian Yards for Streams and Natural Wetlands
- New Buildings and Additions High Contaminant Yielding Materials
- Greenways Walking and Cycling Infrastructure
- Transportation Infrastructure
- Fences Adjoining the Front Yard or Vested Publicly Accessible Open Space

Qualifying Matters

In respect of the requirements of the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 the Waimanawa includes the following qualifying matters.

- A more restrictive front yard rule for residential sites adjacent to the WWLR and Green Avenue.
- A more restrictive rear yard in part of the Residential Mixed housing Urban Zone to provide for a Bat Flight Corridor.
- A more restrictive rear yard in part of the Residential Single House Zone adjoining the Avice Miller Reserve.
- A more restrictive minimum lot size in the Residential Single House Zone.
- A more restrictive maximum height limited in the Landscape Protection Area (Eastern Escarpment).
- A more restrictive minimum landscaping requirement in the Landscape Protection Areas (Northern and Eastern Escarpments).
- Differing riparian yards and planting requirements alongside some streams.

Notification

The notification rules of the underlying zone apply in respect of applications for residential activities or for subdivision associated with an application for the construction and use of residential activities.

Any other application for resource consent will be subject to the normal tests for notification under the relevant sections of the Act.

This notification process is consistent with the approach generally taken in the AUP.

Matters of Control and Assessment Criteria

Matters of control are provided for the three controlled activities (wastewater pump stations, water reservoirs and public transport interchange). The location of these activities and where the controlled activity status apply are shown on the precinct plan.

The following matters of control are proposed:

- Provision of safe and efficient access;
- Landscaping and fencing;
- Effects on the use of open space; and
- Effects on health and safety.

The following assessment criteria are proposed to support these matters of control:

- (1) Provision of safe and efficient access:
 - (a) Whether safe and direct access can be provided to the site for access and maintenance.
 - (b) For transportation hubs, whether safe vehicle, pedestrian and cyclist access into and within the site is achieved.
- (2) Landscaping and fencing
 - (a) The extent to which the visual effects of any buildings or large extents of paving can be softened by landscaping without compromising the functional requirements of the pump station, water reservoir or transportation hub.
 - (b) The extent to which fencing can be used to minimise potential health and safety hazards.
- (3) Effects on the use of public open space
 - (a) The extent to which interference with public use and enjoyment of open space is minimised where the facility is located in public open space.
- (4) Effects on health and safety
 - (a) Whether there will be any health and safety effects and the extent to which these can be mitigated through measures such as fencing and signage.

The normal zone assessment criteria in the AUP apply except for the following:

Subdivision (for restricted discretionary activities).

The following matters of discretion are proposed:

- The matters of discretion listed at E38.12.1(7).
- Landscaping within the Avice Miller Reserve Yard and the Landscape Protection Control areas.
- The provision of open space as shown on Precinct Plan 1.
- Transport including access, walking and cycling infrastructure, traffic generation and parking.
- The design and operation of any intersection with the Wider Wester Link Road and Stage Highway 1.
- Stormwater management.
- Wastewater connections.
- The extent to which greenway connections are provided.
- The extent to which riparian yards are provided adjacent to streams and natural wetlands.
- The effects on recreation and open space.
- The effects of walkways within riparian yards on ecology.

The following assessment criteria are proposed to support these matters of discretion:

- Design and layout.
- Provision for streams, natural wetlands, stormwater and walkways.
- Transport (provision of WWLR and walkway network).
- Stormwater management.
- Wastewater connections.
- Specific criteria for the local centre.
- Effects on recreation and open space

The Precinct Plan (which is comprised of five plans – (1) Spatial Provisions, (2) Environment, (3) Transport (4) Indicative open spaces and (5) Bat flight corridor) is introduced into the AUP to ensure the development of Waimanawa proceeds in accordance with the Precinct Plan. As outlined earlier this Precinct Plan is generally consistent with the Warkworth Structure Plan and has also been based on the initial Vision Document and the concept Masterplan for Waimanawa.

The key matters identified on the Precinct Plan are:

- The indicative alignment of the WWLR and the Collector Roads.
- Potential access points/intersections along the WWLR.
- The location of special yards.
- The identification of land subject to the Landscape Protection Controls (Northern and Eastern Escarpments).
- The indicative walkway and cycleway network. As this is indicative and the final alignments are confirmed during the detailed design process then the provision of this walkway and cycleway network is dealt with through an appropriate assessment criteria.
- The primary stream network for retention.
- The indicative location of stormwater management ponds.
- The indication location of the wastewater pump station(s), water reservoir and public transport interchange.
- Existing covenanted areas, future covenanted areas and vegetation and wetlands to be retained.
- Indicative bat flight corridor.
- Riparian enhancement areas.

Morrison Heritage Orchard Precinct

A second precinct, applying to land at the eastern edge of the plan change area, as "Morrison Heritage Orchard Precinct" is also proposed for the AUP. This enables specific controls to ensure the retention, operation, and enhancement of the existing Morrison's Orchard, located at 1773 SH1, while also enabling

appropriate and sympathetic residential, tourist and visitor activities. This precinct is generally consistent with the adopted Warkworth Structure Plan¹.

The vision of the precinct is: To protect the existing Morrison Orchard as a heritage rural land use, and in so doing, maintaining long-term open space values amidst an evolving urban character in the surrounding landscape. This is achieved by permitting the ongoing use of the site for both traditional orchard and other rural productive land use activities, including complementary residential, tourist and visitor activities.

Figure Nine shows the proposed precinct areas and overall boundary. The proposed zoning for the precinct is Rural – Mixed Rural and Residential – Large Lot.

XXX.2. Objectives

- (1) Existing and future orchard and appropriate rural production activities are provided for and enabled by the Precinct.
- (2) A range of tourist, visitor activities and limited residential activities are provided for to enable heritage, social and economic opportunities based on and complementary to the established heritage orchard and rural activities.
- (3) A rural heritage character and appearance of the Morrison Heritage Orchard is maintained.

The Auckland-wide and zone objectives apply in this Precinct in addition to those specified above.

XXX.3. Policies

- (1) Provide for existing and future orchard and complementary commercial and visitor activities including outdoor rural-based activities, accommodation, weddings and functions, restaurant / café and markets.
- (2) Ensure that residential subdivision and development is enabled in defined areas and at appropriate densities that are consistent with and do not compromise the open space heritage values of the orchard or conflict with associated rural and visitor activities.
- (3) Encourage subdivision, development and land uses that maintain and protect the overall rural character and appearance of the Heritage Orchard Precinct and avoid adverse effects between it and existing and future surrounding residential and other sensitive activities.

The Auckland-wide and zone policies apply in this Precinct in addition to those specified above.

214

_

¹ Pages 52 – 56 Warkworth Structure Plan; June 2019; <u>Warkworth Structure Plan (aucklandcouncil.govt.nz)</u>



Figure 9 Morrison Heritage Orchard Precinct Plan

11. The Regional Stormwater Network Discharge Consent

Council holds a Network Discharge Consent ("NDC") that authorises the diversion and discharge of stormwater from its existing and future urban network across the Region, subject to conditions.

Condition 13 of the NDC specifies how new sections of the network that are created through greenfield development can be included within the authorisation of the NDC - i.e. not require authorisation under a separate resource consent. The key component of that process is the preparation of a Stormwater Management Plan (SMP) for the development area that is submitted to Auckland Council - Healthy Waters for approval, assessed against the requirements of the NDC and associated technical guidance documents.

It is proposed that the future stormwater discharges within the plan change area are provided for under the NDC.

A draft Stormwater Management Plan has been prepared and is included in Appendix Thirteen. It is expected that the Stormwater Management Plan would be approved by Auckland Council – Healthy Waters immediately after this plan change becomes operative. Depending on the outcomes of this plan change process, some minor changes to the draft Stormwater Management Plan may be required and an updated version would be submitted to Auckland Council – Healthy Waters at that time for their approval.

It is understood that this is the process followed for the Clayden Road Precinct (now operative) and no reasons have been identified why the use of the NDC may not be appropriate for this plan change area.

12. Assessment of Actual or Potential Effects on the Environment

The following is an assessment of the actual and potential effects from the implementation of the plan change. It is recognised that this is a high-level assessment based on the indicative masterplan, zoning map and precinct plans and the draft plan change wording.

The assessment is based on a number of specialist reports which have been prepared and are included as part of this report. A number of outcomes from these assessments have subsequently been incorporated into the plan change while in other cases specific matters have been incorporated into matters of discretion and assessment criteria.

The future subdivision bulk earthworks and certain land use activities will require resource consents and as part of those processes more detailed assessments are undertaken based on final designs.

The key outcome of this assessment at the plan change stage is that there are no environmental or cultural issues identified which would give rise to the plan change request being declined on an environmental effects basis.

Mana Whenua Values

Consultation has been undertaken by the applicant with the Manuhiri Kaitiaki Charitable Trust. As part of that consultation process, the Trust has produced a Cultural Values Assessment ("CVA") which is included in Appendix Twelve.

There are no known identified sites of Significance or Value to Mana Whenua within the plan change area.

The CVA includes a list of recommendations and these have been addressed in Section Eight of this report.

Land Supply and Economic Matters

An Assessment of Economic Effects has been undertaken by Market Economics and is included in Appendix Ten.

This Assessment concludes:

"We have assessed the combined effects of the proposed Private Plan Change at Warkworth South. Our analysis suggests that moving the timeline of development forward from 2028-2032 to 2023–2025 would have positive impacts on residential supply and demand and tangible economic effects.

Population and households within Warkworth and surrounds have been on an upward trend over the past 20 years. In the last 10 especially, household growth has increased, consistently above the general growth rate for all of Auckland. This trend implies that Warkworth has become an increasingly desirable place to live over time. Based on Auckland Council modelling, this trend is set to continue into the future. Past household growth has proceeded organically and ad hoc in the past, without large-scale developments to

drive capacity. Enabling timely comprehensive supply such as that proposed within the PPC is of net benefit.

In terms of residential supply, the proposed development fits within the scale and location of dwellings as indicated within the Warkworth Structure Plan. The provision of 1,606 dwellings across a range of THAB, Mixed Housing Urban and Suburban, and Single House dwellings is consistent with the structure plan. Bringing the timing forward from 2028-2032 to 2023-2025 would add supply to an already in-demand market, helping to maintain affordability in the increasingly unaffordable Auckland market. It also ensures that zoning and development are maintained broadly in-line with structure plan goals.

Enabling a 3ha local centre early has benefits for the local community in terms of an increased range of goods and services, while facilitating construction of recreational parks and other community infrastructure provides valuable amenity space for a large catchment years ahead of time."

Urban Design

As the first stage in the design of Waimanawa, a Vision Document was prepared and agreed to with the respective applicants. Initial consultation with landowners was undertaken as part of the preparation of the Vision Document. This Vision was addressed in Section Six of this report.

Subsequent to this and taking into account initial feedback from the range of specialists involved in this project a daft masterplan was prepared for Waimanawa Valley and Waimanawa Hills. These masterplans have evolved to reflect feedback from various parties and the outcomes of the specialist studies and combined into a single masterplan for Waimanawa.

An Urban Design Report for the plan change area has been prepared by Reset Urban Design and is included in Appendix Two. This incorporates an analysis of the area including site constraints and opportunities, the Vision, the design principles and strategies for the masterplan and the masterplan which is the proposed Plan Change would give effect to.

In terms of Urban Design, the plan change would provide for development consistent with the proposed masterplan and in summary would:

- Optimise opportunities for high quality urban residential development, create extensive open spaces and aid maintenance of landscape features and ecological values.
- The local centre is located immediately adjoining SH1 and the WWLR to ensure that the new centre serves a wider catchment area within Warkworth South.
- The area in close proximity to the local centre provides for the greater residential density. This is an efficient use of land that will have convenient access to local services, retail, public transport and key open spaces.
- The transition of residential density out from the local centre supports a compact urban form around the growth node in Warkworth South, whilst enabling a mix of medium-density residential uses.

- The mix of residential zones enables the ability to provide for a wide range of housing choices.
- The extent of residential development will support a functional local centre which will provide for convenience needs for the community.
- Allows for the retention of significant ecological areas, remnant bush and more localised landscape features. This includes enhancing the existing ecological corridors along the upper reaches of the Mahurangi River and its primary tributaries.
- Allows for the development of high amenity passive and active open spaces through Waimanawa.
- Creates a centre green avenue within Waimanawa Valley to connect Valerie Close with the future major park and strengthen key visual connections to the landscape of the northern hills.
- Provides for continuous, interlinked, legible and safe routes for pedestrians and cyclists to create a walkable community.
- Provides for the integration of stormwater management activities with public open spaces to enhance ecological and amenity values.

Visual and Landscape Assessment

A Visual and Landscape Assessment has been prepared by Reset Urban Design and is included in Appendix Four. This assessment concludes:

- "11.2 The Proposal introduces a significant increase in residential and commercial density, and associated road network to the site. However, this intensified development is expected on the site and surrounding sites under the Future Urban Zoning of the area as set out in the AUP (OP) and the WSP.
- 11.3 The introduced density will contrast the existing rural density; it is key to note the existing Site has experienced significant modification through rural activities and lifestyle development that has substantially altered the quality of the natural landscape. The Proposal considers the existing site constraints and sensitivities by protecting and enhancing the SEA areas of the site, the Open Space Conservation zones, retaining the historic Morrisons Orchard, and buffering all existing tributaries with native species. The Masterplans are designed to a high standard and ensures the development complements its surroundings through quality and retaining rural character.
- 11.4 Generous open spaces within the Proposal are linked by a series of recreational paths that follow enhanced stream edges and incise local neighbourhood areas. The Proposal seeks to enhance open spaces and stream corridors with substantial native revegetation. The visual density of the development will be interrupted by the green connections as the tree species mature and will provide further integration into the surrounding area.

- 11.5 It is considered that the Proposed Plan Change is appropriate for the Site and the wider Future Urban Zone of Warkworth South. The proposal will allow for a future residential development that will introduce a new residential density to the Warkworth South area in contrast to the existing rural properties, however it has been informed and aligns with the relevant AUP (OP) and WSP zoning.
- 11.6 The natural catchments and the small number of roads in the area reduces the viewing audience of the site to largely intermediate and close views, there are few distant views of the site. Viewpoint photographs from distant views have not been taken as views are limited to private properties and buffered by landforms and vegetation.
- 11.7 Intermediate views from public locations are limited and the natural catchment of both sites reduce the viewing audience. The intermediate views will receive low visual effects from the Proposal, due to distance to site, and large trees screening the development from neighbouring properties. In the long term these viewpoints will encounter low-moderate visual effects from the Proposal as the urban fabric of the area undergoes substantial change, it is assumed the large trees will be removed to make way for similar development leaving more direct views to the development.
- 11.8 Streets, properties, and public spaces closest to the Site will encounter low-moderate visual effects; all close viewpoints are either on the Site's boundary or within the site. The development will create a large change to the existing rural landscape and will be viewed in the foreground of viewpoints, existing key landscape features like the vegetated northern ridge, waterways, orchard shelterbelts and the Avice Miller Scenic Reserve are preserved and enhanced and will be seen throughout the development retaining the rural character.
- 11.9 When considered collectively, it is concluded that even though the Private Plan Change will create a high level of change, the Site can accommodate the proposed masterplans without significantly diminishing the landscape values. The character of the landscape will be impacted by the proposed development, but it is anticipated that future development within Warkworth South will reduce the overall impact of the scale of the proposal. With a comprehensive maintenance and management programme the landscape will be maintained to a high quality.
- 11.10 It is considered that as the level of sensitivity of the site to visual change is generally Low-Moderate, the mitigation measures of the design applied to the development are effective at reducing impacts and the overall adverse effects of the proposal on the landscape and visual amenity are considered to be an acceptable change within the surrounding environment.
- 11.11 Combining both the landscape and visual effects of the development it in concluded that the overall effects will be no more than minor."

Ecological Assessment

A Baseline Ecological Assessment of the plan change area has been undertaken by Bioresearches Limited and is included in Appendix Nine. This report concludes:

"4.1.1 Waimanawa Valley Block

Moderate value vegetation, being the kānuka forest and mixed exotic / native fragments, both meet Auckland Council's criteria for SEAs, and should therefore be protected under the proposal.

Long-tailed bats were recorded at the south-western corner of the Endean block, using the Mahurangi River riparian margin. This river corridor appears to comprise part of a flight path for bats, and is of very high ecological significance (long-tailed bats, critically endangered) due to their presence. Bats were recorded at one location where the River bends at the southern end, and where there is a clearway (open space alongside or within riparian edge) along which bats were recorded flying. This riparian corridor is therefore of very high value. Although bats were not recorded beyond the clearway bend within the riparian corridor, the further northern extents of the Mahurangi River, along the western boundary of the Project area may also be used by bats, including outside the survey period. This is despite no activity being recorded to the north, particularly where it connects to the kanuka forest- an area that supports emergent podocarp trees.

Therefore, the following recommendations are provided to minimise potential disturbance associated with the Plan Change, to recorded low level bat activity:

a minimum 20 m clear way buffer (Figure 14) should be maintained alongside (adjacent to and additional to) the eastern edge of the Mahurangi River riparian vegetation, along the western boundary of the site. The clearway buffer would be maintained alongside the riparian vegetation as open space with no building structures or permanent lighting that may otherwise disturb a bat flight path. The 20 m width recognises that intermittent bat activity is present at the southern end of the site where it is associated with the Mahurangi River riparian corridor, but reduces significantly at the northern end (where no activity was recorded to the north in Kanuka forest) of the Mahurangi River where it borders the Project area.

4.1.2 Waimanawa Hills Block (a)

The southern end has the highest ecological values where the very high value SEA encroaches onto the southern boundary. This edge supports threatened kauri trees, where kauri dieback hygiene protocols would restrict development activities within 3 x their driplines (approximately 5-6 m). Auckland Council formerly required 30 m setbacks from kauri trees where possible, and this is recommended where possible, given the very high value of the vegetation.

A series of lower value indigenous vegetation fragments that run approximately 10-50 m from, and parallel with, the SEA edge at the southern boundary of the Hao Block. These stands of mature trees represent kauri podocarp, broadleaved forest type, which is an endangered ecosystem type. These fragments are currently very degraded but have very high restoration potential. This potential could be realised through removal of stock access and enhancement planting (buffer and connectivity).

Further, protection of these fragments and maintenance of the existing open space between these fragments and Avice Miller Scenic Reserve would minimise further disturbance to kauri trees at the southern boundary as well as open space for wildlife corridors and recreation.

4.2 Freshwater Ecology

4.2.1 Waimanawa Valley, Waimanawa Hills (a) and Waimanawa Hills (b) Blocks

The current ecological values of freshwater ecosystems within the Endean and Hao Blocks were predominantly assessed as low, and ranged from negligible to moderate. The freshwater values within each site are summarised in Table 7 and Table 17. A detailed assessment of the freshwater constraints to development are within the Freshwater Constraints Analysis (Bioresearches 2020).

The proposal should apply the effects management hierarchy under the National Policy Statement for Freshwater Management 2020 (NPS-FM), where:

- a) adverse effects on wetlands and streams are first avoided, where practicable; and
- b) where adverse effects cannot be avoided, they are minimised where practicable; and
- c) where adverse effects cannot be minimised, they are remedied, where practicable; and
- d) where more than minor residual adverse effects cannot be avoided, minimised or remedied, aquatic offsetting is provided where possible; and
- e) if aquatic offsetting of more than minor residual adverse effects is not possible, aquatic compensation is provided; and
- f) if aquatic compensation is no appropriate, the activity itself is avoided.

Under the National Environmental Standards for Freshwater 2020 (NES-F), earthworks within wetlands that result in drainage is prohibited, unless the earthworks are for an activity that has a status such as specified infrastructure. In regards to works within and/or near streams and wetlands, the proposal should consider the objectives and policies in the NPS-FM and AUP OP, the regulations within the NES-F and the rules within E3 and E15 of the AUP OP.

An onsite meeting was held specifically looking at the Wider Western Link Road in the Waimanawa Valley Block. The diverted, straightened and deepened Watercourse 5 (Figure 6) that is present on the boundary of Morrison Heritage Orchard was assessed for a reduction in riparian width to 4 m to accommodate the link road and associated services. A 4 m riparian width on the southern side of the linear water course would still provide shading and most ecosystem services, leaf litter, woody debris, filtration, but would require maintenance to keep it weed free. The Auckland Council guidance document for Riparian Zone Management (Technical Publication 148), recommends at 10m minimum buffer as a general guideline, but also states that narrower options being considered appropriate as indicated by site constraints or opportunities. Considering the linear nature of the stream, the constraints provided by the Wider Western Link Road and amenities, and provided appropriate native species are planted and the riparian area is maintained, a 4 m buffer between the foot path and the stream is considered appropriate at this site."

Summary of Findings

In respect to the findings of this baseline ecology study it is noted:

- The areas of moderate value vegetation identified is either protected by existing covenants, SEA overlay or an area of esplanade reserve. The remaining areas will be protected by future esplanade reserves or retained within the proposed open space or riparian areas.
- A minimum 20 m clear way buffer for bat flight is provided for through a specific set-back so that the construction of dwellings and accessory buildings cannot be constructed within that area.
- Development within the plan change area can be undertaken in a manner where no reclamation of natural wetlands is required and where effects on these very small areas of natural wetlands can be avoided. Within Waimanawa Hills the identified natural wetlands are adjacent to watercourses and will form part of future open space areas which run along these watercourses. Within Waimanawa Valley the only area of natural wetlands is within an area proposed to be zoned Residential Large Lot. A minimum lot size of 4000m² will ensure there is opportunity to subdivide this land in accordance with the zoning and in a manner where a practical building platform could still be established without compromising the small areas of natural wetlands.
- The Precinct Plan shows the streams which are to be retained as part of the future development. Any modification or reclamation of these watercourses would require resource consent as a non-complying activity.

Archaeological Assessment

There are no sites listed in the Council Cultural Heritage Inventory within the plan change area. A Historic Heritage Assessment Report was prepared in November 2018 by Auckland Council for the Warkworth Structure Plan process. This Assessment concludes:

"Overall, we consider that there are few constraints associated with historic heritage in relation to the development of the study area. However, we do not consider urbanisation of the Combes and Daldy lime works site to be consistent with the provisions of the AUP.

It will be difficult to avoid the loss of some heritage places including several World War II camp sites. We have identified where avoidance or mitigation measures should be considered in section 10.3 of the topic report. These include identifying the former locations of some places and providing interpretation on or off site. Other methods that could be considered include the adaptation of identified buildings for a new purpose or relocation of these buildings, preferably within the Warkworth area.

A number of archaeological sites are recorded within the WSPA and other unrecorded sites are likely to exist. These are protected under the archaeological provisions of the HNZPTA and compliance with this legislation will be required in addition to any other consents that are necessary before development can occur."

The former Combes and Daldy lime are not within the precinct area and nor are any of the known World War II camp sites.

An Archaeological Assessment was undertaken of the plan change area by Clough and Associates and is included in Appendix Eleven. No archaeological sites were identified on the eastern side of Stage Highway One.

Within Waimanawa Valley a single archaeological site was identified and relates to a section of road connecting the Kaipara Flats to the Mahurangi created in the 1850s, with parts remaining in use to this day as farm tracks. The site is considered to have limited archaeological/historic heritage value. The Archaeological Assessment concludes that future development as a result of the proposed plan change is likely to affect the recorded archaeological site. However, any adverse effects are considered likely to be minor and can be appropriately mitigated by information recovery under the archaeological provisions of the Heritage New Zealand Pouhere Taonga Act 2014.

Arboricultural Assessment

An Arboricultural Assessment of the plan change area was undertaken by Craig Webb – Consultant Arborist and is included as Appendix Fourteen.

This report identified a number of trees or groups of trees that should be retained but did not identify any trees which meet the criteria to be scheduled as notable trees in the AUP. It is noted that this report did not cover those trees already protected by the bush protection covenant on Lot 7 DP 150976.

In terms of those six clumps of trees within Waimanawa Valley identified for mandatory retention it is noted:

- 1 One area is already within an existing esplanade reserve and cannot be removed.
- The other five areas are alongside the upper reaches of the Mahurangi River and will be incorporated into future esplanade reserves and therefore retained.

No further protection of these trees is therefore required in terms of the plan change rules.

Engineering and Site Servicing

Geotechnical Matters

Separate preliminary geotechnical investigations have been undertaken for Waimanawa Valley (but this report also includes a memorandum on 1768 SH1) and Waimanawa Hills and are included in Appendix Six.

In terms of Waimanawa Valley, the LDE report concludes:

"Specific consideration will be required for the points summarised within this document when developing the proposed plan change and as the project progresses to subdivision and design. Consolidation and settlement analysis should be conducted in more detail and be site specific for the different stages of the proposed plan change, with remediation methods considered to overcome potential consolidation settlement. In particular, the low-lying alluvial plains to the northwest of the proposed plan change extent.

Based on our review of the data available and our site-specific investigations and preliminary assessment, it is considered that the proposed land within the plan change boundary west of state highway one is geotechnically suitable for residential subdivision, including light infrastructure and community centres (i.e., schools and parks). While earthworks, site contouring, retaining wall and specific analysis and development will be required, these are considered part in parcel for developments of this nature."

The CMW Geosciences Report for Waimanawa Hills concludes:

"The majority of the northern portion of the site is anticipated to require minimal engineering input to be suitable for residential development. Geotechnical hazards associated with recent alluvium such as liquefaction and load induced settlement may require small scale remediation.

The southern portion of the site and gullies, however, is anticipated to require more extensive engineering solutions such as shear keys, in-ground walls, and subsoil drainage to remediate the geotechnical risk here.

Further subsurface investigation is required to confirm assumptions in this report and provide further recommendations around the development of the site."

Stormwater Management

A Stormwater Management Plan has been prepared and is included in Appendix Thirteen.

A treatment train process is proposed which relies on a series of proposed stormwater management ponds before any discharge into watercourses. This provides for the necessary treatment and retention.

The indicative locations of the stormwater ponds are shown on the masterplan.

A SMAF1 overlay over the whole plan change area is proposed. These provisions have been well tested as a methodology for managing stormwater in greenfields development. The objective and policy regime and the approach of the Auckland-wide provisions significant benefit from applying the SMAF1 controls.

Earthworks

An earthworks model for the development of the plan change area (excluding Morrisons Farm the sites accessed off Mason Heights and 1684/1684A SH1) has been completed by Maven and is included in the Infrastructure Report (Appendix Five).

This report concludes:

"The information gathered to-date confirms the site suitable for residential development.

Bulk recontouring is required to enable the construction of a complying roading network and to ensure suitable building platforms can be provided. Initial design plans demonstrate finished levels of 1:8 grade, considered suitable for the density proposed. The earthworks will be supported by engineered retaining walls. Initial locations are indicated, and geotechnical input confirms these walls can be constructed."

Potable Water Supply

A practical and economically feasible connection to the Warkworth potable water network can be undertaken through the construction of a new line from Warkworth to a new proposed reservoir (the Warkworth South Reservoir) to be located on the eastern side of Waimanawa Hills. This connection and water reservoir would be constructed as the first stage of the development of Waimanawa with both then being vested in Watercare. Watercare is in agreement with this proposal.

The majority of the plan change area would be serviced by a reticulated network from the new reservoir. The small area of Residential – Mixed Housing Urban Zone would be serviced from Masons Height. Future lots within the Residential – Large Lot and Rural – Mixed Rural zones would utilise on-site rain harvesting for their potable water supply.

The Warkworth potable water supply has been upgraded in recent years and there is no barrier to connecting to this water supply immediately.

Wastewater Disposal

A practical and economically feasible connection to the Warkworth potable water network can be undertaken through the construction of a rising main from the southern end of Warkworth to a possible new wastewater pumping station adjacent to SH1 opposite Morrisons Heritage Orchard and a second one to be located on or adjacent to the proposed Endeans Farm Recreational Park. This connection and pumping station(s) would be constructed as the first stage of the development of Waimanawa with both then being vested in Watercare. Watercare is in agreement with this proposal.

The majority of the plan change area would be serviced by a reticulated network connected to the new pumping station. The small area of Residential – Mixed Housing Urban Zone would be serviced from Masons Height. Future lots within the Residential – Large Lot zone would utilise on-site wastewater treatment and disposal.

The connection to the Warkworth wastewater network cannot be undertaken until the current upgrading of the Warkworth network is completed, which at this stage is programmed for early 2025. This aligns with the proposed timing of development and when the first houses would require wastewater connections. The plan change includes rules which prohibit the granting of s224(c) approvals for any subdivision which requires a wastewater connection until the wastewater network has been upgraded.

Provision of Power and Telecommunications

As confirmed in the Infrastructure Report (Appendix Five), Chorus and Vector Limited have confirmed that the plan change area can be serviced in terms of telecommunications and power at the time of urban development.

Land Contamination

Separate preliminary site investigations for soil contamination ("**PSI**") have been prepared for the western and eastern sides of SH1 and are included in Appendix Seven. The assessments did not cover the Morrison

Orchard Precinct given that this area is to be zoned Rural – Mixed Rural, is to largely retain its current use and limited future development is proposed. Likewise, it did not cover 1684/1684A SH1 and a PSI for these sites will be required to be undertaken prior to their subdivision.

In terms of the PSI for Waimanawa Valley undertaken by LDE, this area has been identified as a potential HAIL area due to current and part horticultural and agricultural use. Accordingly, to determine the contamination status of soils at the site and to subsequently assess compliance with the NES and AUP, a full Detailed Site Investigation ("**DSI**") including soil testing, may be required to support any future resource consent applications for earthworks at the time of site development. However, no areas were identified as specifically contaminated areas which may impact on the plan change being given effect to.

In terms of Waimanawa Hills the investigation by Focus Environmental Services did not identify any specifically contaminated areas.

Integrated Transportation Assessment

An Integrated Transport Assessment ("ITA") has been prepared by TPC and is included in Appendix Eight. This Assessment concludes:

"The following conclusions can be made in respect of the proposal to rezone the subject site to residential zones plus a local centre with the balance to be zoned open spaces and rural:

- The potential residential development and local centre for the site is feasible from a transportation perspective and has been anticipated in the future planning for Warkworth in the Warkworth Structure Plan and other strategic plans;
- Based on current mode shares, the 2028 peak hour trip generation of the proposal is estimated to be 1,311 motor vehicle movements, 146 walking movements, 8 cycle movements and 3 public transport movements;
- With appropriate traffic management on SH1, the estimated trips generated by the proposal can be accommodated on the adjacent transport network while maintaining acceptable levels of safety and performance;
 - The Plan Change Area will have a high level of accessibility to public transportation, walking, and cycling and the effects of private car travel from the development area will likely be reduced; and
 - Any development enabled by the proposed plan change is consistent with and encourages key regional and district transport policies.

The provision of following transport elements should be considered within the Precinct provisions to enable any future development to be designed to adequately cater for all travel modes and to mitigate the traffic impact on the wider transport network:

- a) Creation of footpaths along both sides of the new street alignments that meet Auckland Transports standards:
- b) Connection of new footpaths with the existing public footpath network immediately outside the site, with new and upgraded pedestrian infrastructure along the frontages on SH1 and Valerie Close;
 - c) The design of any intersection with the Wider Western Link Road or SH1 will be assessed by the extent to which it is supported by a transport assessment and safety audit, demonstrating the intersection will provide a safe, efficient and effective connection to service the expected subdivision and development, including safe and convenient provision for pedestrians and cyclists;
- d) Regular and safe crossing opportunities on the arterial roads where pedestrian desire lines are evident;
- e) Separated, protected, or off-street cycle facilities on arterial and collector roads;
- f) A public transport interchange to be built on the WWLR near the proposed Local Centre zone to enhance the accessibility to the public transport to help accommodate the anticipated demands associated with growth in Warkworth South and other areas;
- g) Measures such as a lower speed limit, a speed threshold and advanced road markings and signage on SH1 to slow northbound traffic; and
- h) Allowance for a crossroad intersection on State Highway 1 at the Wider Western Link Road and Collector Road in the "Waimanawa Hills" area with either traffic signal or roundabout control."

In respect to the recommendations a) to h) it is confirmed:

- The masterplan is based on the assumption that footpaths will be required along both sides of new
 roads and all cycle facilities will be off-street along arterial and collector roads. The masterplan
 includes the recommended cross-sections for the different roading types.
- Pedestrian footpaths/cycle facilities will be constructed along both sides of the existing SH1 where it abuts the Waimanawa Precinct and on the eastern side of SH1 through to Warkworth (McKinney Road intersection) (which may be signalised by that time). A pedestrian path/cycle facility will also be provided on the western side of SH1 between the WWLR/SH1 intersection and the new entrance into the Morrison Heritage Orchard.
- The masterplan has assumed pedestrian crossing infrastructure will be required at, or in the immediate vicinity of, the future SH1/WWLR intersection.
- The masterplan identifies the recommended location for the public transport interchange and this is located close to the proposed local centre. The future development of this public transport interchange (including the purchase of the required land) will be the responsibility of Auckland Transport. Auckland Transport has the legal ability to designate the site of the public transport.

interchange at any stage if it is considered by Auckland Transport that this location needs to be further secured.

 The recommended lower speed limits are supported and will be the responsibility of Auckland Transport when the State Highway is transferred to Auckland Transport after the opening of the new Motorway in 2024.

Health Impact Assessment

No specific existing activities or environmental conditions have been identified which could give rise to potential adverse health impacts if the area is urbanised in accordance with the plan change.

As identified above, future applications for earthworks may need to include a Detailed Site Investigation and if contamination is identified then Site Management Plans to address soil contamination would need to be prepared. This is not uncommon across Auckland and there is no indication that any soil contamination identified will not be able to be appropriately addressed at the time of bulk earthworks.

The implementation of greenways as proposed will assist in the promotion of walking and cycling which is considered to be a positive health outcome.

Reverse Sensitivity and Potential Effects on Residential Amenity

The plan change area itself is not adjacent to any existing sensitive land uses or uses (such as certain industrial uses) where there is a risk of reverse sensitivity effects arising.

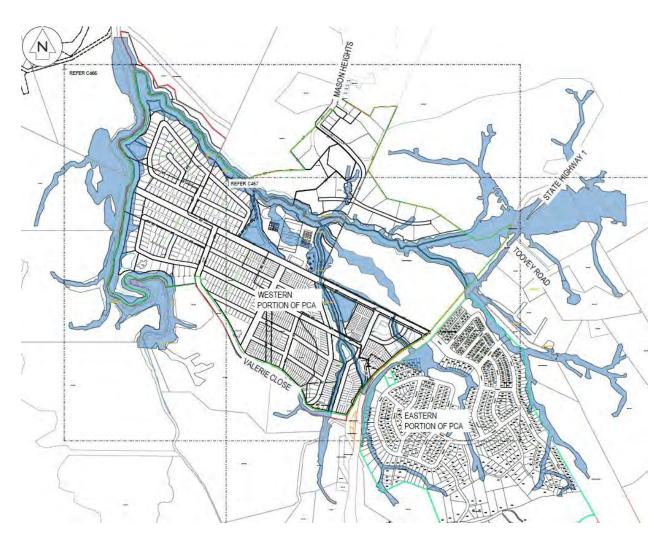
Within the plan change area it is intended that Morrisons Orchard will continue operating as an orchard. Within an orchard operation it could be expected that there will continue to be the use of sprays and noise from orchard machinery. There is a risk of reverse sensitivity effects arising if sensitive urban uses were to be established on the boundary of Morrisons Orchard.

To avoid this potential reverse sensitivity risk, the WWLR will provide a buffer along the southern edge of Morrison Heritage Orchard between new urban activities and the operating orchard. The design of the new Endeans Recreational Park on the western side of the Morrison Heritage Orchard provides the opportunity for landscaping along the boundary and given the area of the proposed park, there is ample opportunity to locate any more sensitive uses well away from the boundary.

Natural Hazards

Flood modelling for the plan change area has been undertaken by Maven and is addressed in the Stormwater Modelling Report included in Appendix Fifteen. This following plan from the Report identifies the 100 Year Flood Extent Plan (Figure Eleven). It is considered that the development of Waimanawa can proceed in a manner where flooding risks are avoided or mitigated to an appropriate level.

Specific earthworks design in the vicinity of the future active park can be undertaken to avoid flooding within that part of the park which is to be used for active recreation.



• Figure 10: 100 Year Flood Extent Plan.

13. Statutory Assessment

This section analyses the relevant statutory provisions that apply to private plan change requests to the AUP. This is a private plan change to modify the zoning in the AUP of an area predominantly zoned Future Urban (and therefore identified already for urban development). As part of this, the plan change proposes to introduce into the AUP two area specific precincts.

The Act sets out the statutory framework, within which resources (including land) are managed in New Zealand. Section 74 of the Act sets out the matters to be considered by a territorial authority in preparing or changing its district plan. These matters include considering the purpose of the Act under Part 2 and the evaluation of the proposal in accordance with section 32.

Section 75 then outlines the relevant matters to be considered for the preparation of a private plan change request. Section 75 of the Act, in addressing the contents of district plans, requires that a district plan must give effect to any national policy statement, any New Zealand Coastal Policy Statement, any regional policy statement and must not be inconsistent with a regional plan. Section 75 states that:

- s75 Contents of district plans
- (1) A district plan must state—
 - (a) the objectives for the district; and
 - (b) the policies to implement the objectives; and
 - (c) The rules (if any) to implement the policies.
- (2) A district plan may state—
 - (a) the significant resource management issues for the district; and
 - (b) the methods, other than rules, for implementing the policies for the district; and
 - (c) the principal reasons for adopting the policies and methods; and
 - (d) the environmental results expected from the policies and methods; and
 - (e) the procedures for monitoring the efficiency and effectiveness of the policies and methods; and
 - (f) the processes for dealing with issues that cross territorial authority boundaries; and
 - (g) the information to be included with an application for a resource consent; and
 - (h) any other information required for the purpose of the territorial authority's functions, powers, and duties under this Act.
- (3) A district plan must give effect to—
 - (a) any national policy statement; and
 - (b) any New Zealand coastal policy statement;

- (ba) a national planning standard; and
- (c) any regional policy statement.
- (4) A district plan must not be inconsistent with—
 - (a) a water conservation order; or
 - (b) a regional plan for any matter specified in section 30(1).
- (5) A district plan may incorporate material by reference under Part 3 of Schedule 1.

It is confirmed that:

- The site is located within the territorial boundaries of Auckland Council and is therefore subject to the AUP. There are no cross-territorial boundary issues. The AUP incorporates the Auckland Regional Policy Statement and both regional and district planning matters. The plan change request gives effect to the Auckland Regional Policy Statement.
- There are relevant National Policy Statements relating to urban growth capacity, freshwater management, highly productive soil and the New Zealand Coastal Policy Statement, which are given effect to by the plan change request.
- 3 There are no water conservation orders applying to the area.

Section 74(2) of the Act also requires that:

- s 74 Matters to be considered by territorial authority
- (2) In addition to the requirements of <u>section 75(3) and (4)</u>, when preparing or changing a district plan, a territorial authority shall have regard to—
 - (a) any—
 - (i) proposed regional policy statement; or
 - (ii) proposed regional plan of its region in regard to any matter of regional significance or for which the regional council has primary responsibility under <u>Part 4</u>; and
 - (b) any—
 - (i) management plans and strategies prepared under other Acts; and
 - (ii) [Repealed]
 - (iia) relevant entry on the New Zealand Heritage List/Rārangi Kōrero required by the <u>Heritage New</u> <u>Zealand Pouhere Taonga Act 2014</u>; and

(iii) regulations relating to ensuring sustainability, or the conservation, management, or sustainability of fisheries resources (including regulations or bylaws relating to taiapure, mahinga mataitai, or other non-commercial Maori customary fishing); and

(iv) relevant project area and project objectives (as those terms are defined in <u>section 9</u> of the Urban Development Act 2020), if <u>section 98</u> of that Act applies,—

to the extent that their content has a bearing on resource management issues of the district; and

(c) the extent to which the district plan needs to be consistent with the plans or proposed plans of adjacent territorial authorities.

This private plan change request satisfies the requirements of sections 74 and 75 of the Act.

Information Requirements for a Private Plan Change Request

Clause 22 of Schedule 1 of the Act identifies the assessment requirements of a proposed plan change. Clause 22 states that:

- (1) A request made under Clause 21 shall be made to the appropriate local authority in writing and shall explain the purpose of, and reason for, the proposed plan or change to a policy statement or plan and contain an evaluation report prepared in accordance with Section 32 for the proposed plan or change.
- (2) Where environmental effects are anticipated, the request shall describe those effects, taking into account clauses 6 and 7 of Schedule 4, in such detail as corresponds with the scale and significance of the actual or potential environmental effects anticipated from the implementation of the change, policy statement, or plan.

In terms of the requirements of clause 21:

- (i) The purpose and reason for the proposed plan change is set out in Section Three of this report;
- (ii) Section Fourteen of this report includes an evaluation in accordance with section 32; and
- (iii) This report and the supporting assessments which together form part of this application provide a detailed assessment of actual or potential effects that are anticipated.

Part 2 of the Act

Section 5 sets out the purpose of the Act as "... to promote the sustainable management of natural and physical resources". Within the Act, sustainable management is defined as:

... managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—

- a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The proposed plan change will provide for additional urban growth (being a mix of residential, business and open spaces) in Warkworth, which has been provided for and anticipated through the current Future Urban zoning. The Warkworth Structure Plan includes the subject area while FULS also identifies urban development of this area.

The urban development which will be achieved through the plan change, and the resulting positive social, cultural, and economic effects, must also consider the effects on natural and physical resources within the subject land. An assessment of the effects of the proposed plan change is set out within the Section 32 analysis which forms part of this document (Section Fourteen).

Section 6 of the Act sets out matters of national importance and reads:

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
- b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:
- c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:
- d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
- e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:
- f) the protection of historic heritage from inappropriate subdivision, use, and development:
- g) the protection of protected customary rights:
- h) the management of significant risks from natural hazards.

In respect to the subject sites, this relates to the protection of the streams and natural wetland areas located within the site boundaries, and protection of any archaeological or cultural features. These matters are addressed within the Section 32 evaluation report.

Section 7 sets out the other matters which must be considered:

a) kaitiakitanga:

- aa) the ethic of stewardship:
- b) the efficient use and development of natural and physical resources:
- ba) the efficiency of the end use of energy:
- c) the maintenance and enhancement of amenity values:
- d) intrinsic values of ecosystems:
- e) [Repealed]
- f) maintenance and enhancement of the quality of the environment:
- g) any finite characteristics of natural and physical resources:
- h) the protection of the habitat of trout and salmon:
- i) the effects of climate change:
- the benefits to be derived from the use and development of renewable energy

The efficiency of the proposed land use and other matters are addressed within the Section 32 analysis.

In terms of s7(i) (climate change), this proposal proceeds from the premises that it is a good planning outcome to develop a local centre with its associated transportation hub, cycleways and walkways and develop the community around that centre. Any local centre relies on a walkable catchment. This plan change more quickly delivers this walkable catchment which will then allow for the development of the local centre and transportation hub. This means that for residents they good get access to standard local retail services and potential alternative transport connections.

The contrary view is that Warkworth is expanded from the centre out. The difficulty with this approach is that key infrastructure such as the water reservoir and the wastewater pumping stations and assets such as the local centre would be constructed well after urbanisation of the northern Warkworth South area has commenced.

This latter approach brings the risk of under development of the three-water services and places a focus on vehicular transport modes as the services of the local centre and transport hub would not be available.

It is considered that in this circumstance, developing Waimanawa first and then enabling Warkworth to grow from the McKinney Road plan change area south to join Waimanawa is the appropriate planning strategy. This delivers better infrastructure, retail servicing and transportation infrastructure outcomes.

Section 8 requires that in achieving the purpose of the Act:-

"...all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi)".

It is proposed that Te Aranga Maori Design Principles will be incorporated in the future detailed design process. A range of recommendations have been made in the Cultural Values Assessment, a number of which have been incorporated into the master planning design process while others are relevant to the future detailed design and construction stages.

14. Section 32 Assessment

Introduction

This section 32 analysis refers to and relies on the following technical reports:

- A. Requested Plan Change;
- B. Planning Report by Osborne Hay (North) Ltd and Tattico;
- C. Urban Design and Landscape Report by Reset;
- D. Design and Masterplanning Analysis by Reset (block west of SH 1) and AStudios Architects (eastern SH 1);
- E. Ecological Assessment including streams by Bioresearches;
- F. Engineering and Infrastructure Assessment by Maven Associates;
- G. Stormwater Management Plan by Maven Associates;
- H. Geotechnical Assessment by LDE;
- I. Transport Assessment by Traffic Planning Consultants Limited;
- J. Economic Assessment by Market Economics;
- K. Archaeological Assessment by Clough and Associates;
- L. Land Contamination Reports by Focus Environmental Services Ltd; and
- M. Arborist Report by Craig Webb.

In addition, this development has relied on the cultural impact assessment provided by Ngāti Manuhiri as part of the Structure Plan feedback and as elaborated on through iwi consultation as part of this application.

Section 32 Evaluation

Legislative tests

Section 32 of the Act requires any proposed plan change to provide an assessment of the appropriateness, effectiveness, efficiency, costs, benefits and risks of the requested plan change including alternative options. Section 32 states:

"32 Requirements for preparing and publishing evaluation reports

- (1) An evaluation report required under this Act must—
 - (a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
 - (b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by
 - identifying other reasonably practicable options for achieving the objectives; and
 - (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
 - (iii) summarising the reasons for deciding on the provisions; and
 - (c) contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.
- (2) An assessment under subsection (1)(b)(ii) must
 - (a) Identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for
 - (i) economic growth that are anticipated to be provided or reduced; and
 - (ii) employment that are anticipated to be provided or reduced; and
 - (b) If practicable, quantify the benefits and costs referred to in paragraph (a); and
 - (c) Assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.
- (3) If the proposal (an amending proposal) will amend a standard, statement, national planning standard, regulation, plan, or change that is already proposed or that already exists (and existing proposal) the examination under subsection (1)(b) must relate to
 - (a) The provisions and objectives of the amending proposal; and
 - (b) The objectives of the existing proposal to the extent that those objectives –
 - (a) Are relevant to the objectives of the amending proposal; and
 - (ii) Would remain if the amending proposal were to take effect."

This will be an amendment to an existing Unitary Plan. The provisions of section 32(3) apply.

This entire planning report and the different technical reports forming part of this application are all part of the section 32 analysis in support of this plan change request.

Objectives the Most Appropriate Way to Achieve Part 2 of the Act

Section 32(1)(a) of the Act requires an evaluation to examine the extent to which the objectives of the proposed plan change are the most appropriate way to achieve the purpose of the Act.

The inclusion of the Precinct specific objectives is the most appropriate way to meet the purpose and principles of the Act set out in Part 2 of the Act because:

The private plan change ("**PPC**") significantly benefits from the extensive work done by Auckland Council and the Warkworth community in the development of the Warkworth Structure Plan. In many ways the Structure Plan process is about identifying what the key elements are for this part of Warkworth that will deliver social and economic wellbeing while protecting important environmental factors and respecting the key cultural elements of this part of Warkworth. The Structure Plan is intended to provide a framework for Warkworth which will facilitate

sustainable management of the land. The PPC finds the right balance between enabling development while protecting the natural and physical resources.

To that end, the proposal includes several objectives that provide for significant residential development, an integrated open space/infrastructure network, the establishment of a new local centre, and protection of the natural environment.

The purpose of the Act is reflected in the proposed objectives of the plan change (given in bold below) which:

- (a) Provide for this critical growth.
 - (1) Provide for residential urban growth in the southern Warkworth area that enables a range of housing options and a local centre through a mix of zones.

The requirement for growth is identified in the FULS, the Regional Policy Statement provisions of the AUP, and in the Warkworth Structure Plan.

Providing for growth is a core objective of section 5 of the Act and this is reinforced in the NPS-UD. The PPC will provide for additional urban growth (being a mix of residential, business and open spaces) in Warkworth, which has been provided for and anticipated through the current Future Urban Zoning. The Warkworth Structure Plan includes the subject area while the FULS also identifies urban development of this area.

This objective ensures that the land resource is developed in a manner that achieves, and does not undermine, its potential to accommodate its share of projected growth and in particular contributes to the anticipated population for Auckland and Warkworth South specifically. Growth in this location relieves pressure for growth in other less appropriate parts of the Auckland Region (such as productive land), thereby safeguarding the needs of future generations.

- (b) Reflects a broad range of residential zones.
 - (6) The application of residential zoning provides for a variety of housing types and sizes that respond to-
 - (i) housing needs and demand; and
 - (ii) the neighbourhoods planned urban built character, including 3-6 storey buildings.

This objective specifically provides for a broad range of residential zones ranging from Large Lot Residential through Single House, Mixed Housing Urban ("MHU") and THAB. This spread will in turn deliver a broad range of housing typologies that respond to housing needs and demand and the neighbourhood's planned urban built character – including 3-6 storey buildings. This will lead to improved social wellbeing for this part of Warkworth. Social wellbeing is enhanced by diverse communities. Diverse communities reflect a range of different lifestyles which rely on different housing choice. The objectives relating to this diversity will "enable people and communities to provide for their social wellbeing" as referred to in Section 5 of the Act.

This objective promotes and enables an efficient use of natural and physical resources as it will utilise land already earmarked for urban development under the AUP and FULS and enables a range of housing options to meet the shortfall in housing supply within the Auckland region, as well as promoting a local centre and associated employment opportunities to support the community.

As addressed earlier in this report, this plan change has been developed consistent with the MDRS provisions of the Resource Management Act. Under these provisions, much of the Single House zoning within the Operative AUP prior to PPC 78 has been rezoned from Single House to Mixed Housing Urban. There are a significant number of exceptions where qualifying matters under section 77O of the Act apply.

In this case, the Single House zone is reliant on qualifying matter 77O(j). This provides for exclusion from the standard MDRS provisions where there are other relevant matters that make higher density inappropriate. In this case significant natural landscapes. The ridgeline along the Warkworth South area and its relationship to the Avis Miller Conservation Reserve warrant particular planning controls. This ridgeline is viewed as on the skyline, i.e. there is no larger backdrop of significant ecological areas as is characteristic of northern Warkworth. It is the gateway to Warkworth from the south. It adjoins land identified for conservation purposes. For these reasons, the Residential - Single House zone is applied with particular provisions relating to density and yards.

(c) Creates a diverse zoning mix.

(1) Provide for residential urban growth in the southern Warkworth area that enables a range of housing options and a local centre through a mix of zones.

Section 5 of the Act identifies the purpose of the Act as being the sustainable management of natural and physical resources. This means managing the use, development and protection of natural and physical resources in such a way that enables people and communities to provide for their social, cultural and economic well-being and health and safety while sustaining those resources for future generations, protecting the life-supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment. The PPC proposes a mix of zoning across the land to create a balanced and diverse community that is consistent with section 5. The PPC will enable the efficient use and development of natural and physical resources through the facilitation of medium to higher density residential development combined with a local centre within the PPC land. The provision of a local centre will enable commercial activities that will serve the local community and also provide for the social, cultural and economic wellbeing of Warkworth. Local employment opportunities will arise at the future local centre and Morrison Heritage Orchard and there are good transportation links to the main business areas in Warkworth.

Section 7 of the Act identifies a number of "other matters" relating to the management, use, development, and protection of natural and physical resources to be given particular regard by the Council. This includes the efficient use and development of natural and physical resources. The increased proportion of surrounding THAB zoned land will ensure the use of land is efficient. This is supported by the proposed collector road

network within the site and envisaged public transport, pedestrian and cycle connections. A public transport interchange is proposed to the immediate west of the new local centre and adjacent to the WWLR. More intensive development is also enabled in close proximity to public transport networks which supports efficiency.

This objective also relates to section 7 of the Act as it promotes the maintenance and enhancement of amenity values. Open spaces are a key amenity for local areas. The PPC proposes a high proportion of quality open spaces which provide for a range of passive and active recreational activities to meet the needs of the future Warkworth South community. With the provision of the future open spaces, a local centre and Morrison Heritage Orchard, residents' day to day social and recreational requirements will be provided for within the PPC area.

Overall, the PPC proposes a diverse zoning mix which is reflective of Part 2 of the Act. In particular, it ensures the efficient use and development of the area and provides for the maintenance and enhancement of the environment and amenity values through the careful application of zoning.

(d) Stimulates open space focussed urban growth.

(3) The Warkworth South Precinct is subdivided and developed in a manner that achieves a series of active and passive open spaces and linkages within the southern Warkworth area.

This objective specifically identifies the potential for active and passive recreation within the precinct specifically along the upper reaches of the Mahurangi River. Zoning is applied to materialise these opportunities and stimulate urban growth centred around the provision of open spaces which enhance the overall amenity and liveability of the precinct. This objective is reflective of sections 5 and 7 of the Act.

The proposed objective seeks to ensure a high-quality network of open space throughout the plan change area, recognising its importance in contributing to a liveable and healthy community. It also contributes towards achieving the purpose of the Act by providing for the social, economic and cultural wellbeing of the future community and to meet the foreseeable needs of future generations. Section 7(c) of the Act is also relevant, as the provision of open space will enhance the amenity values of an area.

(e) Protects the rural and coastal hinterland against future urban expansion through series of landscape protection controls.

(4) Apply urban zoning efficiently to protect against future urban expansion into Warkworth's valued rural and coastal hinterland.

Section 6 of the Act sets out a number of matters of national importance which need to be recognised and provided for in achieving the purpose of the Act. There are several matters of relevance to this PPC. These include the preservation of the natural character of the rural and coastal environment, streams and wetland areas; the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna;

and the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga; and the management of significant risks from natural hazards. This objective ensures urban zoning will be applied in a manner that enables protection of Warkworth's rural and coastal hinterland against future urban expansion.

This plan change identifies and protects the key streams and wetlands including the various tributaries of the upper reaches of the Mahurangi River. It gives a more enhanced protection than the existing Auckland-wide provisions.

The provisions provide for open space adjoining the Avice Millar Reserve and sets a special yard against the reserve to create an appropriate interface.

Key risks associated with the flood plain are protected from development.

There are no waahi tapu on the site as identified by Ngāti Manuhiri. In terms of the cultural aspects around stormwater management, stream protection and revegetation, all these matters are addressed within the plan change or embodied within the Auckland-wide provisions.

- (c) Places limitations on development where appropriate to enhance the rural-urban interface.
 - (5) Enable the enhancement of the character of the rural-urban interface through limitations on housing density, building location, maximum height, and enhanced landscaping.

This objective specifically provides for the maintenance and enhancement of the quality of the environment (section 7 of the Act) by placing limitations on housing density, building location, minimum yard requirements, maximum height and enhanced landscaping. This objective also supports the provision of high density zonings (THAB and MHU) as a means of providing opportunities for intensification in proximity to the proposed local centre.

- (d) Creates a safe and integrated movement network.
 - (2) The Warkworth South Precinct is subdivided and developed in a manner that achieves an accessible urban area with efficient, safe and integrated vehicle, walking and cycle connections internally and to the wider Warkworth urban area while providing for and supporting the safety and efficiency of the current and future national and local roading network.

This objective specifically identifies key vehicle, pedestrian and cycling connections necessary to ensure an integrated movement network across the precinct that is safe and efficient. Vehicle access is limited from individual sites to the WWLR and SH1. The WWLR is provided for in accordance with the Warkworth Structure Plan although in a different location which is more sympathetic to the environment and efficient from a transportation movement perspective. This is one of the key future arterial routes in Warkworth and may

provide a future connection to the motorway network. The conversion of the current SH1 to an urban arterial will also improve the transportation link to the current Warkworth urban area.

The plan change also future proofs the northern collector road link in the Waimanawa Hills portion of the precinct. This enables a connection parallel to SH1 at a future date for development as other portions of the Warkworth South area are rezoned.

- (e) Provides for a local centre.
 - (7) Enable the development of a local centre which is designed to reflect its location opposite the Morrison Heritage Orchard, at the southern gateway to Warkworth and adjoining a watercourse.

Employment opportunities and public amenities provided by the local centre zoning will enable the social and economic wellbeing of people and the developing community to be realised (section 5 of the Act). Critically this provides for the local shopping and immediate service needs for the Waimanawa community. It reduces the need for trips to the Warkworth town centre for basic needs but is set at a level which is subservient to and does not displace the primacy of the Warkworth town centre.

- (f) Ensures coordination of subdivision and development with delivery of infrastructure.
 - (8) Subdivision and development is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements

This objective is the most appropriate way to achieve the purpose of the Act as it enables subdivision, use and development while ensuring the necessary infrastructure is provided to mitigate any adverse effects of the development of the precinct, including cumulative effects, on the wider transport network as the area is developed.

The application of this objective within the precinct and the proposed zoning approach recognises the importance of ensuring that development occurs in an integrated way that will sustainably manage both development and the environment. They also recognise the importance of a high quality urban environment with an emphasis on the public realm.

This objective promotes the safety and wellbeing of people by ensuring that adequate infrastructure to service the development is provided. Effects of hazards and climate change will be taken into account in the design of infrastructure devices.

(g) Ensures protection and enhancement of the natural environment.

(9) Subdivision and development within the precinct provides for the protection and enhancement of identified landscape features, the protection and enhancement of the ecological values of streams, natural wetlands and areas of indigenous vegetation and the retention of a bat flight corridor.

Section 5(2) of the Act defines sustainable management to include safeguarding the life-supporting capacity of air, water, soil and ecosystems. Section 7 of the Act requires particular regard to be given to the intrinsic values of ecosystems, and the maintenance and enhancement of the quality of the environment. Section 6 of the Act relates to the protection of natural and physical resources. The PPC provides for the protection and enhancement of stream and wetland areas located within the site boundaries, and protection of any archaeological or cultural features.

This objective specifically recognises the wetlands and streams within the PPC area and leads to mapping of these features with appropriate protection enhancement rules proposed within the precinct plan. The existing bush protection covenants within the PPC area are not affected by the PPC and these areas have been incorporated into proposed Open Space areas.

The provision of an objective (in association with the proposed policies, standards and rules) specific to the land and the issue at hand is the most appropriate way of ensuring their protection and enhancement; being specifically identified in the precinct and therefore required to be taken into account at the very early stages of subdivision or development planning of the land.

Stream enhancement and protection will be provided for in conjunction with land uses and development of the precinct.

This objective recognises and provides for section 6 matters such as the preservation of the natural character of the coastal environment, the maintenance and enhancement of public access to and along rivers, and the protection from inappropriate subdivision, use and development.

- (h) Provides for esplanade reserves and riparian yards.
 - (9) Subdivision and development within the precinct provides for the protection and enhancement of identified landscape features, the protection and enhancement of the ecological values of streams, natural wetlands and areas of indigenous vegetation and the retention of a bat flight corridor.

The objective ensures subdivision and development provides for esplanade reserves and riparian yard where required. This reflects section 6 of the Act.

The vegetated riparian margins of the upper reaches of the Mahurangi River will be protected at the time of subdivision as esplanade reserves.

A green network has been proposed which will include a mix of open spaces and riparian yards. These will contribute to the protection and enhancement of the existing watercourses and minor wetlands.

(i) Creates a well-functioning urban environment.

All the objectives taken together contributes towards achieving the purpose of the Act by providing for the social, economic and cultural wellbeing of the future community and to meet the foreseeable needs of future generations, as referred in Section 5.

These objectives are those additional to the underlying objectives of the relevant zones and Auckland-wide provisions which also apply. Those objectives have been well tested under section 32 as part of their inclusion within the AUP. That analysis is not repeated here but it is still relevant to this plan change.

Provisions Most Appropriate Way to Meet the Objectives

Section 32(1)(b) requires this analysis to "examine whether the provisions in the proposal are the most appropriate way to achieve the objectives" and then sets out the matters that must be addressed in this analysis. This is elaborated on by section 32(2) and (3).

The following sections set out the analysis undertaken. The first step is to examine the policies followed by the examination of rules and assessment criteria.

Interrelated policies, rules and assessment criteria are assessed as a group. The following paragraphs set out this analysis.

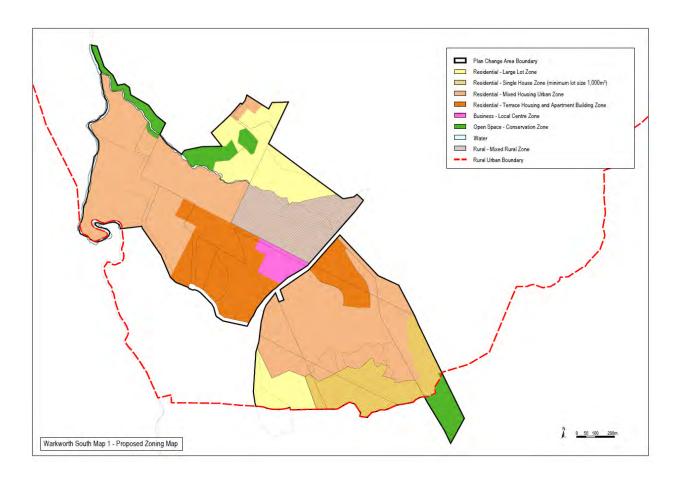
In this case, there is sufficient information about the subject matter of the provisions to determine the range and nature of environmental effects of the options set out above. For this reason, an assessment of the risk of acting or not acting is not required.

Providing for Growth Including Zoning

(a) Proposed amendment

The Plan Change uses standard residential zones, with one exception as listed below. In terms of the policies and provisions of those zones, the analysis relies on the section 32 assessment of the Council, including the recent section 32 analysis on the MDRS in PPC 78. This report addresses the specific provisions of this plan change.

The zoning pattern is shown in the diagram below.



The key points to note are:

- This proposal generally utilises the standard zonings of the Unitary Plan within the subject land.
 No new zones are introduced, although there is a different density control on part of the land subject to the Residential Single House zone (RSH)...
- The RSH is applied to land along much of the eastern ridge on the Waimanawa Hills area. This is in accordance with the qualifying matter which exempts land from the MDRS provision under certain circumstances. Here landscape amenity matters are key, together with the collocation of this land alongside the Avis Miller Reserve and the conservation purposes for that reserve land.
- The intensification with THAB zoning around the local centre is employed.
- The Mixed Housing Urban zone, being the default zoning under the Resource Management (Enabling Housing & Other Matters) Amendment Act 2021, and its application as publicly notified in PPC78 by Auckland Council, is used extensively. This ensures that the plan change is consistent with the requirements of the MDRS.
- Lower density housing is applied on Waimanawa Hills in the upper parts of the ridgeline. Here
 a Residential Single House zoning is applied but with a particularly restrictive density of
 1:1,000m² net site area.
- Large Lot Residential is retained on the unserviced lots heading towards Masons Heights in the north-western part of the precinct.
- Large Lot Residential is applied at the south western part of the site where access constraints
 from SH1 and topography limit roading connections to service higher densities.

- The Morrison Heritage Orchard Precinct is predominantly zoned Rural Mixed Rural to preserve its existing use and underlying functions while allowing for very limited residential development.
 Part is zoned Residential – Large Lot where very limited subdivision is proposed and achievable.
- The precincts then rely on the underlying zone provisions to promote and manage the appropriate level of growth across the Plan Change area.

On the eastern periphery, certain density controls are introduced. These are for landscape reasons and are addressed elsewhere in this report. Specifically, a Special Subdivision Control Area in the Landscape Protection Area- Eastern Escarpment control is imposed through the Plan Change Request. This control requires new sits in the "Eastern Escarpment Area" on Precinct Plan 1 to comply with a minimum net site area size of 1,000m², with the purpose of creating larger site sizes.

(b) Provisions most appropriate way to achieve the objectives

The Council's growth strategy has been long established through the Auckland Plan, Regional Policy Statement components of the AUP, the FULS, and the Warkworth Structure Plan. This section 32 analysis has taken full account of those strategies.

Cumulatively they demonstrate that the zoning pattern set out in this private plan change request is the most appropriate way to achieve the wider regional and precinct objectives of managing and providing for growth in Warkworth.

The key components are:

- (i) The growth strategy relies on the combination of urban intensification, appropriate greenfields development, and expansion of satellite towns. Warkworth is an identified satellite town.
- (ii) The FULS identifies Warkworth South as a future growth area for release by 2028 and prior to 2032. This plan change area is clearly shown as a growth area to be ready for development by 2028. This plan change gives effect to that strategy. The private plan change will deliver occupiable homes some 2 -3 years prior to the FULS target. However, the plan change provides the infrastructure necessary for growth and will ensure the plan change area is designed to provide necessary services for growth.
- (iii) The AUP's objectives are focused on growth adjacent to good transport facilities with an emphasis on public transport, around or in good proximity to town centres, and adjacent to major public open space. A key prerequisite is adequate infrastructure.

The WWLR (a future arterial) has been aligned to reflect topography, to retain it within land currently under the control of the KA Waimanawa Limited Partnership, for safety reasons, and to provide a buffer between future urban development and Morrisons Heritage Orchard. As a result of the alignment of the WWLR, the

Local Centre has shifted to the north and remains adjacent to the intersection of the WWLR within the Local Centre. The public transport interchange is proposed to be to the immediate west of the Local Centre and adjacent to the WWLR.

Warkworth is now serviced by public transport, linking from Warkworth central down north to Wellsford, to the coastal towns to the east and south to Silverdale (with connections from Silverdale to the North Shore and the Auckland CBD). What this development will do is help build the critical population mass that will help justify a permanent public transport interchange and more extensive and regular local bus services.

For the reasons outlined in the effects section of this report, Warkworth South meets all these criteria. The provisions of this plan change are therefore the most appropriate way to achieve these objectives.

- (iv) The entire requested precinct area is currently zoned "Future Urban" except for a small area of "Open Space Conservation Zone" on Lot 3 DP 344489 (which reflects that this lot is an esplanade reserve vested in Council) and is located in the north western part of the Plan Change area and a small area of Rural Rural Production zoned land on the eastern edge. The "Future Urban" zoning heralds and fully contemplates rezoning to urban uses. This plan change gives effect to the policy and the intention that such rezoning would follow a structure plan exercise.
- (v) The Structure Plan itself has been through a technical review and public consultative process over the right way to provide for growth within Warkworth. The subject land is identified as a core growth node. The Structure Plan identifies the key growth zones of Terrace Housing and Apartment Buildings, Mixed Housing Urban and Mixed Housing Suburban.

This private plan change generally follows the zonings identified in the Structure Plan. However, it should be noted that:

- The Mixed Housing Suburban zone is no longer deployed within the AUP as a result of PPC
 78.
- The Single House zone.
- The THAB and MHU zones are used extensively. These largely align with land in the Structure Plan which was zoned either THAB, Mixed Housing Suburban or Single House. However, there are some changes.
- Large Lot Residential applies in two localised part of the precinct reflecting servicing or access constraints.

These changes are brought about for two reasons. The first relates to the MDRS and how this is reflected in PPC 78. It is obviously critical that a consistency is preserved. The second factor is the need to ensure land efficiency. It is only through the effective and efficient use of identified land for growth that the pressure will be reduced for rural expansion in Warkworth. An under-utilisation of development potential on urban

land means that there is less population housed within the identified growth areas. That only places future pressure to rezone further rural land to future urban and subsequently urban activity.

This private plan change package is the most appropriate way to achieve the objectives of providing for growth balanced against other objectives of addressing landscape and other environmental factors. The large lot zoning of the structure plan in some locations is proposed to be zoned Residential Single House but with a reduced density of 1:1,000m^{2.}

(vi) The variety in the zoning pattern with different housing typologies enabled, will create a range of different lifestyle choices which will help promote a diverse community.

(c) Options considered

The Warkworth Draft Structure Plan promoted a different indicative set of zonings with a lower intensity level.

Stepping Towards Far Limited and KA-Waimanawa Partnership spent some considerable time analysing the options for providing for growth within Warkworth.

The zoning pattern proposed in the plan change is the most appropriate option for achieving the regional objectives on managing Auckland's growth. Where there are particular site specific issues that need to be addressed, such as the eastern side of the plan change area where there are identified landscape features, ridges and steep grades and high value streams, then these are best addressed through Precinct controls rather than arbitrarily going for a medium intensity zoning.

Options considered:

- Current Plan Change (chosen). This proposal sees the applicant funding the necessary coordinated infrastructure to service the plan change area, resulting in cost expenditure savings for the
 Council, whilst still achieving the same Structure Plan objectives in terms of the funding and coordinated delivery of infrastructure to service future growth.
- Strict alignment to structure plan. The difficulty with strict adherence to the Structure Plan is that this can result in an inefficient use of land. The Structure Plan predates MDRS provisions of the Act. Among other things MDRS targets more land use efficiency. The Structure Plan is a very helpful guide, but no longer a definitive statement for how urban growth and development should occur across Warkworth South. Notwithstanding that, the Plan Change does follow principles of the Structure Plan including the Local Centre, higher density Terrace Housing and Apartment Building Zone and Mixed Housing Urban zoned land is adjacent, areas of the plan change that have hills and larger grades where the higher value streams and open space areas have been identified have lower density residential zones (Residential Single House and Large Lot).
- Fewer range of zones, focused on lower density development. This option runs counter to legislation and the Amendment Act as referenced above, this puts more pressure onto urban expansion into rural areas in Warkworth because existing urban land is not efficiently used.

- More extensive medium density zoning. The MDRS provisions as applied in Auckland through PPC 78 is a substantial upzoning of the existing metropolitan area to provide for greater growth through urban consolidation planning outcomes. Consideration was given in this plan change through the section 32 analysis to an even more extensive use of Mixed Housing Urban zoning. The obvious candidate here was the RSH zone and rezoning this to Mixed Housing Urban. In the final analysis, this was not pursued. This plan change at the geographic periphery of the area, particularly on the upper eastern ridge, is also about protecting key landscape and environmental matters. This is a significant eastern ridgeline and its juxtaposition with the conservation land of the Avis Miller Reserve. For that reason, and in balancing land efficiency versus the protection of key landscape and conservation features, a progressive zoning between Mixed Housing Urban to RSH with particular density and yard controls has been finally adopted.
- Plan change for only the two principle landowners' properties being Stepping Towards Far Limited and KA-Waimanawa Limited Partnership (KA-W). It would have been possible to advance this as three separate plan changes (Stepping Towards Far, KA-W, and Morrison Orchard land). However, this would have lost the opportunity for an integrated development across this large Warkworth South block. It would have run the risk of an uncoordinated approach to infrastructure, particularly roading and water/wastewater. It would have reduced land efficiency or resulted in a development which failed to protect the core landscape and ecological values of the area. Rather, this development proceeded in terms of the vision and strategic landscape assessment set out in the report by Reset and, from that, supported by other technical planning, ecological, economic, transport and other factors drove the zoning pattern.
- Deferred zoning. One option is to simply await the Council rezoning of this land.

The Council has made it clear that looking across its portfolio and the range of Future Urban zoned land, it has significant financial constraints which have detrimentally impacted its Future Urban Land Supply Strategy.

This means financial constraints are deferring the rollout of urban zoned and development ready land.

The MDRS provisions will create a greater opportunity for urban consolidation which will assist in tempering growth demand. However, the Warkworth South development is still targeted within the early stages of the 30 year growth horizon. This land is being pulled forward only two years. There remains demand for housing. If there is not, it is also, to an extent, self-regulating because development will only proceed if there is the ability to sell sections.

In this particular case, the primary reason why the Council is not in a position to advance Warkworth South to its current published programme is the funding of infrastructure. This development has applicants who are funded and able to provide all infrastructure for the development. In key areas, particularly land corridor preservation and inground utilities, the plan change future proofs the growth for the remaining parts of Warkworth South. In a circumstance where:

The land is identified for urban growth;

- The primary constraint to advancement of the land is infrastructure costs as a public cost.
- The applicants are able and willing to fund the infrastructure; and
- The plan change is largely consistent with the Structure Plan taking on board the MDRS and PPC 78 provisions as they would likely apply to Future Urban land.

then there is no planning reason why a deferred zoning approach is warranted.

The key reasons why the zonings under the plan change are most appropriate way to deliver the growth objective are:

- (i) The Future Urban Zone is a recognised holding zone until the area has been structure planned and ready for development. This has now occurred.
- (ii) Medium and higher intensity residential use around public transport corridors and key open space areas reduces the pressure on further peripheral growth into the rural area. By contrast, a protracted use of low-density zonings only puts further pressure on greenfields expansion.
- (iii) Key community factors such as public transport and the social and community services that make up quality neighbourhoods rely on a concentration of people to make them economically sustainable. It is much easier to create a bus network servicing a high and medium density area, than it is to service it over a low density area. A high density area will better provide the economic sustainability for dairies, cafes, preschools, etc than will a sparse low density area.

(d) Efficiency and effectiveness

The provision of the Residential – Terrace Housing and Apartment Building zoning allows for more intensive residential development close to the future public transport interchange and local centre. It is recognised that owing to topographical and visual sensitivity constraints, certain areas have been proposed to be zoned less intensive Residential – Large Lot, but overall, the plan change provides for a compact urban form.

Higher and medium density development significantly improves the efficiency and therefore effectiveness of the provision of infrastructure. It is problematic and costly to service infrastructure, particularly roading, wastewater, potable water, community facilities, public transport, and schools in sparse low density areas.

There is better land efficiency from high density development rather than a low density scenario which inevitably results in sprawl and has a marked impact in terms of rural production land.

The proposed Plan Change has been carefully considered so as to seek the right balance between zoning that provides efficiency and enables optimal urban growth and yet ensures protection of key areas that across the site including streams and open space through the adoption of zones with lower density around ridges and steeper grades across the plan change area. On this basis, the applicants' have achieved efficiency and effectiveness. This is further strengthened through the joint landowners' commitment to

delivery and finance the co-ordinated infrastructure required to service the plan change area and Warkworth South.

The option of strict alignment to the Structure Plan was not progressed. Firstly, that would have been contrary to the MDRS provisions. The Council is unable to accept a private plan change request that is inconsistent with the MDRS.

There is also benefit in ensuring the maximum efficiency of rezoned land for the long-term benefits this brings to reducing the pressure on further expansion of the RUB.

Similarly, a focus on fewer zones and more lower density zones would fail to have met the requirements of the MDRS provisions. The same comments as above apply.

More extensive use of Medium Density Residential zoning could have been applied to the upper reaches of Waimanawa Hills and Waimanawa Valley. However, medium density three storey housing along this ridgeline would have changed the landscape character of the Waimanawa Precinct and would not achieve the planning outcomes that the qualifying matters under section 770 of the Act seek to protect.

A plan change confined to the 'two principles' land only would fail to take account of the more comprehensive masterplanning opportunity this proposal presents. This would have led to inferior planning outcomes. This would have impacted both transport, ecology and urban design outcomes as integration across a broader land holding would be lost. This option was also rejected.

The deferred zoning objective was rejected for the reasons outlined above, namely that the only justification for deferment was the cost associated with infrastructure. In this case, those costs are covered by the plan change proponents. There is therefore no need or justification for a deferred zoning approach.

(e) Effects

Strategic effects

The Warkworth South area, including the area subject to this plan change, is a core part of the Council's growth strategy. This strategy is outlined within its future urban land release strategy as summarised elsewhere in this planning report, and in the Warkworth Structure Plan.

The Warkworth South area is identified within the 2028-2032 land release which the Council is proposing for Warkworth. Clearly this area is a strategic part of meeting the Council's required growth targets.

There are recent discussions about the Council's financial constraints and the suggestion the Council may need to revisit some of the Future Urban Land Strategy, particularly in the outer years of the FULS programme.

This proposal is fundamentally different from many other greenfield areas because the applicants bring together a consortium which is resourced to fund all infrastructure. The primary reason why the Council has had to reconsider the land release programme of future urban zoning (financial constraints on infrastructure), is largely not applicable in Waimanawa because of the ability to fund and provide all necessary infrastructure.

There is a significant investment in public infrastructure necessary to support urban growth in this area. Given community cost, important this is efficiently used. That includes upgrades to the wastewater infrastructure and potable water supply. It also impacts the stormwater management system.

The significant investment in public infrastructure (roads, transport, wastewater, potable water), this area being a key feature of the Council's growth strategy and being part of Auckland meeting its requirements under the National Policy Statement on Urban Development; make this a strategic growth area for Auckland- one that needs to be rezoned in the short term to meet Council growth targets.

This plan change delivers on that strategic objective.

It will enable this land to be rezoned largely in accordance with the approved Warkworth Structure Plan, and to be rezoned concurrent with the completion of the key infrastructure works, particularly roading and wastewater.

This plan change will deliver strategic benefits to the broader Auckland growth strategy and in particular to Warkworth. The strategic effects of this plan change are significantly beneficial.

Residential effects

The proposed plan change request will deliver 203ha of land currently zoned Future Urban and obviously targeted for release for urban development by 2028 and prior to 2032.

This zoning package is largely consistent with the Warkworth Structure Plan. Where there are differences this is in the low density zones, not the high density zones, and these differences reflect the new legislative requirements that have been introduced since the structure planning process.

The scale and form of development envisaged within the Structure Plan will be delivered by this plan change.

The total estimated yield is approximately 1600 lots and apartment units.

Equally critical is the variety of zoning across the plan change area. This in turn will drive a range of different typologies which will offer a range of different lifestyle choices and price points.

This flexibility and range is seen as an important element in creating diversity in the Warkworth South community.

The residential effects of this development are significantly beneficial, particularly when considered concurrently with the strategic benefits where this land is identified as being important in Auckland's growth strategy and among the first blocks of land targeted for rezoning and release.

Urban design effects

Reset Urban Design and AStudios has undertaken a significant masterplan analysis of the northern sector of Auckland, Warkworth generally and Warkworth South specifically in developing this masterplan.

Reset Urban Design has undertaken the urban design review ('Masterplan Report') of the proposal as it progressed. Those reviews then led to a number of design changes through the evolution of the masterplan.

The key design principles for the proposed plan change include:

- (a) Preserve and enhance the existing ecosystem and natural landscape features
- (b) Create a healthy and sustainable community for people of all ages.
- (c) Promote efficient use of land
- (d) Create quality interlinked public realms accessible to all residents
- (e) Provide for a legible pattern of roads, local streets, lanes and walking and cycling routes.
- (f) Celebrate the unique identify of Warkworth South and create a sense of place.

In addition to the design principles, the Masterplan Report also references a number of Design Strategies to assist in establishing 'a welcoming residential community with good connections and quality amenity spaces'. The design strategies are outlined below as follows:

- Strategy 1: Maintain and enhance the existing streams, forests and wetlands
- Strategy 2: Connect to the larger arterial network
- Strategy 3: Fit a sympathetic urban form onto the site
- Strategy 4: Provide generous open spaces and infrastructure as the focus for the development.
- Strategy 5: Provide a local centre as a key destination for wider area in Warkworth South
- Strategy 6: Maintain and enhance the landscape, historical and cultural values
- Strategy 7: Provide for a dynamic mix of activities, densities and housing options

(f) Benefit and cost

The benefits of this plan change are that:

(i) It gives effect to the Auckland Plan, FULS, AUP (including the Regional Policy Statement) and Warkworth Structure Plan for the reasons set out earlier in this section.

- (ii) It provides for the efficient use of land leading to reduced future pressure on rural land from urban development.
- (iii) It gives enough critical mass to support future public transport and the desirable community services which a neighbourhood benefits from.
- (iv) It targets growth in the area where the community has already committed significant public investment, including major upgrading of the potable water and wastewater networks. It enables the community to realise the benefits from this investment.
- (v) The variety in the zoning pattern will create a range of different lifestyle choices which will help promote a diverse community. Having a mix of employment, residential, open space and other services means residents have easy access to these different types of land uses.
- (vi) Placing an emphasis on the public realm improves the wellbeing of communities.
- (vii) The lower density in the southern area delivers the environmental outcomes and achieves the appropriate balance for growth and landscape amenity.

The costs are:

- (i) The loss of some rural production land in favour of growth and development into urban residential and business uses. This can be justified as this land has been identified as Future Urban Zone for some time. It has also been identified for growth through the FULS. This is a planned loss.
- (ii) Loss of rural amenity from rezoning for residential purposes and future development.
- (iii) Displacement of existing communities over time, as rural environments are replaced by urban development.
- (iv) Potential loss of environmental values if development is not managed properly in terms of protecting those values.
- (v) Costs associated with provision of infrastructure to service the area. Development across the Plan Change area will need to cover the cost of the co-ordinated infrastructure to service it. Much of the core trunk infrastructure is identified for expenditure anyway.
- (vi) A very small area of the subject land is Class 3 soils as identified on the New Zealand Land Classification records. The land, however, is not subject to the National Policy Statement on Highly Productive Land because it is not land zoned Rural Production or Rural. It is Future Urban zoned land and therefore exempt.

The plan change sets out to manage costs where applicable. This can be achieved through the provision of infrastructure and a 'treatment train' approach to stormwater. In terms of the change of function of this land from rural to urban, the costs associated with this repurposed future for this land were effectively determined when the land was zoned Future Urban, i.e. the land for some time has been earmarked for an urban future rather than a rural future.

The costs and benefits of the different options were also assessed. This is summarised below:

(i) Strict alignment to the Structure Plan

The benefits of this scenario is that it has been through an approved public consultation process. It would promote changes which have been publicly tested.

The cost of this is that it leads to a reduced land efficiency because it does not maximise the land for housing. It would also run counter to the MDRS. As such, it would never succeed through the statutory process. This is a significantly high cost for significant expenditure of a plan change that was outside the framework of the Act.

(ii) Fewer zones focused on the lower density

There are few benefits from this option. There is a potential benefit from fewer houses and therefore a less requirement for infrastructure. However, the cost per house would actually increase because of inefficiency matters, although gross cost would be slightly lower.

The costs are significant and disproportionately high compared to the benefits.

- Low density housing in Warkworth South is a significant inefficient use of land which in the final analysis will increase pressure for further urban expansion in the rural area.
- Housing affordability would be compromised. Although overall infrastructure costs would be
 down, these costs would be spread across fewer homes which only increases the per dwelling
 contribution to infrastructure costs. These costs are obviously passed on to the resident and
 would negatively impact housing affordability.
- The low density housing would run counter to the MDRS provisions and ultimately the plan change would fail as it would be inconsistent with the Act.
- The two localised areas where particular constraints of access or servicing support a lower zoning, are zoned Residential - Large Lot.

(iii) More extensive medium density zoning

The benefits are:

- Greater land efficiency.
- Higher efficiency of infrastructure use leading to a marginal improvement in housing affordability as the infrastructure costs could be spread across more homes.

The costs would revolve around:

- Pushing medium density housing onto the ridgelines compromising the character of these
- Compromising some of the open space and spaciousness areas.

 The neighbourhood amenity would therefore be compromised as density was disproportionately favoured in terms of an imbalance between environmental, landscape, amenity and housing density objectives.

(iv) Plan change for the 'two principle' landowners only

The benefits of this are:

The landowners can commit to all associated urban development costs.

The level of information about these properties is more advanced than the peripheral land.
 Therefore the planning issues are clearly understood.

The costs are:

A lack of comprehensive planning and cohesion across the Warkworth South area.

It leaves an inefficient provision of infrastructure. The land is almost not big enough to fund the level of infrastructure required. Alternatively, infrastructure only sized for the landowners to be put in place would lose the opportunity of future proofing the Warkworth South development area. Eventually this would have a significant cost of infrastructural rework and duplication.

(v) Deferred zoning

The benefits of deferred zoning are:

Development timeframes could more closely align with the current stated Council programme.

 One sub-option is the matter is deferred long-term until such time as the Council is ready to promote a public plan change. Some would see benefit in a public versus private plan change.

The costs of this option are:

There would not be provision for housing and retail facilities into Warkworth South.

• The necessary infrastructure upgrades would be further deferred.

• If promoted as a public plan change, then the infrastructure costs would fall to public agencies as opposed to the private sector providing the necessary infrastructure into Warkworth South.

Certainty as to future zoning would remain in abeyance with a level of uncertainty.

(g) Risk

The key risks are:

- (i) The impact of urban growth on the environment, particularly the streams leading into the Mahurangi River. This will require successful mitigation of the effects of urban development, which the proposed objectives and policies seek to achieve.
- (ii) Delay in core infrastructure. The core infrastructure (potable water supply and wastewater treatment) which Waimanawa will utilise is already developed or committed. The Warkworth potable water supply has been upgraded already while work is now being undertaken with the new wastewater line to Snells Beach and the upgrading of the Snell's Beach wastewater treatment plant that will service Warkworth. If there is a risk, it only relates to the timing the new Snells Beach wastewater treatment solution which at this stage is timed to be operational by early 2025. This is a resource consent issue rather than a plan change issue, i.e. subdivision consents would only proceed if the required servicing infrastructure is guaranteed.

(h) Reasons for proposal

This plan change and the growth it will secure through the adoption of urban zones are advanced on the basis that:

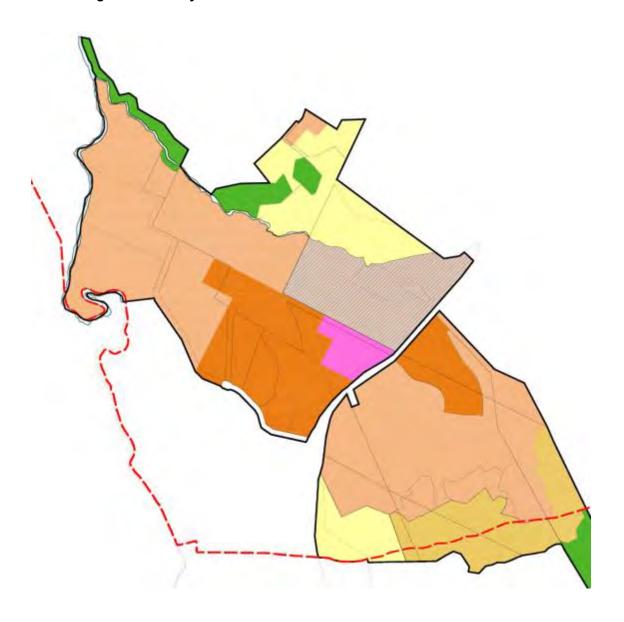
- It is consistent with, and a key part of delivering, the Council's core strategy documents including the Warkworth Structure Plan.
- The land is identified in the FULS for development in the current planning period with housing on stream between 2028 and 2032.
- The land is eminently suitable for urban development as identified through the Future Urban zoning process, the Structure Plan, and this plan change analysis.
- The zoning pattern and level of growth is consistent with the Structure Plan and provides the
 appropriate balance between achieving good environmental outcomes, efficient use of
 infrastructure, creating critical mass to support key community facilities and public transport, and
 providing for growth.
- The variety in the zoning pattern will create a range of different lifestyle choices which will help promote a diverse community.

Rural Urban Boundary (RUB)

(a) **Proposed amendment**

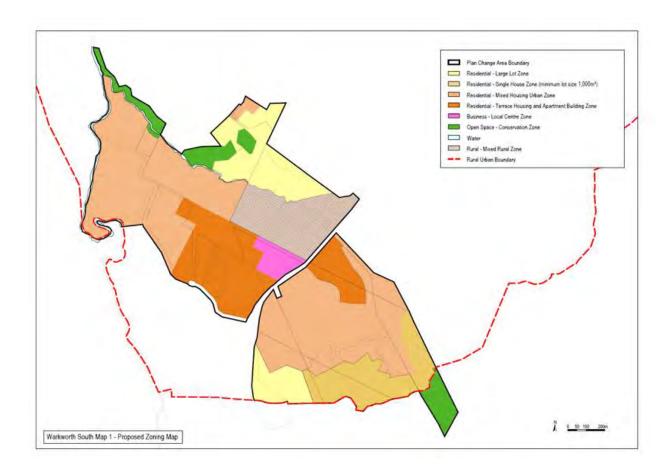
The proposal relocates the RUB in the southern portion of the precinct. The diagram below shows the existing location of the RUB. The RUB is the red dashed line on the plan. The land north of the dashed line is within the RUB. The land south is outside the RUB. This is a relatively small area of land proposed to be zoned single House but with a restricted density of 1 dwelling per 1,000m²

Existing RUB boundary



The proposed RUB location is shown on the diagram below. Essentially this impacts the southern boundary of the precinct. It will include all the residentially zoned land within the RUB. It essentially aligns to title boundaries

Proposed RUB boundary



(b) Provisions most appropriate way to achieve the objective

The technique of a RUB is a regionally important method to set the urban boundary for Auckland. It is appropriate that the RUB is used. It is the well proven existing method applied in the Unitary Plan.

(c) Options considered

There are essentially two options:

(a) to retain the RUB in the existing alignment; or

(b) to move the RUB in the southern area, to align with the property boundary (proposed alignment).

(d) Efficiency and effectiveness

Option (a) of leaving the RUB In its current location, is a less effective method. It looses the strict application of all residential zoning within the RUB. It results in residential zoning both north and south of the RUB location, albeit that part outside of the RUB is of a relatively low density.

The land between the current RUB boundary and the property boundary is appropriate for low density residential zoning for the reasons set out in the existing s32 report.

A key infrastructure for Warkworth South is the potable water reservoir. This is located outside the RUB but within the precinct boundary. It is logical this is recorded within the urban area.

It is logical that the RUB follows either cadastral boundaries or appropriate topographical feature. The current RUB boundary follows neither. It does not follow cadastral boundaries at all. In topographical features, it follows in part a ridgeline but then drops down three quarters of the way up the slope with no logical topographical feature.

Option (b) overcomes these deficiencies. The new proposed boundary follows the cadastral boundary, which is also the topographical feature of a major public native bush reserve. It is a logical boundary.

(e) Benefit, cost and effects

The benefit of option (a) is it preserves the current alignment.

The cost of option (a) is a theoretical small loss of potential rural land as it is now included within the urban area. However, this rezoning is already promoted through the plan change. The reality is that this is such a small sliver of rural land that it is not economic feasible for rural production. This loss of rural land will have negligible effect. By contrast, the benefit of a logical boundary far outweighs the cost.

The benefit of option (b) is it creates a logical boundary for the RUB. It aligns with the topography of the land, and the cadastral title boundaries.

The cost of option (b) is for the community needing to understand the consequence of a change in the RUB. There is also the minimal transactional cost in promoting this part of the plan change.

(f) Effects

The effects of option (a) is a slight increase in the urban area and a corresponding slight decrease in the rural area.

By contrast, the beneficial effects are that the RUB then follows a good logical boundary based on property boundaries and topography.

Option (a) gives a sensible logical urban boundary.

(g) Risk

There is minimal risk from this proposal. There is no ecological effect as the bush is protected and the new bush area within the plan change remains outside the RUB.

The land is not an economical use for rural activity, so there is no risk to economic demise or rural production.

The other technical assessments demonstrate there is no geotechnical or other ecological or landscape risk to this proposal.

(h) Reason for proposal

The RUB is moved to this location recognising this is the appropriate and logical alignment for the RUB. It aligns to cadastral boundaries and topographical features.

Precinct Provisions

(a) Proposed amendment

This plan change introduces a special precinct to this portion of Warkworth. It identifies a series of site specific controls including special provisions relating to:

- Identified intersections to be provided on to SH1 and other transport matters.
- The alignment and protection of the WWLR
- A special yard along the Avice Miller Reserve.
- A limitation on density on the northern and eastern escarpments
- Areas to be protected for landscape purposes.
- Stream and wetland protection.
- Creating a public transport interchange.
- Future proofing key infrastructure including water, stormwater and wastewater.

The specific provisions and the section 32 analysis relating to these provisions is addressed in the following paragraphs. This aspect of section 32 is simply an analysis of whether a special precinct for this area of land is appropriate having taken into account the tests of section 32.

(b) Provisions most appropriate way to achieve the objective

The proposed precinct introduces a number of site-specific provisions that are unique to this area of land within Warkworth. The method in the AUP to manage area specific controls is the Precinct Plan.

The controls reflect the approach identified through the Warkworth Structure Plan.

They act as a package. It gives an integrated and appropriate planning and environmental outcome for Warkworth that cannot be guaranteed if reliance was simply placed on resource consents under the underlying zoning and Auckland wide provisions.

Consequently, the conclusion of this section 32 analysis is that creating a precinct to deal in an integrated way with these area specific provisions is the most appropriate way to achieve the objectives of the AUP.

(c) Options considered

There are essentially two options. The first is to create a precinct. The second is to rely on the underlying zoning and Auckland wide provisions.

The broader section 32 analysis by Auckland Council for the AUP supports and identifies the range of core zonings and Unitary Plan provisions. These are relied on for a number of elements within the Waimanawa Precinct. However, there are a number of key areas that are unique to Warkworth South / Waimanawa that warrant particular regulatory oversight. These include:

- protecting the WWLR route;
- creating a public transport interchange for Warkworth South;
- protecting the northern road on the eastern side of SH1 to connect to the rest of Warkworth South;
- protecting ridgelines and managing density on ridgelines;
- provision for core infrastructure to service the whole of Warkworth South, particularly water and wastewater; and
- particular ecological protection of streams, wetlands and bush areas adjacent to the Avice Millar Reserve.

These matters can be specifically addressed and protected through a precinct approach to planning for this area.

The second option of 'no precinct' relies on individual resource consents to address these matters. While some could be addressed through a resource consent, a far more holistic planning approach is to address them comprehensively through a Precinct Plan. This enables protection of an integrated approach across the entire Waimanawa area, and is not subject to a series of independent resource consents which may not deliver the integrated nature of these key planning provisions.

(d) Efficiency and effectiveness

A precinct provision is an effective and efficient way to deal with area based controls. It is a well tested technique used extensively in the AUP. It is the preferred method of the Council to deal with new comprehensive greenfields developments (including for Warkworth) and means any targeted issues/effects can be effectively managed where the general provisions would not address them.

The alternate of not having a precinct detracts from the efficiency of the provisions. It relies on more matters being sorted out through the resource consent stage. It also does not enable the sophistication to deal with issues such as the density on the ridgeline. These protracted processes definitely work against the efficiency of the development of this land.

(e) Benefit, cost and effects

The benefits of a precinct are:

- (i) It identifies and delivers area specific planning outcomes for Warkworth South.
- (ii) It places a particular emphasis on land which will shortly be released for urban development.
- (iii) It better gives effect to the Warkworth Structure Plan than simply relying on the general provisions.
- (iv) It introduces a higher level of control into the plan appropriate to this particular location.

The benefits of simply relying on the underlying zoning and Auckland-wide provisions is that:

- These provisions are well known and tested.
- It offers a more simple regulatory process.

The costs of a new precinct are the costs associated with the community engagement in bringing down special precinct provisions. To an extent, this is already triggered by the rezoning plan change.

The costs of simply relying on the underlying zoning and Auckland wide rules is:

- The lack of sophistication in the provisions. Area specific matters are reduced to generic assessment criteria under the general provisions.
- It fails to give full effect to the key outcomes identified in the Warkworth Structure Plan.
- It leads to uncertainty in the future as to the form and nature of appropriate development.
- If matters are not resolved upfront through the precinct process, it relies more heavily on the resource
 consent process. This introduces uncertainty and cost to property owners when they are developing
 their own sites. This in turn will have a small but negative impact on housing affordability.

(f) Risk

There is little risk with introducing the precinct. Rather the risk is with not having a precinct and relying on the underlying plan provisions. That introduces the risk of uncertainty and a lack of certainty over the planning and environmental outcomes which underpin this plan change. These are the outcomes the community has ascribed to through support of the Structure Plan.

(g) Reasons for proposal

The precinct technique is advanced because:

- This is the most appropriate method to deliver the area specific provisions which are warranted for Warkworth South.
- There is an expectation by the community of key outcomes as part of the growth expansion of Warkworth. The only way to deliver this is through the precinct methodology.
- The planning importance of these area provisions warrant unique controls managed through the precinct methodology.

Landscape Provisions

(a) Proposed amendments

The identified landscape feature for this precinct is the ridgeline which straddles the RUB along the eastern boundary of the precinct, the northern escarpment which leads up to Mason Heights and the stream valley. It also relates to retaining the character of the Morrison Heritage Orchard. There are specific interrelated provisions which give effect to the landscape objectives for the precinct as follows:

- (i) The Large Lot Residential and Residential Single House zoning ensures low intensity of use on the northern and eastern boundary of the precinct which will assist in protecting the escarpment landforms.
- (ii) For Residential Single House zoned sites adjoining the RUB, a lower density unique to this precinct is created. This creates a minimum net site area of 1,000m² (compared to the standard 600m²). The limitation of one house per site remains.
- (iii) A special landscape yard is created along the northern boundary to buffer the Avice Millar reserve.
- (iv) Open Space Conservation zoning of a block of mature bush adjoining the Avice Millar reserve to, in a landscape sense, expand the character of this reserve.
- (v) Protection of the Mahurangi headwaters.

(vi) Protection of the streams and wetlands comprising the upper reaches of the Mahurangi River catchment.

Cumulatively, the controls have the effect of placing high recognition and high protection of the identified landscape character identified in the Structure Plan for this precinct.

(b) Provisions most appropriate way to achieve the objective

The Warkworth Structure Plan identifies the key outcome the Council is trying to achieve along this area. This is reflected in the precinct objective. It is to recognise the transition between urban Warkworth and the rural area at the RUB. It has several components, namely:

- Morrisons Orchard character protection.
- Avice Millar reserve protection, zoning expansion of the land to the north of the reserve so as to protect adjacent bush, yard buffer to reserve.
- Density control on the upper parts of the ridge.
- Open space identification.
- Stream protection.
- Protection of the bat flight corridor. While primarily for ecological reasons this has landscape impact.
- Protection of the northern escarpment.
- Greenway network.

(c) Options considered

The options considered were:

- (i) The current proposal of a mix of Large Lot Residential and MRZ with a special density control of 1:1,000.
- (ii) Retain the standard 1:600 density across all Single House zoned sites.
- (iii) Not allow development in this part of the precinct.
- (iv) Applying Large lot residential on the Waimanawa Hills steeper contoured land.

These options were evaluated. The conclusion of that analysis was that the current package of controls is the most appropriate way to achieve the balance between protecting the landscape character and providing for reasonable levels of growth.

(d) Efficiency and effectiveness

Because the controls are specifically targeted at those aspects that will have the greatest impact in terms of delivering the environmental outcome, they are the most effective way to achieve the objective. The controls break down the component parts into controlling the location and intensity of development along the ridgeline and in creating a landscaped backdrop along the ridge. The controls provide a highly efficient mechanism to achieve this. Because they are targeted, they are precise and understandable. The controls apply to that part of the precinct which is of the critical landscape character.

In terms of the alternate options of not allowing any development on the ridge area, or restricting it to Large Lot Residential, in both cases this leads to a significantly inefficient land use. Land that is suitable and capable for residential development, remains underutilised.

(e) Effects

Reset have undertaken a character and landscape assessment of the plan change area. This forms part of this plan change application.

That assessment informed a number of the provisions included as part of this plan change. This plan change:

- (i) Protects the key eastern ridge ensuring a reduced density of housing along the ridgeline.
- (ii) Protects the eastern escarpment with low density housing reflecting this land is not serviced.
- (iii) Provides a protection for the Avice Millar Reserve through setbacks, retaining this land outside the RUB, and including conservation zoning over an area of bush adjacent to the reserve.
- (iv) Provides ecological protection to the streams with extensive riparian yards throughout the plan change area.

These measures are given effect to through both the zoning, ecological protection, and the special rules on subdivision and development.

The landscape and planning assessment identified that the cumulative effect of all these provisions are such that there are either positive effects or any effects can be successfully controlled at resource consent stage relying on the provisions and assessment criteria within the plan change.

(f) Benefit and cost

Benefits of the current plan change:

- This plan change best provides an integrated package that achieves the objectives.
- The core ridges and streams are protected.
- The lower density ensures a spaciousness of sites along the rural urban fringe.
- The stream areas and riparian margins are protected. As well as ecological benefit, these obviously
 have a demonstrable landscape and amenity benefit.
- The correct balance is reached between environmental, landscape and urban design features and providing for housing opportunity.
- This maximises land efficiency without compromising environmental outcomes.

The costs of the current plan change provisions are:

 This does not result in the highest efficiency use of land. However it does reach the right balance between environmental outcomes and residential yield.

The benefits of retaining the standard RSH density are:

- It is a simple, well understood control.
- It is easy to administer.
- It does end up with a higher yield than the proposal.

The costs of applying the standard 1:600 density are:

A greater level of built form is enabled on the ridgelines to the detriment of landscape values. While this is only one cost element it is seen as a significant outcome in terms of the Structure Plan and the objectives of this plan change. Thus it overrides the benefits.

The benefit of not allowing any development in this part of the precinct are:

The landscape ridge is fully protected.

The costs are:

- The opportunity for housing development and yield is lost.
- This is a critical part of the site for the reservoir because it is the highest point of land within Warkworth South.
- Lack of yield ultimately has an impact on the efficient use of infrastructure which in turn has a
 negative impact on housing affordability. Infrastructure costs need to be spread across fewer sites.

The benefit and cost of the fourth option of the Large Lot Residential were really dictated by topography and the fact that this land is proposed in the Structure Plan to be unserviced and therefore suitable for Large Lot Residential. As such, there is no real practical alternative.

(g) Risk

If there are no controls then there is a risk that the landscape character of the ridgeline is diminished.

In other aspects there is little risk from this package of controls. They have been carefully refined as a package to deliver the outcomes without unduly compromising the growth objectives of the precinct.

(h) Reasons for proposal

This package of landscape character protecting provisions will best ensure:

- (i) The key landscape area, being the ridgelines and stream valleys form an important part of the character of Waimanawa. They are protected through these provisions.
- (ii) The special density controls create the right balance between ensuring reasonable yield to meet the growth objectives balanced against spaciousness to meet the character objectives.
- (iii) The landscaping control ensures the vegetated development of this ridgeline.

Ecological Provisions

(a) **Proposed amendment**

This plan change introduces particular provisions relating to terrestrial and stream ecology. A Precinct Plan (Precinct Plan 2) is introduced which identifies key streams and ecological areas to be protected. Assessment criteria on subdivision within the plan examine the extent to which these ecological areas are protected through any subdivision process and vested in the Council.

Reclamation of streams identified on Precinct Plan IXXX.9.2 are a non-complying activity.

The precinct provisions identify those parts of the ecology (stream and terrestrial) within the precinct area which are identified as being of high value. In this case particular provisions are applied to enhance the level of protection for these areas beyond those set out in the Auckland-wide provisions.

For areas to be of medium or low value, then the standard Auckland-wide provisions apply.

(b) Provisions most appropriate way to achieve the objective

The AUP has extensive provisions relating to the identification and protection of streams. The structure of this plan change is that these objectives, policies, provisions and assessment criteria apply, unless specifically modified within the precinct. In this case all the objectives and policies of the AUP apply including

Chapters E1, E3 and the relevant objectives and policies of B7. These general AUP provisions have already been through a section 32 analysis and found to be appropriate and will deliver the desired environmental outcomes.

This plan change adopts these provisions for Warkworth South. The only changes are to the process of assessing streams, and not environmental outcomes or considerations. The process change proposed is:

 For identified critical permanent streams, any modification or reclamation of the streams is a noncomplying activity.

Under the AUP the default provision in this case, modification or reclamation of other permanent or intermittent streams located across the Plan Change area would be a Discretionary Activity if outside an overlay or non-complying if identified on an overlay.

The plan change signals that the identified areas are expected to be retained in their natural state, and hence, the non-complying activity status is imposed.

An area of watercourse has been identified alongside the WWLR where the riparian yard can be reduced to a minimum of 4m. This reflects the constraints on providing for the WWLR along this section and it may be practical during the detailed design stage to provide for a wider riparian margin by incorporating the footpath and/or cycleway within a vegetated berm.

It is considered that this method best achieves the objectives. Key environmental features and locations are identified within the Precinct Plan. These are seen as particularly important and are protected. Other portions of the ecology of the area are subject to assessment under the precinct considering factors of ecology, growth, base flows and offset mitigation. In these other areas it leaves open the debate as to the balance between providing for a range of factors that must be weighed in enabling the development of an area.

The core environmental policy regime and rules as within the AUP, are retained. Primary streams within the precinct are identified. Appropriate activity classification, and the statutory process these trigger, are applied as non-complying activity consents.

(c) Options considered

There are three basic options:

- (a) To rely on the Auckland-wide provisions in full;
- (b) Provide particular and additional protection for high value stream and ecological areas; or
- (c) Protect all streams and terrestrial ecology.

(d) Efficiency and effectiveness

The purpose of these ecological provisions are to:

- Ensure the core ecological features on the site are fully protected.
- To identify those provisions which can rely on the underlying Unitary Plan provisions versus those which need specific controls.

This proposal identifies the underlying provisions as being appropriate to the significant majority of the precinct and the management of effects and environmental outcomes. The Council's existing published section 32 material outlines why these are effective controls and workable. Furthermore, they are underpinned and supported by the National Environmental Standard: Freshwater Management and have been well tested in practise in previous consents.

There are however unique features of this site due to it being the headwaters of the Mahurangi River and certain key ecological provisions including an important bat corridor.

So as to clearly inform the development of the land, it is important and appropriate that these particular provisions are clearly identified early in the land development process through this plan change provision. That is the most efficient way to ensure effective masterplanning and then subsequent development of the Warkworth South area.

The alternatives do provide a reasonable degree of protection. The Auckland-wide rules would obviously have generic protection but would not identify the bat corridor. Where they would lack efficiency is that there would not be the upfront understanding of the controls. That brings additional complexity, inefficiency at the resource consent stage. Significant masterplanning work could have been undertaken only to find that wrong assumptions were made about ecological outcomes on the land.

Similarly, a blanket protection of all controls is not efficient because it places a higher level of protection over features that are not warranted under the National Environmental Standard on Freshwater Management or the general AUP provisions.

(e) Benefit and cost

The benefits of this approach are:

- High value stream ecology is identified and protected.
- High value terrestrial ecology is protected.
- There is clear understanding for the planning and development of the land as to which areas need to be protected.
- Other medium and low value ecological areas are subject to resource consent assessment under the AUP provisions. This gives future flexibility as the appropriate balance is worked through as to the level of development.

The costs of this proposal is that the Council and community needs to engage upfront in determining which are the prime ecological areas on the land. This is assisted by the technical work done in support of this private plan change request.

The benefits of simply relying on the AUP provisions are:

- These have been tested through section 32 and through the AUP adoption process.
- The controls are understood and readily available to the public.

The costs are:

- The general provisions fail to give adequate protection to certain key ecological features.
- There is no generic protection of the bat corridor.
- There is a significant risk of rework or inefficient expenditure because significant land development is undertaken based on assumed ecological outcomes only to find that, at resource consent stage, redesign is necessary. This is the counterfactual of the benefit of identifying these key ecological features upfront and giving them high protection. Everybody then proceeds with development of land in the knowledge of these key features.

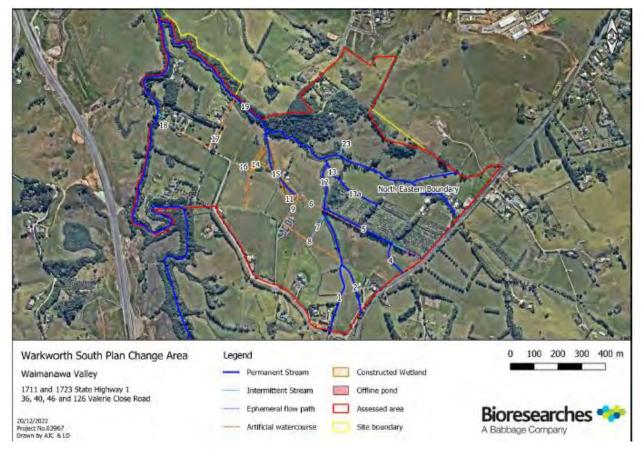
The benefit of protecting absolutely everything is that all ecological features, no matter how meritorious, are protected. It can be argued that that has some environmental benefits.

The costs are that the balance is lost between protecting key ecological features and providing for necessary growth within the area and other urban design outcomes. Part 2 of the Act is focused on achieving this balance. This option fails to deliver on that balance.

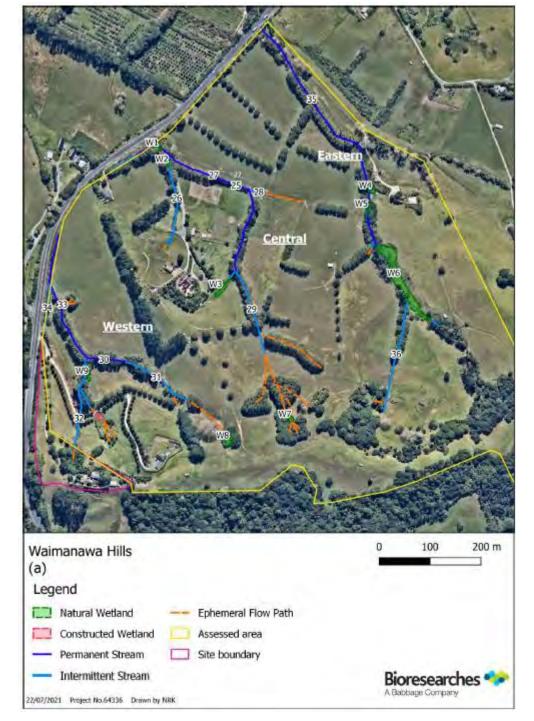
(f) Effects

The Baseline Ecology Assessment is included in this application. This covers the streams which traverse the site and the terrestrial ecology including established native bush in pockets within the site.

The diagrams below are an extract from the Baseline Ecology Assessment showing the existing streams and the status of those streams across Waimanawa Valley to the west of SH1, whilst the second diagram shows streams and the status of the streams in Waimanawa Heights to the east of SH1.



Streams located across Waimanawa Valley



Streams located across Waimanawa Hills

Bioresearches has undertaken a detailed onsite survey of the streams and bush areas. They have identified existing streams and classified them to permanent, intermittent and ephemeral and has also identified wetland and boggy habitat and some substantial areas of bush. Bioresearches has also assessed them in terms of their current value as high, medium or low.

The location of SH1 which dissects the Warkworth South Plan Change area has impacted the direction of a number of these streams. Auckland GIS Viewer (Geomaps) indicated several watercourses across the Plan Change Site. These were ground-truthed and classified during site visits. The Bioresearches Baseline Ecological Report confirms that the waterways are all tributaries of the Mahurangi River. The Mahurangi

River consists of two main branches, one branch flowing from near Pohuehue, south of the site, and the other branch flowing from the Waimanawa. Two of the sub tributaries / branches of the Waimanawa catchment converge near the north west corner of the site and then flow eastwards before discharging to the Mahurangi Harbour.

Precinct Plan 2 shows the stream overlay and how the ecological corridors or green fingers within the Precinct are protected.

Terrestrial Significant Ecological Areas are associated with the southwestern corner of Waimanawa Valley (SEA_T_2367) and the southern boundary of Waimanawa Hills (SEA_T_2378) and which are identified to be the highest areas of terrestrial ecological value across the Plan Change area.

In terms of the terrestrial vegetation values of Waimanawa Valley and Waimanawa Hills, the Baseline Ecological Report provides the following conclusions in this regard:

"The terrestrial ecology values of the Waimanawa Valley Block are associated with indigenous vegetation features in the SEA, regenerating kanuka forest, and the mixed native and exotic fragment. These vegetation features generally support diverse flora assemblages that are representative of the forest ecosystems that would have formerly covered the surrounding landscape. While only SEA 2367 is identified by the AUP as a mature forest ecosystem type ('critically endangered' Puriri Forest), the Kanuka forest and smaller fragment clearly support components of a kauri, podocarp, broadleaved forest type (Regionally Endangered, Singers et al. 2017). The kanuka forest appears to be transitioning to this forest type in parts, and the smaller block, which was formerly grazed underneath, supports mature components and is recovering with weedy and indigenous regeneration beneath the canopy".

and

"SEA_T-2378, which covers Avice Miller Scenic Reserve and crosses the southern boundary of the Waimanawa Hills (a) Block, is of Very High value. Indigenous species dominate this kauri, podocarp, broadleaved forest, including characteristic podocarp trees, kauri, rimu, totara and kahikatea. Puriri, taraire, rewarewa, tanekaha, nikau and mahoe also make up a relatively diverse indigenous community along the southern boundary edge. Kauri trees were the only 'threatened' species recorded, however, further survey may identify long tailed bats (roosting or using the edge as a fly way), given the close proximity to recent records. 'At risk' species are likely, including forest, elegant and pacific gecko, ornate skink and potentially the kauri snail, Parayphanta busbyi which is would represent the southern-most natural distribution limit for this species. The fragment as a whole, would also function as a relatively important link in an ecological corridor running east-west, to the south of Warkworth. Being relatively weed free, this SEA has a high level of integrity and would rank Very High (Table 3). Of note, is that some of the kauri trees at the SEA edge are in very poor condition. One such tree is identified on Tiaki Tamaki Makauru GIS maps as being "with infection other than kauri dieback".

The historic and present use of much of the precinct for grazing has resulted in the clearance of riparian vegetation, disturbance of channels and damage to streambanks and streambeds. A number of watercourses within the site have been modified to varying degrees and Bioresearches consider that they have limited character. The Baseline Ecological Report sets out a detailed analysis of each individual stream. On this matter the report states:

"Watercourses were classified under the Auckland Unitary Plan Operative in Part (AUP OP) to determine, in accordance with the definitions in these plans, the ephemeral, intermittent and permanent status of these watercourses. The majority of watercourses were initially classified during the November 2020 site visit to provide indicative watercourse extends and confirmed during subsequent site visits. During the site assessments, the presence, and extent of water was noted, reference photos were taken and freshwater habitats were marked using a handheld GPS unit. The quality of the aquatic habitat was assessed, noting ecological aspects such as channel modification, hydrological heterogeneity, riparian vegetation extent, substrate type and any fish or macroinvertebrate habitat observed. Riparian and catchment information was also reviewed".

"The current ecological values of freshwater ecosystems within the Waimanawa Valley and Waimanawa Hill Blocks were predominantly assessed as low, and ranged from negligible to moderate. The freshwater values within each site are summarised within Table 7 and Table 17. A detailed assessment of the freshwater constraints to development are within the Freshwater Constraints Analysis".

(g) Risk

- (a) That low value streams capable of being upgraded to high value streams are likely lost. That is a factor common across the region. The methods the Council has used with mitigation and offsetting creates a structured basis in which these matters can be evaluated and, if streams are lost, appropriate offsets provided.
- (b) That other urban objectives cannot be achieved due to the degree of ecological protection. In this case this plan change sets the appropriate balance. High value ecology is protected. The future development has been worked through to ensure it can fully accommodate this level of protection. This is embodied within the precinct.
- (c) The protected areas will subsequently be damaged. The plan change makes it clear that these areas will be protected through the subdivision process. The presumption is that these areas will vest in the Council on subdivision once the necessary mechanisms such as noxious weed removal and any necessary stabilisation is put in place along particularly the streams.

(h) Reasons for proposal

This approach identifies and protects the key ecological features of streams and terrestrial ecology, namely bush. It provides a clear framework for future development of the land.

Open space and walkway/cycleway network

(a) **Proposed amendment**

The Waimanawa masterplan places a strong emphasis on creating a walkable community. Precinct Plan 1 shows the greenway network which includes a walkway network within the precinct. The WWLR will be built with footpath and cycleway connections. Precinct Plan 4 shows the locations of the proposed areas of open space. Although it was originally intended to include Open Space – Informal Recreation and Open Space – Sports and Active Recreation Zones, Council Officers identified to the team that it was the preference of Council for these zones not to be included. This then provides more flexibility at the time of subdivision in determining the final open space layout and Council's requirements at that time.

(b) Provisions most appropriate way to achieve the objective

These provisions show the core network. It is more extensive than shown in the Warkworth Structure Plan but does include those parts of the walkway network that are shown within the Structure Plan and are within the precinct.

Including this sort of information within the precinct makes it clear to all property owners and the community where (indicatively) the network that will be created.

(c) Options considered

There are basically two options.

- (i) To not identify the open spaces and walkways within the precinct and rely on the standard Aucklandwide provisions and assessment at the time of resource consent; or
- (ii) To show the core network within the Precinct Plan (chosen option).

Option (i) introduces inefficiency and uncertainty. In the land development phase, it is unclear which land is needed for open space development. It means that significant work can done at the resource consent stage when it could be made clear now through the precinct provisions which are the key open space to be preserved and what is the network to be achieved. As it is the preference of Auckland Council for the Open Space areas not to be zoned, the inclusion of a Precinct Plan provides an alternative but more flexibility solution in terms of identifying the approximate location of future open spaces.

(d) Efficiency and effectiveness

Option (ii) of showing the core network within the Precinct Plan is seen as the most efficient and effective method. It is clear to all developers and future property owners as to the network implications. It also is helpful to the community to understand this approach, and to the Council in securing the broader network.

(e) Benefit and cost

The benefits of the Proposed Plan Change (Option (ii)) are:

- The indicative future open spaces and walkways are clearly identified.
- This brings certainty to development.
- It responds to the masterplan nature of the Waimanawa area.
- An integrated network is provided across multiple property owners ensuring that the end outcome is a comprehensive network of open space and walkways.
- The key additional bush area adjacent to Avis Miller Reserve is protected.

The costs are simply those associated with developing the open space and walkway network.

The cost of this are:

- Significant commitment of open space land for the area.
- A loss of flexibility in the future to respond to changing circumstances.
- What could be seen as a disproportionate requirement on particular property owners to provide open space network rather than a full sharing of this requirement.

The benefit of the alternative of not identifying the network is:

• Flexibility is retained through to resource consent stage.

The costs are:

- There is no certainty that a comprehensive integrated open space network can be delivered.
- Because the network will eventually cross multiple property boundaries, the network can be significantly compromised by landowners opting out of their commitment to form and open space network.
- There is huge uncertainty for property owners because they are not sure where the network goes and what they need to plan for in terms of future provision of open space and connections.

(f) Effects

The effects of this development are:

- (i) To create a network of open spaces and walkway which will complement and add to the broader Council open space and walkway programme for Warkworth. This will assist in both recreational leisure time activity and in connectivity between communities.
- (ii) Footpaths and on-road cycle routes are integrated within the road reserves to provide primary pedestrian and cycle access across the site. The routes are legible and offers direct connections to the local centre, public transport interchange and open spaces.
- (iii) The open spaces are interlinked and well connected with the proposed local centre and residential community through both on-road walking and cycling routes and off-road recreational paths.
- (iv) The walkways are targeted for the stream corridors. A series of shared pedestrian and cycle paths are generously provided alongside Mahurangi River and its tributaries. This adds significant amenity and pleasance. It does however impact the practicality of the formation of the walkways. Not all areas will have full mobility accessibility. There will always be alternate mobility locations particularly on street footpaths. However some of the areas will run up in stream valleys where a level of mobility will be necessary. The alternative is to take the walkways out of the stream location where a better topography can be created. This gives greater mobility opportunity, but it does detract from the amenity of walking through the stream environs.

(g) Risk

The most significant risk is how these walkways are protected. The divided land ownership is problematic and has the definite risk of variable maintenance approach.

The cooperating landowners' commitment and the requirements of this plan change is that these walkways and the associated streams be vested in the Council to form part of the broader Council network. That would happen on subdivision once all the physical works had been put in place.

(h) Reasons for proposal

This approach is the best way to ensure the future extension of the Warkworth walkway network.

Stormwater management

This plan change embodies all the Auckland-wide provisions of the AUP plus introduces two additional provisions.

The first is to apply the Stormwater Management Area Flow 1 ("**SMAF1**") to the entire precinct. This will mean that the onsite full detention and retention controls of the AUP will apply to all new development within

the precinct. The second is to identify the indicative location of key stormwater management ponds (shown on the masterplan).

(a) **Proposed amendment**

The Auckland-wide overlays are amended to include the plan change area within the SMAF1 controls.

Precinct Plan 2 outlines the indicative locations of a series of stormwater management ponds which form part of the treatment train process.

In this context it must be recognised that the Auckland-wide rules provide extensive objectives, policies, standards and assessment criteria relating to stormwater management. This is in terms of both quality, the quantum of stormwater particularly managing it at peak times, and sophisticated erosion and sediment control. All these provisions apply to the precinct.

(b) Provisions most appropriate way to achieve the objective

The SMAF1 provisions have been well tested as a methodology for managing stormwater in greenfields development. The objective and policy regime and the approach of the Auckland-wide provisions significant benefit from applying the SMAF1 controls. Detention and retention are a key part of managing stormwater quality.

The treatment train process set out in the Stormwater management plan relies on a series of initiatives, most of which are addressed appropriately under the Auckland-wide provisions. However, the stormwater management pond system is a key part of the treatment train. It is appropriate to provide indicative location for these facilities which reinforces the broader stormwater treatment train approach.

The analysis by Maven demonstrates this development can meet the conditions of consent for the Auckland Council global stormwater network discharge consent.

(c) Options considered

Essentially there are three options:

- (i) to rely solely on the Auckland-wide provisions;
- (ii) the approach set out within this plan change (chosen option); or
- (iii) to have full customised provisions.

The Auckland-wide provisions effectively, for greenfields development, work best if the SMAF1 controls apply. These provisions generally do not apply to the Future Urban zone but are rather assessed and

applied at the time of rezoning. It would be possible to control all stormwater in communal facilities such as stormwater ponds. However the volume of water coming off land and its adjacent location to the Mahurangi River tributaries means that the SMAF1 provisions and the location of the stormwater management ponds provide a much more certain outcome to the treatment train process.

The third option of customising all rules simply introduces a repetition into the document. It also means that the reliance and understandings which have been built upon the Auckland-wide provisions would not necessarily apply. It introduces an inherent inefficiency.

(d) Efficiency and effectiveness

The proposal put forward is the most effective and efficient way to manage stormwater. The introduction of the SMAF1 provisions incorporates the sophisticated control mechanisms on stormwater within the AUP into this precinct.

This is complemented by the identification of the stormwater management ponds within the treatment train process.

This finds the right balance between the integrity of relying on the underlying Auckland-wide provisions, while at the same time ensuring the full range of provisions apply over the precinct and that the important location of the stormwater management ponds are shown indicatively.

The option of having no SMAF control is discounted. This is simply seen as a fundamental requirement under the Resource Management Act and the AUP in this area (being the headwaters of the Mahurangi River). Such an option was simply seen as spurious.

The efficiency of simply relying on the underlying AUP provisions is largely what this plan change is doing. However, because the SMP identifies key particular areas, including the application of SMAF1 and certain stormwater management ponds as part of the treatment train device, then it is significantly more efficient and effective to identify these upfront than to make provision for them within the Precinct.

(e) Effects

Maven have provided advice on stormwater management (overland flow, flooding, riparian margins, stormwater reticulation and stormwater quality) which is set out within the Infrastructure Report included as part of this plan change request.

Overland flow paths

The site is affected by numerous overland flow paths, many of which will be modified or redirected as part of the future bulk earthworks to establish roads and building platforms. Resource consent will be required where the entry or exit point of an overland flow path is to be modified, however Maven has noted that for

the most part, the overland flow paths commence within the land meaning there will be no upstream flooding effects. Where possible, overland flow paths will be accommodated within the proposed road network.

Flooding

Maven has identified that there are known flooding issues downstream of the site, and as a result, attenuation of stormwater flows from 90th percentile flows will be required to restrict post-development runoff flow rates to pre-development levels in accordance with the SMAF 1 controls of the AUP. This requires hydrology mitigation in the form of retention and detention of runoff from urban development for the 90th percentile storm event in accordance with AUP E10.6.3. Maven confirms that extent of flooding is confined to the streams and riparian margins within the plan change area and immediately downstream. All future building platforms will be located outside the 100-year ARI modified floodplain.

Riparian margins and setbacks

The AUP requires that a 10m riparian yard be provided from the edge of permanent and intermittent streams. For streams with an average streambed width of 3m or more, a 20m wide esplanade reserve is required to be vested. These are identified in the Maven report.

Riparian margins carry the dual function of enhancing the amenity of an area while providing a stormwater function and addressing flood risk associated with the corridor.

The plan change does not propose to alter the AUP provisions as they relate to the streams on site except in respect to a length of watercourse along the WWLR where a reduced riparian yard is proposed, and it is anticipated that future development applications will need to address the relevant stream reclamation and riparian margin matters.

Stormwater reticulation

There is no existing reticulated stormwater network within the site. Stormwater disposal is to be provided via a new public stormwater network (to be vested to Council) with discharge points into the Mahurangi South tributaries on-site. The networks will be designed to convey the 10-year ARI event in accordance with Auckland Council's Stormwater Code of Practice.

The future network (including discharge or stormwater to the stream) will be subject to resource consent and engineering plan approval applications. It is envisaged that the stormwater discharge will align with the Auckland Council Comprehensive Network Discharge Consent.

Stormwater quality

Stormwater quality treatment is required for certain land uses as set out in Chapter E10 (Stormwater Quality – High contaminant generating car parks and high use roads). Treatment is required for high-use roads that see 5,000 vehicles per day, and for car parks that support 30+ parking spaces.

A range of initiatives and devices are available to both manage stormwater quality and quantity, including:

(a) A rule preventing high-contaminant roofing and cladding products, particularly untreated copper and zincalume. Only inert materials are allowed.

(b) Treatment for the catchment will be a variety of methods to create a treatment train approach. This could include detention and retention, rain gardens, swales, and stormwater ponds.

(c) Maximisation of natural or daylighted streams.

(d) Planting in the streams to add secondary stormwater treatment.

Consideration of additional treatments and the inclusion of water sensitive design parameters will be incorporated into the detailed design for future development of the land and be undertaken in accordance with GD01 and GD04.

(f) Benefit and cost

The benefits of the stormwater management method in the proposed plan are significant. A sophisticated stormwater management system is enabled. This is critical given the location in the headwaters of the Mahurangi River. SMAF is the primary control the Council relies on.

The approach does impose significant financial costs and site utilisation costs by requiring onsite detention and retention. However, this is warranted given the environmental benefits of a sophisticated stormwater management process.

The benefits of relying simply on the underlying plan provisions are:

It does not require any particular provisions within the plan change.

It is a well understood process.

The costs are:

 That the SMP already determines the key stormwater management features that should be within the precinct. It is significantly more efficient and cost-effective to identify these upfront to the benefit of all property owners.

• Because it is an integrated system crossing multiple title boundaries, if there are no precinct provisions, then there are potential environmental costs for failure to get an integrated treatment train system. That in turn puts additional financial cost on the developers who need to be fully self-sufficient in terms of stormwater management and cannot rely on a precinct-wide approach.

The benefit of a fully identified stormwater management process is that there is clear understanding upfront of the land development requirements.

The costs are:

- This requires two significant investments in stormwater engineering prior to understanding whether the provisions of the precinct and associated rezoning are successful.
- SMPs do evolve over time as new methods become available. The current provisions enable a higher degree of responsiveness. The introduction of, and then updating of, the NES:FW is a good example of why a degree of flexibility is beneficial. This is lost if the provisions in the precinct are too prescriptive.

(f) Risk

The risk of not importing the SMAF1 provisions is that water volumes during peak storm events could overwhelm the system. This in turn can lead to compromises in water quality through increased flows and greater issues with erosion and sediment control.

(g) Reasons for proposal

This proposal effectively imports and standard SMAF1 controls which are the proven method for managing stormwater in greenfields development. This is seen as the preferred approach for managing stormwater within the precinct.

Transport Provisions

(a) **Proposed amendment**

The Precinct Plan introduces four specific provisions. The first is to identify the WWLR as a limited access urban arterial. The second is to identify the locations for new intersections. The third is to identify collector roads. The fourth is to provide a road design and form function table.

(b) Provisions most appropriate way to achieve the objective

The development provided for by the plan change confirms the location and provision of the WWLR, which will form an integral part of the Warkworth arterial roading network and a link to any future southern interchange. Limited access restrictions and pedestrian connections are proposed along WWLR and SH1. The plan change also identifies the location of the collector roads within the precinct.

The primary source document for people seeking to develop their sites will be the AUP. It is unreasonable to expect future residents and developers to trawl through other documentation when clear provisions can be stated in the Precinct Plan referring to the limited access road nature. It is appropriate that this be made explicit within the Precinct Plan.

The WWLR must serve the adjacent residential neighbourhoods identified through the Future Urban zoning. Consequently, there needs to be identified intersections. Through the work leading up to this plan

change request, the landowners have had various individual discussions with Auckland Transport over the location of the primary SH1 intersection. The Precinct Plan identifies the supported location.

Identifying these within the Precinct Plan removes uncertainty as to where they will be and enables landowners to plan the development of their properties in the knowledge that certain forms of intersections can be constructed in identified locations.

(c) Options considered

There are essentially three options:

- (i) Show location of WWLR and intersections as proposed on the Precinct Plan.
- (ii) Show location of WWLR and collector roads as it is proposed in the Warkworth Structure Plan.
- (iii) Not show these provisions and rely on the underlying plan provisions to control the urban arterial nature, and the requirement to control access.

(d) Efficiency and effectiveness

The WWLR as shown on the conceptual masterplan (**Option (i)**) is located to the north of its indicative location on the Warkworth Structure Plan. With this Plan Change, the WWLR is proposed to form a crossroad intersection with SH1 and the collector road to the east of SH1. The feasibility of this alignment has been considered at a high level along with other options as part of the masterplan development.

A possible roading network is also indicative on the conceptual masterplan. The location and alignment of all indicative roads within the Waimanawa Valley and Waimanawa Hills areas have been designed to take account of topography and ecological features of the site as well as stormwater and geotechnical requirements and the alignment of the WWLR.

By contrast, the location of the WWLR as it is proposed in the Warkworth Structure Plan (**Option (ii)**) is some 300 metres south of the proposed WWLR in this plan change. It connects to SH1 in the vicinity of the northern Valerie Close intersection.

The southern boundary of the Warkworth FUZ is located on a bend in SH1 with limited forward visibility and within a northbound overtaking lane. It is expected that, to be effective in reducing speeds, the future urban 60km/h threshold of southern Warkworth could be no further south than the FUZ boundary, and it would require the shortening or removal of the northbound overtaking lane.

Option (ii) of the WWLR intersection with SH1 as proposed in the Structure Plan would be located some 550 metres to the north of the southern boundary of the Warkworth FUZ. This would give limited distance

for northbound traffic on SH1 to slow down and adjust their driving behaviour to suit an urban environment where they may encounter traffic slowing or stopped for the intersection.

By comparison, **Option (i)** of the new /WWLR/SH1 intersection proposed by this plan change is some 850 metres to the north of the southern boundary of the Warkworth FUZ. This extended urbanised lead-up is expected to provide a more appropriate distance for northbound traffic on SH1 to adjust their driving behaviour to expect traffic slowing or stopped for the intersection.

Option (iii) of simply not showing the WWLR/SH1 alignment and intersection leaves significant uncertainty and risk for both Auckland Transport, the Council and landowners. It means that detailed design has to be developed for resource consent purposes without any certainty as to where this location is. The Precinct Plan is the correct forum to reach agreement as to the location of the intersection. Detailed design of the intersection itself can follow at resource consent stage but the location of access to Waimanawa Valley and Waimanawa Hills is appropriately identified through the Precinct Plan.

The conclusion of Reset, TPC, Maven, Osborne Hay (North), and Tattico is that the location of the WWLR intersection as proposed in this plan change is preferred to the location of the WWLR intersection as indicated on the Warkworth Structure Plan. This is from a transportation engineering, urban design and planning perspective. In addition, it is far more efficient and effective to stipulate within the precinct the limited access nature of the WWLR and the location of the intersections.

The alignment of the WWLR still achieves the transportation purpose of this road but the alignment better reflects the local topography and fits comfortably within the proposed zone layout to provide for a more efficient route.

While indicative only, identifying transport connections on the conceptual masterplan helps parties understand the potential future development within the Plan Change area, providing certainty on land accessibility.

This gives very clear knowledge and certainty to all parties of the transport constraints including landowners, developers and future residents. It is clear and easy to find. Having reached agreement with Auckland Transport over the nature and operation of this road, it is logical to express this through the precinct provisions. The agreement referred to follows extensive consultation as part of the plan change process. The alignment particularly of the WWLR has been subject to detailed analysis in terms of transport, urban design, geotechnical and ecology. While Auckland Transport still wants to work through the details and undoubtedly will have detailed responses to this plan change request, there has been an acceptance that the applicants requested WWLR alignment is fully workable and is to be supported. There are qualifications from Auckland Transport around this particularly concerning the detailed setbacks from the streams and geotechnical requirements. However, these are matters that can be worked through in the plan change process and subsequent resource consents.

(e) Effects

The transport assessment by TPC is included within this application and focuses on:

- the WWLR;
- the ability for connections on to the WWLR in terms of the capacity of the road and trip generation from the development; and
- the local road network (including collector roads) within the neighbourhood and the improved connectivity to other modes such as public transport, walking and cycling.

The landowners acknowledge that the WWLR:

- will likely be a limited access urban arterial (the exact form and function of much of this road is still to be determined);
- may initially be built as a two-lane road on the southern side, although land procurement and bulk earthworks will be established for the final four-lane road;
- will require connecting landowners to agree the vesting of a four-lane road but design any connections on to the WWLR as either a two-lane road or four lane road; and
- will need to design for the access points, as identified on the Precinct Plan.

The key transport outcomes of the proposal are:

- Support towards the upgrading of the SH1 corridor to an urban arterial road along the frontage of the site:
- To support the WWLR including its alignment, as a vital link in the transport network for Warkworth South;
- Providing quality connected residential neighbourhoods to support the growth of Warkworth;
- Creating a network of walkways through the Plan Change Area with a series of roads and active mode routes; and
- Identifying key intersections to provide access to adjacent land for development.

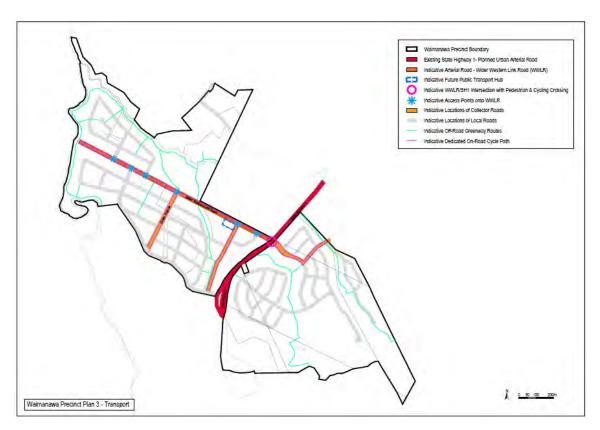
The proposed layout recognises the accessibility of the site to the future public transport network and employment areas.

The proposed WWLR provides a new north-south connection between Woodcocks Road in the north and SH1 in the south. It provides a strategic link through the south-western growth area and provides connectivity to and from the southern interchange if this is constructed in the future.

In response to this the Precinct Plan:

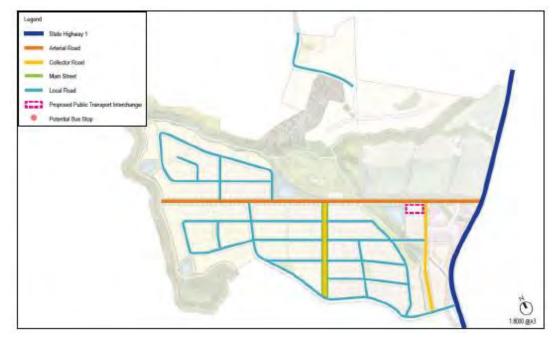
- Identifies the six intersection connections to the WWLR from the precinct (refer Diagram 20 below).
- Provides that all properties fronting the WWLR have access from local roads within the adjacent land or rear laneways, i.e. no property has vehicle access across the WWLR.

 Ensures properties front the WWLR for urban design reasons so they provide passive surveillance of the walkways and cycleways on the WWLR.



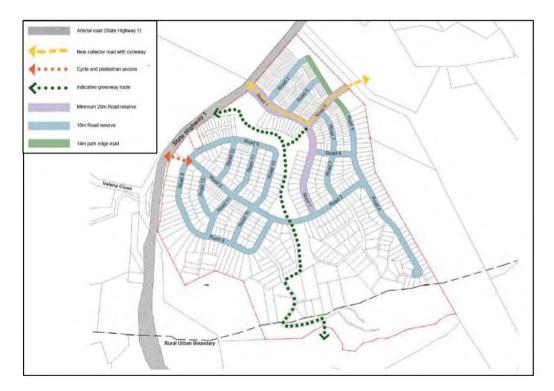
• Figure 11 – Proposed Precinct Plan - Transport

The Integrated Transport Assessment (Appendix 8) also comments on the local road network. Diagram 21 and 22 shows the roading hierarchy for Waimanawa Valley and Waimanawa Hills respectively. The masterplan for each area creates a core network of roads.



• Figure 12 – Road Hierarchy Waimanawa Valley

The most significant road within the Waimanawa Valley area is SH1, which currently forms the transport corridor through the Warkworth area connecting Auckland to northern New Zealand and Warkworth's arterial and collector roads. The WWLR is the primary road connection into the area, with core secondary roads forming two T-junctions with the southern side of the WWLR. A network of local roads connects to these primary/secondary roads both north and south of the WWLR.



• Figure 13 - Road Hierarchy Waimanawa Hills

The most significant road within the Waimanawa Hills area is Road 1 which is a secondary "Collector" type road with a primary function to transfer traffic from local roads onto arterial roads, in this case being SH1. There is opportunity for it to be extended from the northern boundary of the PCA once the adjacent Future Urban zoned land is developed. The balance of the masterplan involves a network of local roads that will provide access to most lots and deliver amenity and urban design outcomes.

The overall conclusion of the Integrated Transport Assessment is that:

- "The potential residential development and local centre for the site is feasible from a transportation perspective and has been anticipated in the future planning for Warkworth in the Warkworth Structure Plan and other strategic plans;
- The 2028 peak hour trip generation of the proposal is estimated to be 1,235 motor vehicle movements, 137 walking movements, 8 cycle movements and 3 public transport movements;
- With appropriate traffic management on SH1, the estimated trips generated by the proposal can be accommodated on the adjacent transport network while maintaining acceptable levels of safety and performance;
- Developers may be required to vest some additional land and upgrade road frontages and supporting infrastructure to enable SH1, Mason Heights and Valerie Close to be upgraded to

accommodate active modes and connect to the existing active mode network. This can be addressed through the relevant resource consent applications in accordance with the AUP rules for the respective zones proposed by the proposed plan change;

- The site will have a high level of accessibility to public transportation, walking, and cycling and the effects of private car travel from the development area will likely be reduced; and
- Any development enabled by the proposed plan change is consistent with and encourages key regional and district transport policies."

(f) Benefit and cost

The benefits of including these transport provisions in the Precinct Plan are:

- There is certainty to landowners, developers and future residents as to the lack of access to the WWLR for individual homes/properties and the identified location and nature of intersections.
- Given there is agreement as to the location of intersections, it is appropriate that these be identified within the Precinct Plan.
- The precinct provisions are written in such a way as to create a degree of flexibility so in the detailed design the matters can be worked through between the applicant and Auckland Transport.

The costs of doing this are:

- In the unexpected circumstance where the Auckland Transport wishes to relocate the intersections or allow access on to the WWLR, then there would be additional regulatory constraint and process to follow. However, this is an extremely low probability.
- There is a significant cost to developers in laying out a local roading pattern that will service all sections and mean none get access to the WWLR. However, this cost is incurred effectively through the decision of Auckland Transport on the WWLR coupled with the planning controls relating to access on to arterial roads.

The benefits of the WWLR in the Structure Plan are:

It is further removed from the stream.

The costs are:

- It splits the Waimanawa Valley in two by bisecting the community. The town centre would be on one side of the road and some residential with the rest of the residential on the other side.
- The contour of the Structure Plan route mean that there is significant cut and fill earthworks and retaining wall required. This adds physical construction cost but more importantly compounds the issues of dislocation of community.

The WWLR will be a strategic arterial regardless. This means no access from private sites. The
original route means that land both north and south would need to have rear laneway housing. This
doubling of the number of laneways cuts to land efficiency and physical development costs.

The option of not identifying the WWLR has no public benefit.

The cost of not identifying the route are:

- There is significant uncertainty as to where the route will go.
- There is the inability to secure and protect the route in the future. This would mean significant compulsory acquisition costs at some future date which, after housing was built, would make the route extremely expensive and disruptive to the community. This to the detriment of the Council, public and landowners.
- A lack of specificity over the route means that there can be no appropriate design and masterplanning for the alignment, to the significant detriment of property owners and the public.

(g) Risk

There is minimal risk in identifying the primary intersection on SH1 to give access to the WWLR. There now seems to be a consensus between Auckland Transport and the applicant's advisers as to the preferred location for this intersection. Matters of detailed design may refine the specifics of this to a small extent, but that can appropriately be dealt with at resource consent stage.

The risk is that some unknown fundamental reason occurs as to why the location needs to shift. The Precinct Plan identifies this as an indicative location. There is the necessary flexibility to respond in the unlikely event this risk occurs.

(h) Reasons for proposal

These transport provisions are included to create certainty as to where the intersections will be located in the development of this area of Warkworth South and the nature of these intersections (particularly the available turning movements). Essentially this gives effect to the various discussions between the cooperating landowners and Auckland Transport. It reflects the evidence presented on the WWLR requirement.

The explicit identification of the WWLR as a limited access future urban arterial reflects the decision on the WWLR requirement. It makes this explicit within the Precinct Plan. It is appropriate that with site area specific controls, these particular transport measures should be contained within the precinct provisions.

Local Centre

(a) **Proposed amendment**

This proposal is to rezone a small block of land as a Business – Local Centre. This is envisaged to provide local retail and servicing functions to the Warkworth South community. It will also provide a level of service to passing traffic on the WWLR.

(b) Provisions most appropriate way to achieve the objective

Objective B2.2.1(3) states "Sufficient development capacity and land supply is provided to accommodate residential, commercial, industrial growth, and social facilities to support growth." [emphasis added]

The Warkworth Structure Plan identified the desirability for a local centre in this general location to service this neighbourhood. It was positioned as a local centre so that it provides retail, food and beverage and local office support to the immediate community but is not of such a scale as to undermine or compete with the Warkworth Town Centre. This zoning delivers on that objective. Given the relatively small scale of the centre, it is appropriate to rely on the standard zoning provisions and associated objectives, policies and development controls of the local centre.

Part of this zoning also covers the location of the future public transport interchange.

(c) Options considered

There were three basic options.

- (i) Create a local centre but in the location shown on the Warkworth Structure Plan.
- (ii) Create a local centre in the position shown on this plan change request.
- (iii) Rely on the underlying provisions of the THAB zone which provides for dairies and food and beverage up to 100m² gross floor area.

(d) Efficiency and effectiveness

To service the community, the local centre needs to be viable. Therefore, it must be in a location where it can operate efficiently and effectively.

Option (i) of locating the centre where the Council originally envisaged, has some disadvantages in terms of access as outlined earlier. Under this scenario, the WWLR intersection would be located to the south of the Collector Road intersection. This arrangement hinders connectivity to the local centre and new public transport interchange for pedestrians, cyclists and vehicles coming from the eastern side of SH1. It also is inefficient having two intersections on SH1 within 225 metres of each other.

By contrast, **option** (ii) of aligning the proposed WWLR intersection with the Collector Road on the eastern side of SH1 is considered more advantageous from a traffic perspective. The location of the local centre proposed by the PPC at the cross junction of the WWLR intersection and the intersection of the Collector Road results in greater connectivity of the local centre. Integrating the two intersections avoids having to provide two separate intersections on SH1 within 225 metres of each other, improving efficiency of the network. The crossroad intersection will be designed so as to provide good direct access to and from the centre for both pedestrians and vehicles. The proposed location of the centre is more centrally located within the precinct area than its location in the Structure Plan, therefore better servicing the residential catchment, within 225 metres of each other.

The third alternative, **option (iii)** of relying on the THAB rules does not give certainty that this service will be provided. Relying on THAB zone means retail could be spread extensively through the neighbourhood – or not provided at all. By contrast a local centre relies on congregation of uses. While only a small scale local centre. The Warkworth South community will need shops, food and beverage greater than 100m² in size. A local centre is necessary. It also helps underpin local public transport priorities with the future public transport interchange co-located with the local centre.

(e) Benefit and cost

The benefits of this centre as proposed are:

- It provides a committed local centre with retail and food and beverage functions to service the community.
- The scale is such that it will not compete with the Warkworth Town Centre.
- The location is well placed in terms of traffic accessibility.
- Its location of the intersection gives good pedestrian connections.
- It is centrally located within the community.
- Provides for some employment opportunities within the Waimanawa community.
- Provides for a future public transport interchange.

The costs of this development are:

 There is a loss of housing. However, that is appropriate given the need to create an integrated community with a range of services including commercial services.

The benefit of creating this centre in the location shown on the Structure Plan are that it simply gives effect to the Structure Plan.

The costs are:

- The centre is on sloping ground making development more difficult.
- The centre is split from its catchment by the strategic arterial road of the WWLR.

The centre is much more difficult to access for residents in Waimanawa Hills.

The benefits of relying on the THAB zoning are that:

Where retail goes can be very flexible.

The cost of relying on the THAB zoning are:

- There is not enough critical mass to service the needs of the local community.
- It is far better to identify the location of the neighbourhood centre so that appropriate masterplanning can occur to facilitate this development.
- Local centres rely on an aggregation of retail and community facilities to service the neighbourhood.
 A THAB zoning does not deliver this.

(f) Effects

The relatively confined extent of zoning will ensure this location centre is supportive of the primacy of the town centre while still providing local services to the Waimanawa community.

The size of the centre and its zoning creates the appropriate balance between providing for services and yet ensuring that the scale is appropriate to Warkworth South.

The Warkworth Structure Plan identified the importance of this local centre to serve the community.

The effects of this proposal are therefore significantly beneficial. It provides a local centre of the scale proposed and acknowledged as being appropriate to service the community and yet not compete with the Warkworth Town Centre itself.

The effects of putting the centre in this location are also beneficial for the reasons outlined under the effective and efficiency section, i.e., the proposed location is far more advantageous from a traffic accessibility and connectivity standpoint, and there are beneficial effects and ease of pedestrian access to the centre which do not exist in the alternate location.

(g) Risk

There is a risk that the centre may not be viable and therefore not proceed.

The risk has been successfully managed. Getting the location correct where it can benefit and better service the community and passing traffic, increases the prospect of economic feasibility.

The second underpinning factor will be to ensure there is sufficient population within the catchment to service the centre. This precinct proposes a yield which would make this viable.

(h) Reasons for proposal

The local centre:

- Responds to the Warkworth Structure Plan's intention for there to be a local centre servicing this
 portion of Warkworth.
- Provides important services and support for the residential community.
- It is in a location which will maximise the prospect of economic feasibility.

Auckland-wide provisions relied on

(a) Other potential provisions

As part of the preparation for this plan change, a range of additional technical assessments were commissioned relating to:

- earthworks;
- geotechnical considerations;
- land contamination; and
- infrastructure.

A planning analysis was then undertaken to identify whether the effects and planning issues identified through the technical assessment are appropriately managed under the Auckland-wide provisions, or would require precinct specific provisions.

In the case of earthworks, geotechnical, land contamination and infrastructure, the conclusion reached is that the current Auckland-wide provisions fully address the relevant planning matters for the subject land.

Consequently no amendments are proposed for these particular matters. However, the precinct provisions import in full the Auckland-wide provisions. This means that the standard controls relating to:

- regional land disturbance;
- district land disturbance;
- subdivision;
- land contamination; and
- wastewater.

apply.

(b) Provisions most appropriate way to achieve the objective

The Council has carried out a detailed section 32 assessment as part of the AUP process. This has identified that the Auckland-wide provisions are the best method to achieve the objectives of the plan. There

are no precinct specific objectives or other planning factors which would lead to a different conclusion or warrant different provisions.

(c) Options considered

Theoretically, this proposal could have suggested bespoke provisions for the elements identified in (a) above, e.g. land disturbance, land contamination. The only reason to assess this would be for the purpose of completing this section 32 analysis. Rather this analysis relies on the Councils s32 analysis of these Auckland wide provisions.

It is clear that these additional options are unwarranted because the nature of the plan change provisions are characteristic of land throughout Auckland which the Auckland-wide provisions successfully manage.

(d) Efficiency and effectiveness

The Auckland-wide provisions have proved an efficient and effective method to control land development since 2015. Simple consistent application of provisions is the most efficient way to achieve the environmental outcomes.

To create bespoke provisions is highly inefficient. It introduces complexity and duplication into the plan. It does this for no material benefit.

(e) Benefit and cost

The benefits are:

- (iv) a consistent approach across the region;
- (v) a proven set of provisions which have been effective in managing the effects of development and delivering the desired environmental outcomes; and
- (vi) proven tested provisions.

The costs are minimal in that these provisions would apply regardless and would not be overruled by precinct provisions. As no additional provisions are warranted, there is no additional cost.

The existing section 32 material prepared by the Council for these Auckland-wide provisions equally applies here. This proposal relies on that Auckland-wide assessment.

There are no benefits either to the community to the environment in creating bespoke provisions where no such controls are warranted.

The costs are significant not only in duplication and complexity but in the cost of working these things through as part of this plan change provision and in the cost of landowners needing to deal with both bespoke provisions and Auckland-wide provisions.

(f) Effects

The technical reports forming part of this application have all assessed whether there are unique attributes in terms of the effects of earthworks, subdivision, land contamination, wastewater or general infrastructure that warrant special provisions. They have concluded that the Auckland-wide provisions are appropriate. Consequently, the effects can be all successfully managed under the Auckland-wide provisions. As stated, these provisions are well tested and have been applied to greenfields development extensively. They have proved appropriate to manage the effects.

(g) Risk

There are no or minimal risks with this approach given that the Auckland-wide provisions fully apply and have proved to be effective in delivering the environmental outcomes.

(h) Reasons for proposal

The existing provisions addressing land disturbance, land contamination, land stability and infrastructure related to subdivision will deliver the necessary planning and environmental outcomes. No additional provisions are required.

Notification

(a) **Proposed amendment**

The proposal includes a rule stating that the notification rules of the underlying zone apply in respect of applications for residential activities or for subdivision associated with an application for the construction and use of residential activities. Any other application for resource consent for an activity listed in Table IX.4.1 Activity table will be subject to the normal tests for notification under the relevant sections of the Act.

(b) **Provisions most appropriate**

This plan change, by the time it is effective, will have been through extensive consultation process involving the Warkworth Structure Plan, and then this plan change. Aspects subject to residential activities will have been well defined and the effects and implications clearly identified and appropriate assessment criteria introduced.

Ensuring the planning process is efficient for this class of activity is the best way to meet the objectives of the plan.

(c) Options considered

There are essentially two options. The first is the approach proposed within the plan change. The second is to default to the standard notification provisions of the Act.

(d) Efficiency and effectiveness

The standard practice in the AUP for precinct provisions is that restricted discretionary activities are made without notification. The safeguard of the 'special circumstance' exception provides a method by which if there is something unique about the proposal or site, then the Council has the right to notify any application.

By the time this plan change provisions have been through the statutory process, the restricted discretionary activity elements will have been well tested in the context of the specific location of the precinct.

This process provides the most effective way to deal with notification matters.

The option of simply relying on the default provisions for restricted discretionary activities, where matters could be notified, limited notified or non-notified, fails to take account of the detailed precinct provision analysis that has been done as part of this plan change request.

(e) Benefits

The benefits of the approach requested in the plan change is:

- A more straightforward process where the parameters of the notification assessment are clearly understood by the community, applicants and Council officers.
- It means that issues that have been worked through as part of this plan change process are not then needed to be revisited at resource consent stage (unless there are special circumstances).

There is a theoretical cost to the community if something abnormal comes up which would warrant a wider scrutiny through notification of a proposal. However, that would almost inevitably trigger 'special circumstances' where the Council has the right to publicly notify.

The benefit of the status quo standard Act provisions are:

It is a known process.

The costs are the duplication of effort as issues that are worked through and clearly resolved as part of the Precinct Plan provisions of this plan change are then repeated as part of the resource consent process.

(f) Effects

The effects of this proposal relate to process. Essentially identifying the appropriate controls through the plan change means that the effects are all subject to controls or appropriate assessment criteria. The effects are therefore all managed.

(g) Risk

There is minimal risk through this process. The 'special circumstances' provisions provides the safeguard for any abnormal circumstances or application.

(h) Reasons for proposal

This is the standard approach to dealing with notifications within precincts. It provides the most effective and efficient way to deal with the consenting process.

15. Consultation Outcomes

This section summarises the consultation undertaken on the proposed plan change up to mid-April 2023.

Mana Whenua

The Manuhiri Kaitiaki Charitable Trust (for Ngāti Manuhiri) was consulted at a very early stage in the preparation of the plan change both in terms of the possible name for this area (Waimanawa) and the proposed urban development of this area.

Subsequent to this, the Trust has prepared a CVA which has been addressed in Section Eight of this Report.

On the 30th of June 2022 an email introducing the Proposed Plan Change was sent to the following representatives of iwi identified by Auckland Council as having mana whenua status (in addition to Ngati Manuhiri):

- kaitiaki@ngaitaitamaki.iwi.nz
- office@ngatimaru.iwi.nz
- Taiao@ngatipaoaiwi.co.nz
- NPTB@ngatipaoatrustboard.co.nz
- taiao@ngatiteata.iwi.nz
- raukura@ngatiwai.iwi.nz
- hrenata@ngaatiwhanaunga.maori.nz
- mbaker@ngaatiwhanaunga.maori.nz
- tetaritaiao@kaiparamoana.com
- tokitaiao@ngatiwhatuaorakei.com
- tiaki@tekawerau.iwi.nz
- runanga@ngatiwhatua.iwi.nz

The following responses were received:

- Te Kawerau a Maki deferred to Ngāti Manuhiri
- Ngā Maunga Whakahii o Kaipara Development Trust deferred to Ngāti Manuhiri

This email was resent on the 27th of September 2022. As at 7 October 2022 no other responses had been received.

Rodney Local Board

An initial presentation on the proposed Plan change was given to the Rodney Local Board on the 19th of May 2021. This presentation introduced the then applicant, the plan change area and the vision for Waimanawa. Various questions were raised in respect to pedestrian and cycle connections and a recommendation made that the Matakana Coast Trails Trust was consulted (and this was subsequently undertaken).

During the presentation, a concern was raised by a Board Member that the development of Warkworth South was not intended until after the construction of the southern interchange. This view is not supported in either the Warkworth South Structure Plan or the FULS and it is unclear how this perception may have arisen particularly given there has been no commitment to construct the southern interchange to date.

A related concern raised was that the plan change was prior to when the FULS sought to have this area development ready. This is correct but the FULS remains a non-statutory document and has a guidance purpose only. Furthermore, the FULS has not been updated in recent years to reflect the NPS-UD or development which has occurred to date. In addition, with the upgrading of the Warkworth wastewater network underway, the planned opening of the Puhoi to Warkworth Motorway in 2023 and the intended infrastructure funding package by the applicants there are now no infrastructure provision constraints for the development of Waimanawa.

It was intended to update the Local Board in October 2021 and then in early 2022. Despite written requests to the Local Board to undertake the presentation (including an update on the infrastructure funding request and proposed infrastructure for Warkworth South), the Board declined the requests. Further input into the masterplan process and the preparation of the plan change from the Local Board has therefore not been possible.

Auckland Council

Planning and Urban Design

An initial meeting to introduce the plan change proposal was held with the relevant Council officers on the 4th of November 2020. This meeting covered the possible plan change area, the plan change philosophy in terms of the design and how it reflects the Warkworth Structure Plan and studies to be undertaken. Council Officers identified that the provision of infrastructure and the timing of this would be the key issue and confirmed that Council would be opposing private plan changes where infrastructure funding fell on Council. Council Officers also were of the opinion that the funding of social infrastructure (ie libraries) would also need to be included and the developers would need to undertake all roading development.

Council Officers also expressed the view that the plan change would need to take account of the housing being provided under the then Plan Changes 25 and 40 and the timing for that housing development (which had not been confirmed at that time).

A second meeting was held with the relevant Council Officers on the 25th of May 2021 to updated Council on the plan change development including the vision document and the proposed zoning layout. Council officers reiterated that infrastructure funding remained the key issue for Council. Having considered the Vision document and its alignment with the Warkworth Structure Plan, Council Officers considered that the main focus on discussions would need to be on the provision of infrastructure and funding of it.

It was confirmed by the plan change team that costings for the infrastructure and lot yields were being confirmed and that work was progressing on methods to fund this infrastructure. Once this had progressed further, then further meetings would be held with Council to confirm the approach being taken.

Although Council was to look at the zoning in further detail, no significant issues were immediately obvious, but Council would not want the local centre constructed as the final stage of the development of Waimanawa.

It was agreed that there would be one further meeting before a formal pre-application process was entered into.

Subsequent to this a further meeting was held on the 28th of June 2022 where Council Officers agreed to the proposal that the draft plan change documentation be lodged with Council as a "soft lodgement" to provide an opportunity for Council Officers to review and provide feedback prior to the plan change being finalised and formally lodged. The soft lodgement was progressed with feedback received from the Planning, Urban Design, Transportation, Māori Heritage, Contaminated Lands, Economics and Parks and Community Facility staff of Council as well as Healthy Waters and Auckland Transport. Approximately 200 questions were raised with the majority having been addressed in the final Plan Change or this report. The key issues raised were:

- Request to remove Open Space Zonings;
- Stronger and more detailed transportation objectives and policies;
- Identification of qualifying matters; and
- Alignment of wording of objectives with recent Plan Changes.

Healthy Waters

Maven liaised directly with Health Waters in respect to the stormwater modelling and the proposed stormwater train. It is understood that Health Waters is in support conceptually with the proposal but will provide a formal and detailed response at the time that the plan change is lodged. Healthy Waters responded to the soft lodgement and sought a number of clarifications to the stormwater report and modelling, and these have been addressed in the final report.

Supporting Growth Alliance (AT/AC/NZTA)

The three organisations asked to be consulted together given their related interests in this area. An initial meeting was held on the 18th of May 2021. The key outcomes were:

- Confirmation that the plan change would incorporate and provide for the WWLR. The indicative route shown was considered appropriate for further investigation.
- Confirmation that SH1 would revert to the control of Auckland Transport upon the opening of the Puhoi-Warkworth Motorway and would be an urban arterial. The plan change would need to take account of that.
- Confirmation that the speed environment on the SH1 into the southern approach for Warkworth would need to be reviewed and changed over time. This may require some physical works on SH1 when it becomes an urban arterial and potentially as part of the development of Waimanawa.

A number of subsequent meetings were held between the parties and Supporting Growth were provided the updated Masterplan and the proposed route of the WWLR along with supporting information for feedback. At a meeting on the 14th of April 2022, Supporting Growth advised that they could not provide feedback on the proposed WWLR rather any feedback would have to come from Auckland Transport and Auckland Council.

Auckland Transport provided on the 14th of April 2022 a plan showing an indicative WWLR route and their preferred position for the public transport interchange. The route provided by Auckland Transport differed from the WWLR route released by Supporting Growth on the 29th of April 2022 for public consultation. Supporting Growth subsequently confirmed that the route released by them was the preferred route and not that provided earlier by Auckland Transport.

A site meeting was held with Supporting Growth staff on the 18th of May 2022 to discuss the proposed WWLR cross-section (including riparian planting width) where the road is proposed to run alongside the watercourse adjoining the Morrison Orchard boundary. Supporting Growth staff advised at that meeting that the riparian planting width would need to be determined by Council and the proposed cross-section reduction (from 24m to 22m) would need to be discussed directly with Auckland Transport.

Consultation was then undertaken directly with Auckland Transport in respect to the reduced carriageway width for part of the WWLR. On the 20th of July 2022, Auckland Transport confirmed that this reduction would not be supported by Auckland Transport at this stage.

A site meeting was held with a representative of Auckland Council (Parks and Community Facilities) to discuss the proposed minimum riparian yard width along the WWLR. It was confirmed that as an esplanade reserve was not required along this section of the watercourse a reduction in the riparian yard could potentially be supported given the restraints. Possible options of integrating walkway and cycling provisions within the riparian margin along this part of the WWLR was raised as a matter which could be further explored with Auckland Council and Auckland Transport at the detailed design stage. The riparian yard, if

not incorporated into the road reserve, could be vested in Auckland Council either as open space or as part of a stormwater reserve.

A meeting with SG was held on the 1st of December 2022. At that meeting it was confirmed that SG remains supportive of the WWLR alignment proposed and is currently in the process of preparing the notices of requirements to designate the area required for the WWLR/SH1 Intersection and the WWLR to the west of the precinct. The WWLR/SH1 notice of requirement would provide a degree of flexibility in terms of design options and the minimum set back from the watercourse further to the west.

In March 2023, the applicant was made aware by residents that Supporting Growth had sent out to certain landowners plans showing the future indicative designation location for the WWLR. These plans were requested from Supporting Growth and supplied. Supporting Growth confirmed that the route of the WWLR through the Plan Change area was indicative only and Supporting Growth were only focussed on the location of the route at the western side of the Plan Change area where it crosses the watercourse and at the WWLR/SH1 intersection.

The proposed area to be designated at the western side of the Plan Change area aligns with the proposed WWLR alignment at this location in the Plan Change. The proposed area to be designated for the WWLR/SH1 intersection does not extend north enough to cover the full area required for the WWLR/SH1 intersection in the Plan Change. Supporting Growth would not release the reports they have prepared to support the proposed designation area and advised that the reports would not be made public until such time that the Notices of Requirements for the Designation was notified. It is therefore not possible to assess at this stage why the Supporting Growth proposed designation area does not extend to the north to cover the full area required for the WWLR/SH1 intersection.

Watercare Services Ltd

Maven liaised directly with Watercare Services Ltd in respect to the proposed wastewater and potable water infrastructure. It is understood that Watercare Services Ltd does not oppose the proposal and formal feedback is expected at the time of the lodgement of the Plan Change.

Ministry of Education

Prior to the plan change process being initiated, the Ministry of Education had been liaising with Mr Endean for a number of years on a possible primary school site on his land holdings. Various meetings have been held with Ministry of Education representatives. The representatives have confirmed that the Ministry remains very interested in establishing a new school in Waimanawa, potentially adjacent to or opposite the proposed recreational park.

The Ministry does not currently have the funding to undertake the site identification study or land acquisition. This funding is expected to be confirmed once the need for the new primary school is confirmed. The possible need to provide for a future school is reflected in the proposed Waimanawa Precinct Objective 7 and supporting Policy 2. The Ministry of Education in July 2022 confirmed that they support the wording of this objective and supporting policy.

Matakana Coast Trail Trust

A meeting was held on site (27 May 2021) with the representatives of the Matakana Coast Trail Trust. Although the exact route of the future cycle trail from Thompsons Road to the vicinity of the Honey Centre has not yet been confirmed, it is proposed to provide a connection to the Avice Miller Reserve. This could potentially be achieved through a connection through the eastern side of Waimanawa. This can be determined at a later date once the detailed design of the eastern side of Waimanawa is underway and the Trust has further refined its plans for this area.

The Trust was supportive of the green network and the provision of cycle/pedestrian connections through Waimanawa.

One Mahurangi

A meeting with held with a One Mahurangi representative on the 25th of May 2021 to discuss the roading layout. One Mahurangi supported the provision of the WWLR but considered it should be constructed to a four-lane standard. Although the plan change provides for it being constructed to a two - lane collector road standard, there is requirement that the width of land to be vested for the road is to be adequate for a future four - lane arterial road.

The location of the WWLR and SH1 intersection was supported.

Subsequent to this, regular updates were provided to the Infrastructure and Roading Forum hosted by One Mahurangi.

Adjoining Residents

A pop-in afternoon was held for adjoining residents on the 31st of July 2021 at the former Ransom Vineyard. Various plan change team members were present to answer questions and information was provided including the vision, the draft masterplan, the draft zoning layout and key points from the various draft specialist studies.

This pop-in afternoon provided an opportunity for adjoining residents to learn about the vision and plan change process and to provide their initial views. Subsequent to that meeting there has been further correspondence/questions from a couple of residents which have been responded to.

Generally, most residents were aware and accepting that the area was to be urbanised. A couple of residents expressed their thoughts that it was being undertaken earlier than they had anticipated. There was support for the Vision for Waimanawa and the Master Plan, although there were various questions on future roading connections and relationship with adjoining properties when they are developed (including future infrastructure connections).

A second pop-in afternoon for adjoining residents was held at the former Ransom Vineyard on the 9th of April 2022. An update on the findings of the studies and the plan change process was provided at that session. There was continuing support for the plan change.

Through the process, two adjoining landowners sought the inclusion of their land within the plan change area and this has been undertaken.

Mahurangi Sports Collective

An initial discussion has been held with a representative of the Mahurangi Sports Collective. The Collective seeks to be consulted further when the design of the recreational park progresses.

Landowners within the Plan Change Area

The landowners within the plan change area have been liaised with through the process by meetings, three pop-in afternoons, and email updates. Landowners have generally provided access for various specialists who required access to certain properties.

Landowners were supportive of the Vision. Feedback was received on earlier draft masterplans and as a result of that feedback, the roading network was refined and were certain zone boundaries.

The majority of landowners are very supportive of the plan change and have been identified as cooperating landowners. The ownership of one property off Valerie Close is currently in the process of changing and for that reason this property owner has not been identified as a cooperating landowner at this stage. The three property owners with access off Mason Heights have been less involved. One landowner is based overseas and there has been limited correspondence from them. One property is on the market and the current owner has a different development and zoning expectation than what is being proposed. The third property owner has taken a very limited interest and this property has limited development potential.

The owner of 1684A SH has requested very recently that their property be included as their Future Urban zoned land is on the edge of the RUB and would not comfortably sit with any other future plan changes. As a result of that the only other remaining lot within the RUB in this area, 1684 SH, has also now been included in the plan change. Both sites are proposed to be zoned Residential – Large Lot due to limitations with site access and the topography of both sites.

Warkworth Area Liaison Group

The applicants were invited by the Warkworth Area Liaison Group to present the Plan Change proposal at their meeting on the 5th of April 2023. The presentation covered the vision for the plan change area, the masterplan and the zoning and precinct plans. A small number of questions were raised in respect to the roading forms to be used, the upgrading of the current SH1, the route of the WWLR to the west and provision for medical services. Overall, the plan change was warmly received.

Key Consultation Outcomes

The consultation with various parties raised a number of valid issues which have subsequently been addressed in the plan change process. These are:

The plan change largely reflects the Warkworth Structure Plan. The alignment of the WWLR still achieves the transportation purpose of this road but the alignment better reflects the local topography

and fits comfortably within the proposed zone layout. A number of landowners have indicated their strong support for the WWLR alignment compared to the earlier proposed alignment by Supporting Growth (which is no longer being pursued by Supporting Growth).

- An infrastructure funding package is being developed. The required infrastructure for wastewater, potable water and stormwater will be provided for as part of the development of Waimanawa.
- The WWLR will be constructed to a collector road standard as part of the development of Waimanawa. The width of land vested is to allow for the future upgrading of the road to an arterial standard.
- 4 SH1 will be transformed to an urban arterial standard as part of the development of Waimanawa and this will include a pedestrian/cycle connection to the existing Warkworth pedestrian network.
- 5 The objectives and policies support the provision of social infrastructure including education facilities.
- Refinements to the key roading routes and zone boundaries have been undertaken through the process reflecting feedback received.

16. Conclusion

This proposed private plan change requests covers approximately 159 ha in the Warkworth South area. The plan change seeks to introduce two new precincts into the AUP. The precinct approach is consistent with the methodology that Council is continuing to adopt within the AUP for providing for area specific planning outcomes. The two proposed precincts are:

- The Waimanawa Precinct
- The Morrison Heritage Orchard Precinct.

The Waimanawa Precinct introduces a suite of open space and residential zones as well as a local centre zone and over time would allow for the development of approximately 1600 residential lots and apartment units.

The Morrison Heritage Orchard Precinct introduces a Rural – Mixed Rural zone and Residential – Large Lot zone over the existing Morrison Orchard to allow for its continued operation and expansion over time to allow for a limited number of uses so it becomes both a focus for Warkworth South and a local destination.

The plan change will generally give effect to the Warkworth Structure Plan as it relates to the Warkworth South area. The infrastructure package which is to be implemented will provide the key infrastructure required both for Waimanawa and also the future urban development of the remainder of the Warkworth South area.

In summary, the development provided for by the plan change would:

- (a) Provides for Morrison Orchard to continue to operate, expand and to develop a range of complementary activities so it becomes a focus for the future Warkworth South community and a local destination while recognising its historical past.
- (b) Provides for residential growth in Warkworth south, which reflects that Warkworth has been identified as a satellite town within Auckland and the Future Urban zoning currently applied to this area.
- (c) Create a range of residential zones consistent with the Structure Plan which in turn creates a diversity of housing choice.
- (d) Provides for a range of open spaces to provide for different recreational opportunities and the protection of existing vegetation including the extensive riparian margins along the upper reaches of the Mahurangi River.
- (e) Provide for water quality treatment for stormwater discharges into the upper reaches of the Mahurangi River.
- (f) Confirms the location and provision of the WWLR, which will form an integral part of the Warkworth arterial roading network and a link to any future southern interchange.

- (e) Provide for urban development in a manner which reflects the unique character of this valley and in particular by facing and respecting the upper reaches of the Mahurangi River.
- (f) Provide for a local centre in a location which will contribute to the southern entranceway to Warkworth, is easily accessible both to future Waimanawa residents but also to the future Warkworth South population and which will be close to any future public transport interchange for Warkworth South.

The section 32 analysis demonstrates that the objectives for both the Waimanawa and Morrison Heritage Orchard precincts are the most appropriate way to achieve the purpose of the Act. The supporting policies then rules and assessment criteria are then the most appropriate way to achieve these objectives.

The adoption of the plan change:

- (a) will assist the Council in achieving the purpose of the Act and the NPS-UD;
- (b) gives effect to the Auckland Regional Policy Statement and is consistent with the general provisions of the AUP;
- (c) accords with the purpose and principles of Part 2 of the Act;
- (d) is supported by necessary evaluations in accordance with sections 32 and 32AA Act; and
- (e) will help with the effective implementation of the AUP.

Appendix One: Landholding Details

Refer attached link.

Appendix Two: Urban Design Repot

As the first stage of the development of the Waimanawa Masterplan and the plan change a draft Vision Document was prepared and then refined through the process to reflect feedback, outcomes of various specialist studies and an increasing knowledge of the area and outcome objectives.

This Vision Document does not form part of the plan change and is provided as background information.

An indicative Masterplan has been developed showing how the Waimanawa area could be developed. This Masterplan confirms the indicative location of the collector and arterial roads roads and a possible local roading network.

The purpose of the Masterplan is to demonstrate how development could proceed under the Waimanawa Precinct. However, it is recognised that during the detailed design process the lot layout and location of local roads may be refined. This Masterplan therefore does not form part of the plan change but is provided to give an indication as to how Waimanawa may be developed.

Appendix Three: The Requested Plan Change

Refer attached link.

Appendix Four: **Visual and Landscape Assessment**

Refer attached link.

Appendix Five: Infrastructure Report

Refer attached link.

Appendix Six: Geotechnical Investigation Reports

Refer attached link.

Appendix Seven: Land Contamination Assessments

Refer attached link.

Appendix Eight: Integrated Transport Assessment

Refer attached link.

Appendix Nine: **Ecological Baseline Assessment**

Refer attached link.

Appendix Ten: Assessment of Economic Effects

Refer attached link.

Appendix Eleven: Archaeological Assessment

Refer attached link.

Appendix Twelve: Cultural Values Assessment

Refer attached link.

Appendix Thirteen: **Draft Stormwater Management Plan**

Refer attached link.

Appendix Fourteen: **Arboricultural Assessment**

Refer attached link.

Appendix Fifteen: Stormwater Modelling Report

Refer attached link.

Appendix Sixteen: Soil and Resource Report

Refer Attached Link.

325

Report Prepared By:

David Hay

Version: Final

Updated: 14 April 2023

Osborne Hay (North) Limited

PO Box 16

Warkworth 0941

Phone: 09 425-9844 Mobile: 027 425-0234

Phone: 0274 924 387

Tattico Limited PO Box 91562 Victoria Street Auckland 1142

John Duthie

This document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission.

326

APPENDIX 3

COUNCIL DECISION TO ACCEPT PPC93



Komiti mō te Whakarite Mahere, te Taiao, me ngā Papa Rēhia / Planning, Environment and Parks Committee

OPEN MINUTES

Minutes of a meeting of the Planning, Environment and Parks Committee held in the Reception Lounge, Auckland Town Hall, 301-305 Queen Street, Auckland on Thursday, 7 September 2023 at 10.03am.

TE HUNGA KUA TAE MAI | PRESENT

Chairperson
Deputy Chairperson
Members

Cr Richard Hills Cr Angela Dalton

IMSB Member Edward Ashby

Cr Andrew Baker Cr Josephine Bartley Cr Chris Darby Cr Julie Fairey

Cr Alf Filipaina, MNZM

Cr Lotu Fuli

Cr Shane Henderson

Cr Mike Lee Cr Kerrin Leoni

Cr Daniel Newman, JP

Cr Greg Sayers

0 ,

Deputy Mayor Desley Simpson, JP

Cr Sharon Stewart, QSM

Cr Ken Turner Cr Wayne Walker Cr John Watson

Cr Maurice Williamson

From 10.30am, Item 5.2

From 10.20am, Item 5.2 From 10.09am, Item 5.1 From 10.04am, Item 1

From 10.50am Item 8 Until 4.37pm, Item 17

In person and via electronic link

Via electronic link, until 4.36pm, Item 17 From 10.50am Item 8, until 5.59pm, Item C2

Via electronic link and in person

From 10.06am, Item 4

TE HUNGA KĀORE I TAE MAI | ABSENT

Members Cr Christine Fletcher

IMSB Member Hon Tau Henare

Mayor Wayne Brown

Planning, Environment and Parks Committee 07 September 2023



Resolution number PEPCC/2023/120

MOVED by Cr G Sayers, seconded by Cr A Baker:

That the Planning, Environment and Parks Committee:

- a) whakaae / agree not to reject the private plan change request by KA Waimanawa Limited Partnership and Stepping Towards Far Limited (included as Attachments A to C of the agenda report) under clause 25(4) of Schedule 1 of the Resource Management Act 1991, on the basis that:
 - i) the grounds to reject a private plan change request under clause 25(4) of Schedule 1 are limited and:
 - A) the request is not frivolous. The applicant has provided supporting technical information and the private plan change has a resource management purpose.
 - B) the request is not vexatious and the applicant is not acting in bad faith by lodging the private plan change request.
 - C) the substance of the request has not been considered and given effect to, or rejected, by the Council or the Environment Court. within the last two years.
 - D) having regard to relevant case law, at a coarse level of assessment, the requested plan change is not contrary to sound resource management practice.
 - E) a coarse-grain assessment does not indicate that the private plan change would make the Auckland Unitary Plan contrary to Part 5 of the Resource Management Act 1991.
 - F) the provisions of the Auckland Unitary Plan subject to the private plan change request have been operative for at least two years.
- b) whakaae / accept the private plan change request by the KA Waimanawa Limited Partnership and Stepping Towards Far Limited, included as Attachment A to C, pursuant to clause 25(2)(b) Schedule 1 Resource Management Act 1991, and having particular regard to the applicants section 32 evaluation report for the following reasons:
 - i) the applicant's section 32 evaluation report considers different options and concludes that the proposed rezoning of land along with the application of two precincts is the most appropriate way to achieve the purpose of the Resource Management Act 1991.
 - ii) accepting the private plan change request enables the matters raised by the private plan change request and the matters raised in the coarse level assessment to be considered in detail, during a public participatory planning process.
 - iii) it is inappropriate to adopt the private plan change. The private plan change proposal is not a matter under consideration in council's policy work programme. The private plan change does not address a gap in the Auckland Unitary Plan (Operative in Part) 2016, introduce a new policy direction, nor does the private plan change have broad application by seeking to change provisions that apply across the region. The proposed changes are specific to the site and their appropriateness requires a full and detailed assessment through the notification and submission process. The applicant did not request that the council adopt the private plan change request.



- it is not appropriate to deal with the private plan change as if it was a resource consent application because the extent of land covered, and the development processes involved in urbanisation at the scale proposed is well beyond the scope of a consentable resource consent application in the Future Urban Zone. A resource consent would also require considerably more detail which is not appropriate to require at this stage in the development of the affected land.
- v) the applicant requested that the council notify the private plan change request.
- c) tautapa / delegate authority to the Manager Regional, North, West and Islands Planning to undertake the required notification and other statutory processes associated with processing the private plan change request by the KA Waimanawa Limited Partnership and Stepping Towards Far Limited pursuant to Schedule 1 to the Resource Management Act 1991.
- d) tono / request staff to prepare a council submission on this Private Plan Change, particularly focusing on infrastructure requirements and funding, to be approved by the Chair, Deputy Chair and a member of the Independent Māori Statutory Board.

CARRIED

Attachments

A 7 September 2023, Planning, Environment and Parks Committee, Item 12 - Auckland Unitary Plan - consideration of a private plan change request under Clause 25, Schedule 1, Resource Management Act 1991- Warkworth South

13 Auckland Unitary Plan - Making operative Private Plan Change 84 - Omaha South

Resolution number PEPCC/2023/121

MOVED by Cr G Sayers, seconded by Deputy Mayor D Simpson:

That the Planning, Environment and Parks Committee:

- a) whakaae / approve Private Plan Change 84 to the Auckland Unitary Plan (Operative in Part) under clause 17 of Schedule 1 of the Resource Management Act 1991.
- b) tono / request staff to complete the necessary statutory processes to publicly notify the date on which Private Plan Change 84 becomes operative as soon as possible, in accordance with the requirements in clause 20(2) of Schedule 1 of the Resource Management Act 1991.

CARRIED

14 Auckland Unitary Plan and Hauraki Gulf Islands District Plan - Making operative Plan Change 71 and Plan Modification 14 - Removal of Car Parking Minimums

Resolution number PEPCC/2023/122

MOVED by Deputy Chairperson A Dalton, seconded by Cr L Fuli:

That the Planning, Environment and Parks Committee:

a) whakaae / approve Plan Change 71 to the Auckland Unitary Plan (Operative in Part) and Plan Modification 14 to the Hauraki Gulf and Islands District Plan under clause 17(1) of Schedule 1 of the Resource Management Act 1991.

APPENDIX 4

SUBMISSIONS AND FURTHER SUBMISSIONS

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Hugh Briggs

Date: Thursday, 2 November 2023 2:00:50 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Hugh Briggs

Organisation name:

Agent's full name: Hugh Briggs

Email address: hugh@briggs.kiwi

Contact phone number: 027 243 5301

Postal address: hugh@briggs.kiwi Snells Beach Auckland 0920

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

No specific rules but a general one on total Plan Change

Property address:

Map or maps:

Other provisions:

Timing of proposed development given the new Draft Future Development Strategy which delays the development of several Growth Areas around Warkworth

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

The recently amended Future Development Strategy proposes to delay by at least 10 years several of the Growth Areas, including Warkworth South, because of infrastructural and financial constraints.

The Plan Change developers propose to create the necessary infrastructure without the need for any Council funding, so that development can commence 2025. It will be necessary for Council to resolve this issue for this Plan Change and ensure that those services and roading can be development ready. At present this Change would be contrary to the FUD strategy.

I or we seek the following decision by council: Approve the plan change with the amendments I requested

1.1

Details of amendments: None specific, but general concern about timing.

Submission date: 2 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? Yes

Would you consider presenting a joint case at a hearing if others have made a similar submission? Yes

Declaration

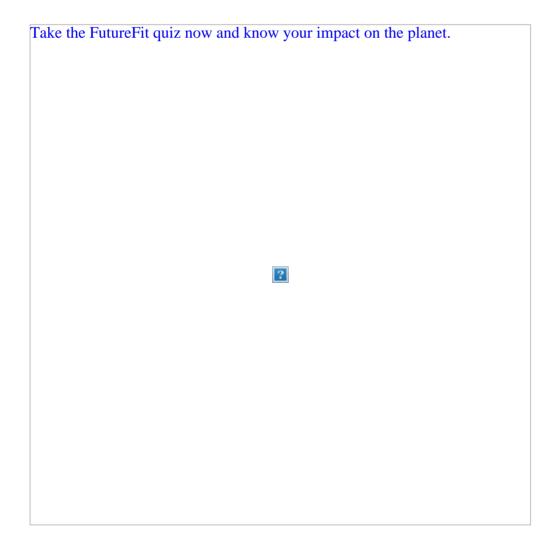
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or

attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

PROPOSED PLAN CHANGE – WARKWORTH SOUTH SUBMISSION

Introduction

My name is **Hugh Briggs**. I am a retired planning consultant with over 45 year's experience, much of which involved urban growth development planning.

I am Secretary of the Mahurangi Trails Society (MTS) and also the Northern Action Group (NAG), indicating my interest in development issues in the Warkworth region. I am also involved with Warkworth Area Liaison Group (WALG). I have written similar submissions on behalf of MTS and WALG/One Mahurangi. This one reflects my own professional opinion based on my relevant experience.

Summary

- I fully support the form of development as proposed in the Plan Change Precinct Plans and Zoning Map.
- The Plan Change is accompanied by a very comprehensive analysis of all planning, transport, design and environmental factors, reaching a logical and practical development solution for this sector of Warkworth township.
- I do not support the timetable for releasing land as indicated in the Council's recently amended Future Development Strategy (FDS). The proposed date for such release (2040-45+) is totally unrealistic, as the reason for making that decision was based on the difficulty Council faced in being able to fund and implement those services and roading upgrades.
- This development undertaken by the developers will enable the creation of new service infrastructure and upgrading of the existing main arterial as well as the proposed new link road without the need for any significant work involvement or funding by Council.
- It will enable the area to be serviced and developed earlier, enabling land being available to: meet housing demands for varied house types, improve roading access into and around Warkworth, create more and safer pedestrian and cycle routes in and around this part of

Warkworth, and create attractive reserve areas and open space linkages.

Analysis of Precinct Plans and Proposed Zoning Map

The Plan Change Zoning Map proposes using a range of residential zones (from the AUP), being Mixed Housing Urban, Terrace Housing and Apartments, Low Density and Large Lots zones. This is an appropriate zoning distribution to create a mix of housing types to meet the varying demands for such a mix in Warkworth.

However, the use of a high density zone in this "outer" area of Warkworth would compete with the need for such higher density developments closer to the town centre which would provide more support for retail activity.

The layout reflects the need to respect the varied landscape qualities. The areas are broken into smaller "cells" with the creation of the open space linkages along the streams and undulations. It also protects the bush and ecological areas and respects the amenity of the adjacent Morrison Heritage Orchard precinct by having a lower density along that boundary.

Roading Network and Upgrades

Residential Areas

The development area is "split" by SH1(A), and by a proposed Wider Western Link Road.

This development provides a very real opportunity for an upgrade of the existing section of SHI(A) in a coordinated manner by the developers without requiring significant work and funding contributions from Council. This upgrade would also include both pedestrian and cycle paths to be included.

It would also enable this section of the Wider Western Link Road to be built to the appropriate standard and on an alignment to be agreed by the developer and Auckland Transport.

Cycle and Pedestrian Links

The opening up of this area will enable the earlier building of key cycle tracks between this southern area and Warkworth centre and other new trails around the region.

The layout provides for dedicated on-road tracks enabling safer movement through the development. More importantly, it is creating offroad tracks through the area along the open space network. This will

provide attractive routes for the recreational cyclists, encouraging more people to be active.

Natural Environment and Open Space

The Precinct Plan layout recognises the value of the site's landscape with its creation of the open space linkages, and opportunities for people to move readily through the development area, as indicated above. They will also enable the protection of the biodiversity within these areas.

Development Issues

I do not agree with the Council's timetable for land release in the Warkworth area, as now indicated in its amended Future Development Strategy (FDS). It is proposing to defer all of the recognised growth areas by a considerable extension of time. In this case Warkworth South is proposed to be deferred until 2040-45.

This decision has been made based on Council's inability to implement the necessary upgrade or provision of new service infrastructure or new or upgraded roads, due to work and financial constraints.

In an ideal situation, Council would control the release of urban growth areas, having created the planning layouts themselves through detailed structure plans and zone changes, with the accompanying schedule of the necessary infrastructure. (This was achieved in other Councils when circumstances were easier, eg Manukau City in the 1970's).

Auckland Council does not have the planning resources to have achieved this, and is severely constrained financially to provide the service and roading infrastructure in the time required.

Development of such areas is necessary earlier rather than later to meet housing demand and to create much needed improvement to traffic movements through and within the township. The introduction of these Private Plan Changes does provide a realistic opportunity to develop these areas in a rational and cost effective fashion.

Conclusion

The development as proposed has considerable merit as an appropriate form of development, with some attractive landscape and environmental features, with a network of cycle ways and pedestrian linkages. The necessary infrastructure (services and roads) can be implemented without any significant reliance on Council funding. I would thus request that the Council approve this proposed Plan Change to be notified and progressed through the appropriate procedures.

Hugh Briggs (Retired Urban Planning Consultant)

PROPOSED PLAN CHANGE – WARKWORTH SOUTH SUBMISSION

Introduction

My name is **Hugh Briggs**. I am a retired planning consultant with over 45 year's experience, much of which involved urban growth development planning.

I am Secretary of the Mahurangi Trails Society (MTS) and also the Northern Action Group (NAG), indicating my interest in development issues in the Warkworth region. I am also involved with Warkworth Area Liaison Group (WALG). I have written similar submissions on behalf of MTS and WALG/One Mahurangi. This one reflects my own professional opinion based on my relevant experience.

Summary

- I fully support the form of development as proposed in the Plan Change Precinct Plans and Zoning Map.
- The Plan Change is accompanied by a very comprehensive analysis of all planning, transport, design and environmental factors, reaching a logical and practical development solution for this sector of Warkworth township.
- I do not support the timetable for releasing land as indicated in the Council's recently amended Future Development Strategy (FDS). The proposed date for such release (2040-45+) is totally unrealistic, as the reason for making that decision was based on the difficulty Council faced in being able to fund and implement those services and roading upgrades.
- This development undertaken by the developers will enable the creation of new service infrastructure and upgrading of the existing main arterial as well as the proposed new link road without the need for any significant work involvement or funding by Council.
- It will enable the area to be serviced and developed earlier, enabling land being available to: meet housing demands for varied house types, improve roading access into and around Warkworth, create more and safer pedestrian and cycle routes in and around this part of

Warkworth, and create attractive reserve areas and open space linkages.

Analysis of Precinct Plans and Proposed Zoning Map

Residential Areas

The Plan Change Zoning Map proposes using a range of residential zones (from the AUP), being Mixed Housing Urban, Terrace Housing and Apartments, Low Density and Large Lots zones. This is an appropriate zoning distribution to create a mix of housing types to meet the varying demands for such a mix in Warkworth.

However, the use of a high density zone in this "outer" area of Warkworth may compete to a limited extent with the need for such higher density developments closer to the town centre which would provide more support for retail activity.

The layout reflects the need to respect the varied landscape qualities. The areas are broken into smaller "cells" with the creation of the open space linkages along the streams and undulations. It also protects the bush and ecological areas and respects the amenity of the adjacent Morrison Heritage Orchard precinct by having a lower density along that boundary.

Roading Network and Upgrades

The development area is "split" by SH1(A), and by a proposed Wider Western Link Road.

This development provides a very real opportunity for an upgrade of the existing section of SHI(A) in a coordinated manner by the developers without requiring significant work and funding contributions from Council. This upgrade would also include both pedestrian and cycle paths to be included.

It would also enable this section of the Wider Western Link Road to be built to the appropriate standard and on an alignment to be agreed by the developer and Auckland Transport.

Cycle and Pedestrian Links

The opening up of this area will enable the earlier building of key cycle tracks between this southern area and Warkworth centre and other new trails around the region.

The layout provides for dedicated on-road tracks enabling safer movement through the development. More importantly, it is creating off-road tracks through the area along the open space network. This will

provide attractive routes for the recreational cyclists, encouraging more people to be active.

Natural Environment and Open Space

The Precinct Plan layout recognises the value of the site's landscape with its creation of the open space linkages, and opportunities for people to move readily through the development area, as indicated above. They will also enable the protection of the biodiversity within these areas.

Development Issues

I do not agree with the Council's timetable for land release in the Warkworth area, as now indicated in its amended Future Development Strategy (FDS). It is proposing to defer all of the recognised growth areas by a considerable extension of time. In this case Warkworth South is proposed to be deferred until 2040-45.

This decision has been made based on Council's inability to implement the necessary upgrade or provision of new service infrastructure or new or upgraded roads, due to work and financial constraints.

In an ideal situation, Council would control the release of urban growth areas, having created the planning layouts themselves through detailed structure plans and zone changes, with the accompanying schedule of the necessary infrastructure. (This was achieved in other Councils when circumstances were easier, eg Manukau City in the 1970's).

Auckland Council does not have the planning resources to have achieved this, and is severely constrained financially to provide the service and roading infrastructure in the time required.

Development of such areas is necessary earlier rather than later to meet housing demand and to create much needed improvement to traffic movements through and within the township. The introduction of these Private Plan Changes does provide a realistic opportunity to develop these areas in a rational and cost effective fashion.

Conclusion

The development as proposed has considerable merit as an appropriate form of development, with some attractive landscape and environmental features, with a network of cycle ways and pedestrian linkages. The necessary infrastructure (services and roads) can be implemented without any significant reliance on Council funding. I would thus request that the Council approve this proposed Plan Change to be notified and progressed through the appropriate procedures.

Hugh Briggs (Retired Urban Planning Consultant)

1.1

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - David Owen Morgan

Date: Friday, 3 November 2023 7:46:04 am

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: David Owen Morgan

Organisation name:

Agent's full name: Dave Morgan

Email address: oyster109@yahoo.com

Contact phone number:

Postal address: 8 Valerie Close Warkworth Auckland 0983

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Private plan change 93, Warkworth South

Property address:

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

I support the plan change in full, without any amendments.

I or we seek the following decision by council: Approve the plan change without any amendments

2.1

Details of amendments:

Submission date: 3 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

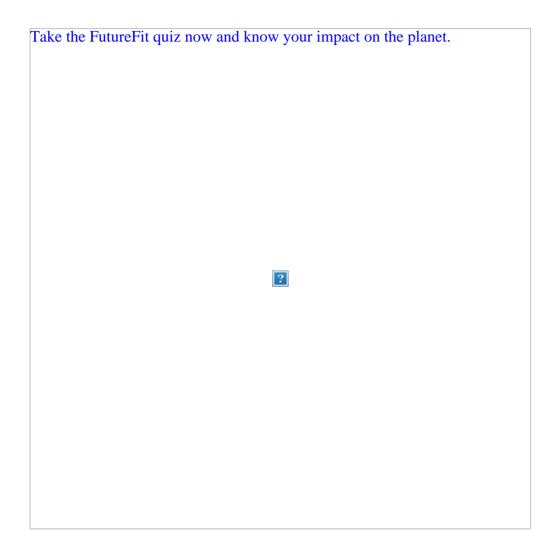
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz

Unitary Plan To:

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Dianne Lillian Morgan

Friday, 3 November 2023 8:31:07 am Date:

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Dianne Lillian Morgan

Organisation name:

Agent's full name:

Email address: musicmakerdiannem@gmail.com

Contact phone number:

Postal address:

28 Komokoriki Hill Road Makarau

RD1 Warkworth Auckland 0981

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Proposed Private Plan Change 93

Property address: 8 Valerie Close, Warkworth

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

I support the Proposed Plan Change 93 (Private) for Warkworth South to rezone land. The development will enhance the Warkworth area, which is popular and growing rapidly. The change will make possible additional, attractive housing in a beautiful setting close to Warkworth, as well as providing additional community areas, including the Waimanawa precinct and Morrison Heritage Orchards.

I or we seek the following decision by council: Approve the plan change without any amendments | 3.1

Details of amendments:

Submission date: 3 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

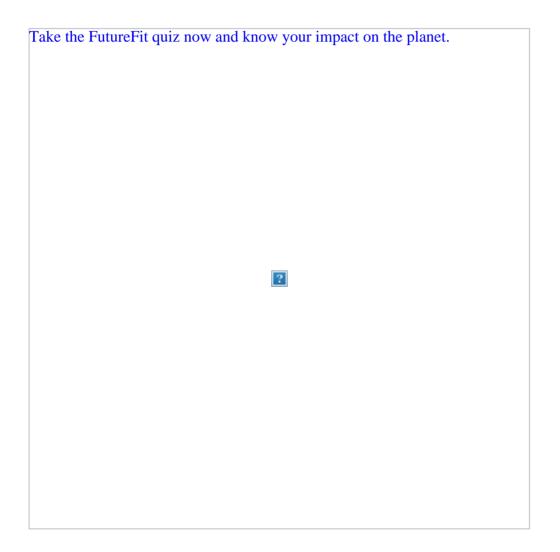
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Dominique Coote

Date: Saturday, 4 November 2023 3:15:37 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Dominique Coote

Organisation name:

Agent's full name:

Email address: dominiquecoote@outlook.com

Contact phone number:

Postal address:

Orewa

Auckland 0931

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

-

Property address: -

Map or maps: -

Other provisions:

-

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

The proposed plan with help with housing & transport.

I or we seek the following decision by council: Approve the plan change without any amendments

4.

Details of amendments:

Submission date: 4 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

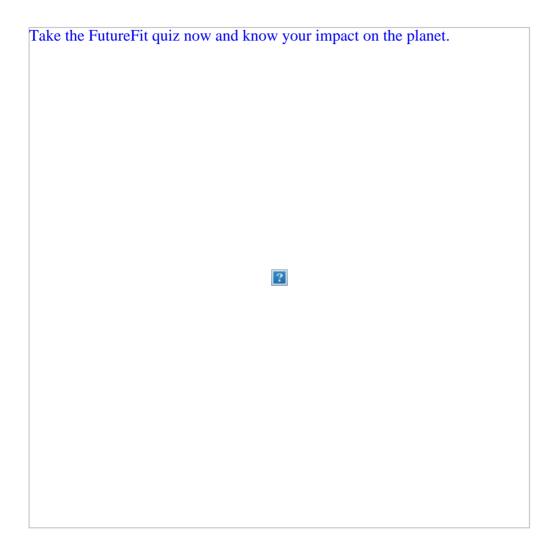
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Louisa Gowing

Date: Sunday, 5 November 2023 3:31:00 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Louisa Gowing

Organisation name:

Agent's full name:

Email address: jandlgowing@gmail.com

Contact phone number:

Postal address: 83 Valerie Close

Warkworth 0983

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Proposed plan change

Property address:

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

Warkworth is a growing town and needs the amenities that this plan covers. The recreation facilities by the river along with the market area, will make the subdivision a thriving and sort after area by new residents

The fact that they will be providing their own utilities which can then be joined into the Council infrastructure at a later date is a bonus.

I or we seek the following decision by council: Approve the plan change without any amendments

5.

Details of amendments:

Submission date: 5 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

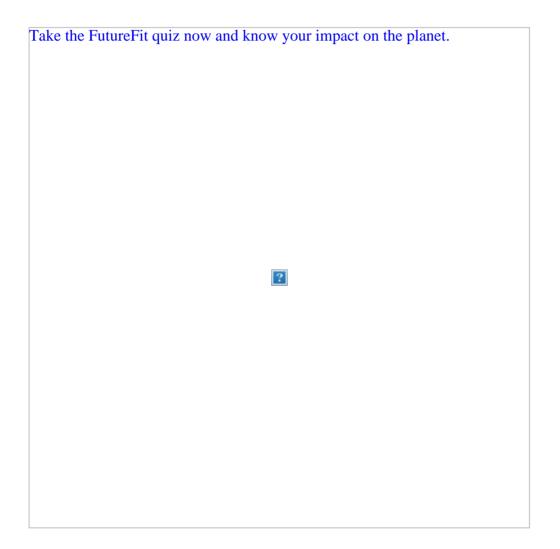
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Stanley Coote

Date: Sunday, 5 November 2023 9:16:04 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Stanley Coote

Organisation name:

Agent's full name:

Email address: stanleycoote@outlook.com

Contact phone number:

Postal address: 18 muncaster Rd Snells Beach Auckland 0942

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

-

Property address: -

Map or maps: -

Other provisions:

-

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

This proposed plan will help fix Warkworth's traffic issues and extend housing on the south side of Warkworth.

I or we seek the following decision by council: Approve the plan change without any amendments

6.

Details of amendments:

Submission date: 5 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

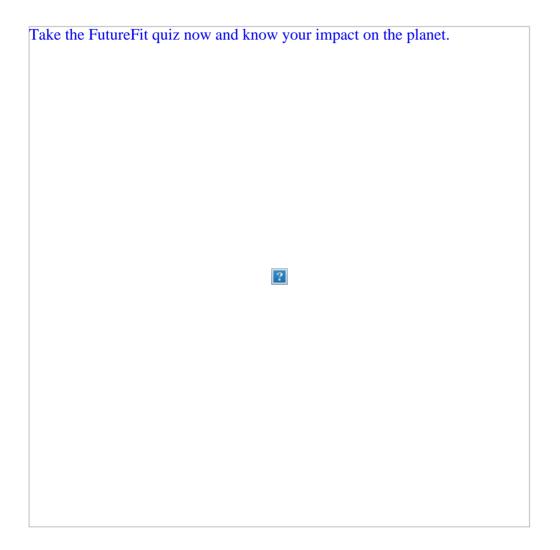
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: <u>Unitary Plan</u>

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Stephen Haycock

Date: Wednesday, 15 November 2023 2:00:17 pm
Attachments: Warkworth South submission from S Haycock.pdf

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Stephen Haycock

Organisation name:

Agent's full name:

Email address: steve@haycocks.nz

Contact phone number:

Postal address: 270 Falls Rd RD4 Warkworth Auckland 0984

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Property address:

Map or maps:

Other provisions:

My submission relates to the type of housing that is proposed and the layout of subdivision. I am also commenting on the timing of release of land for development by Council

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? Yes

The reason for my or our views are:

Council needs to release this land for development sooner rather than later as Warkworth needs quality properties for housing given the prospective population increases. This development would also give the Council the opportunity to get infrastructure provided by the developers rather than having to provide it themselves.

I or we seek the following decision by council: Approve the plan change with the amendments I requested

Details of amendments: Bring forward the land release date from that which Council has proposed in its recent amendment to the Future Development Strategy

Submission date: 15 November 2023

Supporting documents

Warkworth South submission from S Haycock.pdf

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

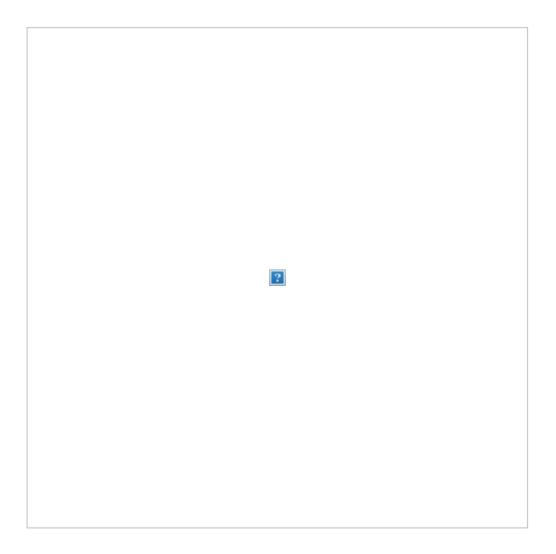
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with

our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

PROPOSED PLAN CHANGE – WARKWORTH SOUTH SUBMISSION

Introduction

My name is **Steve Haycock**. I am a retired builder. I try to involve myself positively in local affairs and am making this submission as a party interested in ensuring the future needs of Warkworth are adequately met through well planned and timely constructed subdivisions.

Summary

- I do not support the timetable for releasing land as indicated in the Council's recently amended Future Development Strategy (FDS). The proposed date for such release (2040-45+) is totally unrealistic, as the reason for making that decision was based on the difficulty Council faced in being able to fund and implement those services and roading upgrades.
- This development undertaken by the developers will enable the creation of new service infrastructure and upgrading of the existing main arterial as well as the proposed new link road without the need for any significant work involvement or funding by Council.
- It will enable the area to be serviced and developed earlier, enabling land being available to: meet housing demands for varied house types, improve roading access into and around Warkworth, create more and safer pedestrian and cycle routes in and around this part of Warkworth, and create attractive reserve areas and open space linkages.

Residential Areas

I like the mix of housing types that will meet the varying demands for such a mix in Warkworth. I also like that the subdivision design protects the bush and ecological areas and respects the amenity of the adjacent Morrison Heritage Orchard precinct by having a lower density along that boundary.

Roading Network and Upgrades

This development provides a very real opportunity for an upgrade of the existing section of SHI(A) in a coordinated manner by the developers

without requiring significant work and funding contributions from Council. This upgrade would also include both pedestrian and cycle paths to be included.

It would also enable this section of the Wider Western Link Road to be built to the appropriate standard and on an alignment to be agreed by the developer and Auckland Transport.

Cycle and Pedestrian Links

The opening up of this area will enable the earlier building of key cycle tracks between this southern area and Warkworth centre and other new trails around the region.

The layout provides for dedicated on-road tracks enabling safer movement through the development. More importantly, it is creating off-road tracks through the area along the open space network. This will provide attractive routes for the recreational cyclists, encouraging more people to be active.

Development Issues

I do not agree with the Council's timetable for land release in the Warkworth area, as now indicated in its amended Future Development Strategy (FDS). It is proposing to defer all of the recognised growth areas by a considerable extension of time. In this case Warkworth South is proposed to be deferred until 2040-45.

Development of subdivisions such as this is necessary earlier rather than later to meet housing demand and to create much needed improvement to traffic movements through and within the township.

The introduction of these Private Plan Changes does provide a realistic opportunity to develop these areas in a rational and cost effective fashion.

Conclusion

The development as proposed has considerable merit as an appropriate form of development, with some attractive landscape and environmental features, with a network of cycle ways and pedestrian linkages. The necessary infrastructure (services and roads) can be implemented without any significant reliance on Council funding.

I request that the Council approve this proposed Plan Change to be notified and progressed through the appropriate procedures.

PROPOSED PLAN CHANGE – WARKWORTH SOUTH SUBMISSION

Introduction

My name is **Hugh Briggs**. I am a retired planning consultant with over 45 year's experience, much of which involved urban growth development planning. I am making this submission on behalf of the Warkworth Area Liaison Group (WALG) and One Mahurangi, as I am involved with both these Groups.

Summary

- WALG and One Mahurangi fully support the form of development as proposed in the Plan Change Precinct Plans and Zoning Map.
- The Plan Change is accompanied by a very comprehensive analysis of all planning, transport, design and environmental factors, reaching a logical and practical development solution for this sector of Warkworth township.
- WALG and One Mahurangi do not support the timetable for releasing land as indicated in the Council's recently amended Future Development Strategy (FDS). The proposed date for such release (2040-45+) is totally unrealistic, as the reason for making that decision was based on the difficulty Council faced in being able to fund and implement those services and roading upgrades.
- This development undertaken by the developers will enable the creation of new service infrastructure and upgrading of the existing main arterial as well as the proposed new link road without the need for any significant work involvement or funding by Council.
- It will enable the area to be serviced and developed earlier, enabling land being available to: meet housing demands for varied house types, improve roading access into and around Warkworth, create more and safer pedestrian and cycle routes in and around this part of Warkworth, and create attractive reserve areas and open space linkages.

359

Analysis of Precinct Plans and Proposed Zoning Map Residential Areas

The Plan Change Zoning Map proposes using a range of residential zones (from the AUP), being Mixed Housing Urban, Terrace Housing and Apartments, Low Density and Large Lots zones. This is considered to be the most appropriate zoning distribution to create a mix of housing types to meet the varying demands for such a mix in Warkworth.

The layout reflects the need to respect the varied landscape qualities. The areas are broken into smaller "cells" with the creation of the open space linkages along the streams and undulations. It also protects the bush and ecological areas and respects the amenity of the adjacent Morrison Heritage Orchard precinct by having a lower density along that boundary.

Roading Network and Upgrades

The development area is "split" by SH1(A), and by a proposed Wider Western Link Road.

This development provides a very real opportunity for an upgrade of the existing section of SHI(A) in a coordinated manner by the developers without requiring significant work and funding contributions from Council. This upgrade would also include both pedestrian and cycle paths to be included.

It would also enable this section of the Wider Western Link Road to be built to the appropriate standard and on an alignment to be agreed by the developer and Auckland Transport.

Cycle and Pedestrian Links

The opening up of this area will enable the earlier building of key cycle tracks between this southern area and Warkworth centre and other new trails around the region.

The layout provides for dedicated on-road tracks enabling safer movement through the development. More importantly, it is creating off-road tracks through the area along the open space network. This will provide attractive routes for the recreational cyclists, encouraging more people to be active.

Natural Environment and Open Space

The Precinct Plan layout recognises the value of the site's landscape with its creation of the open space linkages, and opportunities for people to move readily through the development area, as indicated above. They will also enable the protection of the biodiversity within these areas.

Development Issues

WALG and One Mahurangi do not agree with the Council's timetable for land release in the Warkworth area, as now indicated in its amended Future Development Strategy (FDS). It is proposing to defer all of the recognised growth areas by a considerable extension of time. In this case Warkworth South is proposed to be deferred until 2040-45.

This decision has been made based on Council's inability to implement the necessary upgrade or provision of new service infrastructure or new or upgraded roads, due to work and financial constraints.

In an ideal situation, Council would control the release of urban growth areas, having created the planning layouts themselves through detailed structure plans and zone changes, with the accompanying schedule of the necessary infrastructure. (This was achieved in other Councils when circumstances were easier, eg Manukau City in the 1970's).

Auckland Council does not have the planning resources to have achieved this, and is severely constrained financially to provide the service and roading infrastructure in the time required.

Development of such areas is necessary earlier rather than later to meet housing demand and to create much needed improvement to traffic movements through and within the township.

The introduction of these Private Plan Changes does provide a realistic opportunity to develop these areas in a rational and cost effective fashion.

Conclusion

The development as proposed has considerable merit as an appropriate form of development, with some attractive landscape and environmental features, with a network of cycle ways and pedestrian linkages. The necessary infrastructure (services and roads) can be implemented without any significant reliance on Council funding.

WALG and One Mahurangi would thus request that the Council approve this proposed Plan Change to be notified and progressed through the appropriate procedures. 8.1

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Paula Christine Anderson

Date: Monday, 20 November 2023 6:45:58 am

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Paula Christine Anderson

Organisation name:

Agent's full name: Paula Christine Anderson

Email address: piindibolli@gmail.com

Contact phone number:

Postal address: 63 Perry Road

Warkworth 0983

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Property address:

Map or maps:

Other provisions:

The "six goals to achieve" the applicants's "vision" as provided on page 39 of the application are disengenuous and misleading.

Do you support or oppose the provisions you have specified? I or we oppose the specific provisions identified

Do you wish to have the provisions you have identified above amended? Yes

The reason for my or our views are:

The plan change application fails to address and/or diminishes the adverse effects upon the natural environment of crowding into a relatively small area of what is currently farm land and treed areas so many structures and paved areas. The number of buildings and streets and footpaths will result in an over-crowded area of land which is currently part of the essential "breathing space" for Warkworth and its inhabitants. I have an intimate knowledge of the subject area. The lower soils are rich and rain water drains down into the lower areas and then drains to the Mahurangi river. Covering the soil areas which are currently grassed will result in water volume and velocity problems. Pollutants from human habitats will be greatly increased and will enter the water habitats. Areas with rich soils should be preserved and planted with trees and not covered in impenetrable materials. Additionally, the utilities in the area are of a quality and supply that current residents have to live with unacceptable daily challenges to quality of life - for example, an inability to find a job in the local area, inability to receive consistent electricity supply, inability to obtain a land line

telephone connection, inability to obtain a doctor's visit within 3 weeks or more of requesting an appointment, inability to enrol a new student in the local school, inability, in summertime and during national holidays, to drive to local shops and businesses without encountering unacceptable levels of traffic congestion. According to an article in the Mahurangi Matters publication of February 20, 2023, it is contemplated that a further approximately "7500 additional dwellings" are expected to be built in the areas of land around Warkworth which are being contemplated for future urban development. The proposal by Waimanawa is for approximately one quarter of that number to be crammed into a relatively small area of land. Some of the buildings will be multi-storey. It would result in an inappropriate, intensive, human habitat which will resemble a modern ghetto with no meaningful protection of the current environment.

I or we seek the following decision by council: Decline the plan change 9.1

Submission date: 20 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

Yes

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.

CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Maria Collins

Date: Monday, 20 November 2023 3:31:09 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Maria Collins

Organisation name:

Agent's full name:

Email address: maria.collins@harbourhospice.org.nz

Contact phone number:

Postal address: 47 Glenmore Drive Warkworth Auckland 0901

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Property address: 32 Glenmore Drive and 47 Morrison Drive

Map or maps:

Other provisions:

The traffic would affect the people who use Tui House, Harbour Hospice, the traffic needs to continue on the old state highway one.

Do you support or oppose the provisions you have specified? I or we oppose the specific provisions identified

Do you wish to have the provisions you have identified above amended? Yes

The reason for my or our views are:

The traffic would create a lot of congestion and noise.

It will have an effect on the people who use Tui House Harbour Hospice.

There are many people who utilise our services 5 days a week, with the District Nurses and Hospice Nurses needing to be able to easily access Tui House on the weekends as well.

I or we seek the following decision by council: Decline the plan change 10.1

Submission date: 20 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

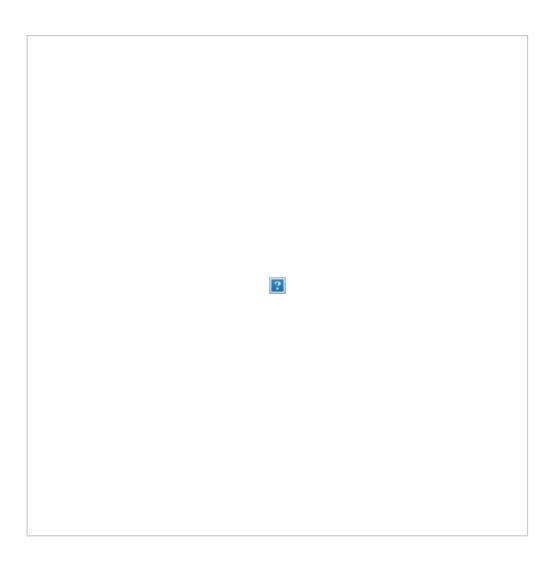
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - William Arthur Endean

Date: Tuesday, 21 November 2023 1:31:01 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: William Arthur Endean

Organisation name:

Agent's full name:

Email address: bill@dawsonslawyers.co.nz

Contact phone number: 021 904 867

Postal address: 11 Judge St Parnell Auckland 1052

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

This submission relates to the whole of the Plan Change

Property address: 36,40,46, 123 Valerie Close, Warkworth

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

The properties we own referred to above are within the plan Change area.

We have owned property in the area for the past 18 years and are very familiar with the area. The Plan Change mostly follows the plans for the area as set out in the 2019 Warkworth Structure Plan

The Plan Change provides for a generous amount of Public Open Space , conservation, Riparian margins, Informal zones and playing fields which will benefit all of Warkworth, compared to the modest contributions provided by Plan Changes 25 and 40.

Since the opening of the Puhoi to Warkworth Motorway, retail business in Warkworth has declined dramatically. Warkworth needs an increase in population to make up for the loss in trade before there are more business closures. Already there is a 25% vacancy rate in the Grange Retail Centre as a consequence of the Motorway Bypass.

Warkworth needs more housing for worker accommodation, for workers in the district.

The Plan Change area is ideally suited for residential housing due to it's favourable topography and

sheltered environment. In the 18 years we have owned our properties they have never been flooded.

I or we seek the following decision by council: Approve the plan change without any amendments

11.1

Details of amendments:

Submission date: 21 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? Yes

Would you consider presenting a joint case at a hearing if others have made a similar submission? Yes

Declaration

Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.

I .	
I .	

CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

Submission on a notified proposal for policy statement or plan change or variation

Clause 6A of Schedule 1, Resource Management Act 1991 FORM 5

amended and the reasons for your views)



This plan change has limited notification under clause 5A(4)(b) of First Schedule, Resource Management Act 1991, making submissions under this clause limited to those given written notice of this plan change.

Send your submission to unitaryplan@aucklandcouncil.govt.nz or post to:	For office use only	
Attn: Planning Technician	Submission No:	
Auckland Council	Receipt Date:	
Level 24, 135 Albert Street		
Private Bag 92300 Auckland 1142		
Submitter details		
Full Name or Name of Agent (if applicable)		
Mr/Mrs/Miss/Ms(Full Name) Mr ARMVR DOUELAS BROW	NN_	
Organisation Name (if submission is made on behalf of Organisation)		
Address for service of Submitter		
13 OLIVER STREET		
WARKWORTH 0910		
Telephone: 02(17/ 3310 Fax/Email: Joughrow.	ninz@gmailicom	
Contact Person: (Name and designation, if applicable)		
Soons of submission		
Scope of submission		
This is a submission on the following proposed plan change / variation to		
Plan Change/Variation Number PC93 (Private)	
Plan Change/Variation Name Onewa Road WARK WORT H	SOUTH	
The specific provisions that my submission relates to are: (Please identify the specific parts of the proposed plan change / variation)		
Plan provision(s)		
Or		
Property Address		
Map PLEASE SEE MAP		
Or		
Other (specify)		
Submission		
My submission is: (Please indicate whether you support or oppose the spe	ecific provisions or wish to have them	

I support the specific provisions identified above				
I oppose the specific provisions identified above				
I wish to have the provisions identified above amended Yes No				
The reasons for my views are: Beause the plan as it stands to jam wood co				
Kous to old state highway I at the junction with				
Mckinney Rosed would create a major lagard especially				
(continue on a separate sheet if necessary				
I seek the following decision by Council:				
Accept the proposed plan change / variation				
Accept the proposed plan change / variation with amendments as outlined below				
Decline the proposed plan change / variation				
If the proposed plan change / variation is not declined, then amend it as outlined below.				
I wish to be heard in support of my submission				
I do not wish to be heard in support of my submission				
If others make a similar submission, I will consider presenting a joint case with them at a hearing				
Movember 2023				
Signature of Submitter Date				
(or person authorised to sign on behalf of submitter)				
Notes to person making submission:				
If you are making a submission to the Environmental Protection Authority, you should use Form 16B.				
Please note that your address is required to be made publicly available under the Resource Management Act 1991, as any further submission supporting or opposing this submission is required to be forwarded to you as well as the Council.				
If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of Part 1 of Schedule 1 of the Resource Management Act 1991.				
I could ☐ /could not ☐ gain an advantage in trade competition through this submission.				
If you could gain an advantage in trade competition through this submission please complete the				
following: I am I / am not I directly affected by an effect of the subject matter of the submission that:				
(a) adversely affects the environment; and				
(b) does not relate to trade competition or the effects of trade competition.				

Planning Technicians
Plans and Places
Auckland Council
Private Bag 92300
Auckland 1142

20 November 2023

Plan Change 93 (Private) - Warkworth South

I wish to draw attention to the proposed intersection of McKinney Road and Old State Highway 1.

In my opinion any crossing including McKinney Road would produce a hazard to traffic travelling South on Old State Highway 1.

Traffic traveling South would be accelerating as they climbed past the Grange. At the brow, just South of Wech Drive, Old State Highway 1 bends to the right and descends towards McKinney Road.

The distance between the brow of the rise and the first sighting of McKinney Road is very short. Activity at the convergence with McKinney Road is already an issue!

Any increase in that activity should be avoided.

I strongly recommend that the Southern portion of the Western Link meet up with Old State Highway 1 in the area of the dwelling at 1829 Old State Highway 1, Warkworth.

12.1

Please see attached maps.

That would be half way between McKinney Road to the North and Old State Highway 1 bending to the right on its way South.

Regards Douglas Brown dougbrown.nz@gmail.com

A D Brown (Arthur Douglas Brown)
13 Oliver Street
Warkworth 0910

alling 20/11/23



To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Wendy Patricia COURT

Date: Wednesday, 22 November 2023 11:45:13 am

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Wendy Patricia COURT

Organisation name: NA

Agent's full name: NA

Email address: courtwp@hotmail.com

Contact phone number:

Postal address: 124 Perry Rd Warkworth Auckland 0983

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Property address:

Map or maps:

Other provisions:

The goals to achieve the applicants vision as provided on pg 39 are misleading.

Do you support or oppose the provisions you have specified? I or we oppose the specific provisions identified

Do you wish to have the provisions you have identified above amended? Yes

The reason for my or our views are:

I live in Perry rd and I strongly object to any change in the district plan which allows for more dense building in the green belt to the south of Warkworth.

My reasons for objecting are as follows:

Warkworth is surrounded by countless aquifers. Yet another high density subdivision will alter the water table and interfere with drainage into the Mahurangi River.

The infrastructure around Warkworth is already stretched to its limits as shown by such things as glacial slow internet, frequent power outages, and potholes aplenty. Yet another high density subdivision will cause more infrastructure issues for current residents.

As residents of Perry Rd we have been subjected to 8 years of motorway construction with associated noise, construction traffic and dust production. It was a very stressful episode which led to health issues.

As a long standing Auckland City rate payer (43years), I moved to the country to experience a rural lifestyle, not so I could live perched on the edge of yet another high density sub-division.

13.1

I or we seek the following decision by council: Decline the plan change

Submission date: 22 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

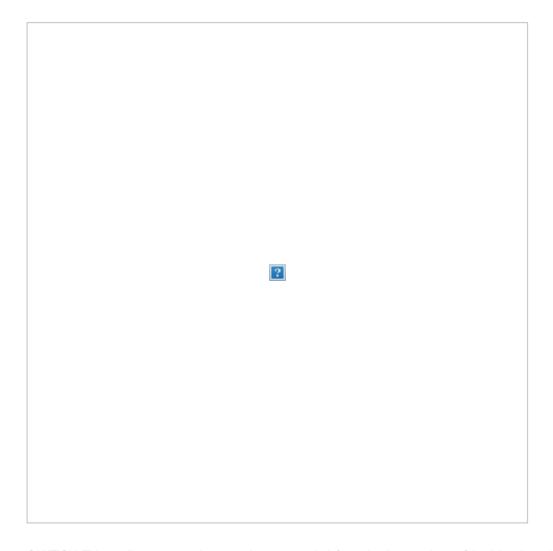
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

Yes

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this

email may be those of the individual sender and may not necessarily reflect the views of Council.

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Mark Calvert

Date: Wednesday, 22 November 2023 1:45:20 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Mark Calvert

Organisation name:

Agent's full name:

Email address: mark.calvert360@gmail.com

Contact phone number:

Postal address: PO Box 109042 Newmarket Auckland 1149

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Property address: 123 Valerie Close, 40 Valerie Close, 36 Valerie Close, 1711 SH1 and 1723 SH1

Warkworth

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

The proposal adds to the much needed urban land available for the construction of housing.

I or we seek the following decision by council: Approve the plan change without any amendments

14.1

Details of amendments:

Submission date: 22 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

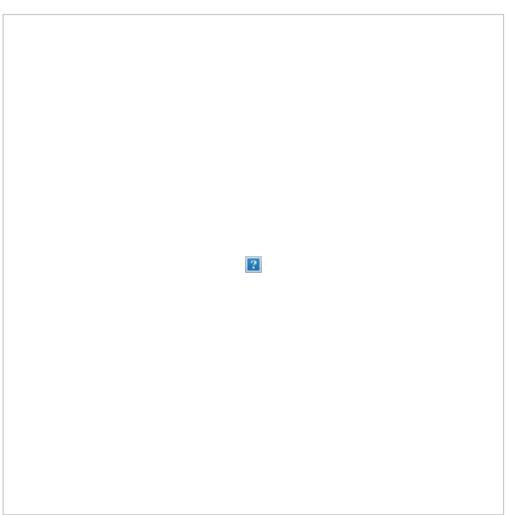
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

To: <u>Unitary Plan</u>

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Warwick William Scown

Date: Wednesday, 22 November 2023 2:30:12 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Warwick William Scown

Organisation name:

Agent's full name: Warwick Scown

Email address: w1g1b1s1@gmail.com

Contact phone number:

Postal address: 34 Green Road Matakana Auckland 0985

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Property address: 40 46, 83, 123, 125 Valerie Close, 1711 1723, 1738 and 1773 State Highway 1

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

I support the visionary plan for the future offered by PC 93.

There is a current desperate need for more well designed housing north of Auckland, now that the area has been unlocked by the Ara Tuhono -Puhoito Warkworth motorway.

I or we seek the following decision by council: Approve the plan change without any amendments

15.1

Details of amendments:

Submission date: 22 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

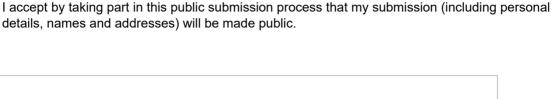
Declaration

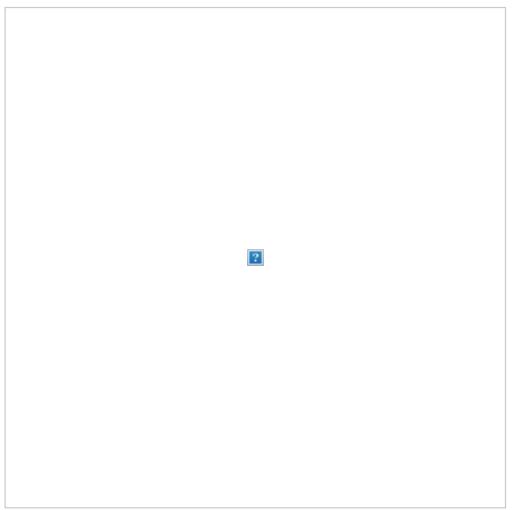
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No





CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Gregor Stevenson

Date: Wednesday, 22 November 2023 3:00:14 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Gregor Stevenson

Organisation name: Stevenson Family Trust

Agent's full name:

Email address: admin@stevensonfamilytrust.nz

Contact phone number:

Postal address:

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Private Plan change

Property address:

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

Plan is inline with Warkworth Structure plan which I broadly support.

I or we seek the following decision by council: Approve the plan change without any amendments

16.1

Details of amendments:

Submission date: 22 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

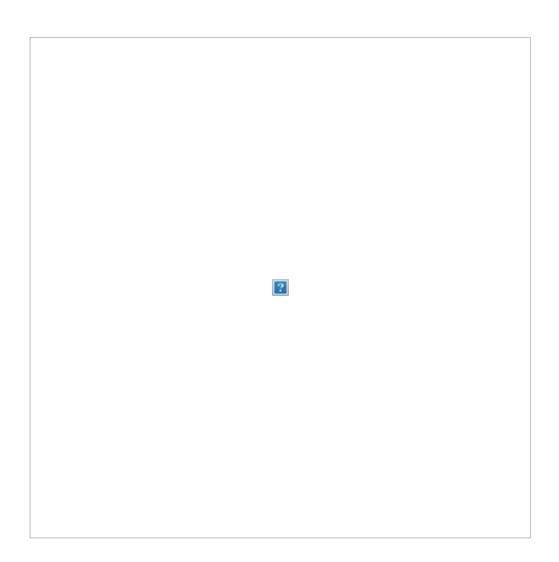
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

IN THE MATTER of the Resource

Management Act 1991

(RMA)

AND

IN THE MATTER of a submission under

clause 6 of the First Schedule to the RMA on Private Plan Change 93:

Warkworth South

SUBMISSION ON NOTIFIED PROPOSAL FOR PRIVATE PLAN CHANGE 93: WARKWORTH SOUTH TO THE AUCKLAND UNITARY PLAN (OPERATIVE IN PART)

To: Auckland Council

Name of submitter: Auckland Council

(contact: Craig Cairncross)

Address for service: 35 Albert Street

Private Bag 92300 Auckland 1142

INTRODUCTION

- 1. This is a submission on Private Plan Change 93: Warkworth South (**PPC 93**) to the Auckland Unitary Plan (Operative in Part) (**AUP**) by KA Waimanawa Limited Partnership and Stepping Towards Far Limited (**Applicant**).
- 2. This submission by Auckland Council is in its capacity as submitter (ACS).
- 3. The scope of the submission is to:
 - a. the Waimanawa Precinct; and
 - b. the Morrison Heritage Orchard Precinct
- 4. ACS submit a neutral position regarding the re-zoning of the land, on the proviso that amendments are made to infrastructure provisions in the proposed Waimanawa Precinct.

- 5. ACS submit a neutral position on the extension of 6,40m² to the Rural Urban Boundary (**RUB**), on the proviso that this cannot occur separately from the balance of the plan change.
- 6. ACS seek amendments to provisions in the Waimanawa Precinct and the Morrison Heritage Orchard Precinct. Providing the matters raised in this submission are addressed, ACS do not oppose the two precincts.

GENERAL REASONS FOR SUBMISSION

Funding and infrastructure pre-requisite

- 7. The National Policy Statement on Uban Development (NPS-UD) and Auckland Regional Policy Statement (RPS) Chapters B2 and B3 of the AUP contain objectives and policies that place strong emphasis on the importance of ensuring the integration of infrastructure, including transport infrastructure, with land use / urbanisation. Section 75(3) of the RMA requires PPC 93 to "give effect to" these higher order provisions. This is a strong directive requiring the relevant objectives and policies to be implemented. Examples of these provisions include:
 - a. Objective 6 of the NPS-UD which requires local authority decisions on urban development that affect urban environments to be "Integrated with infrastructure planning and funding decisions".
 - b. The range of RPS provisions in chapters B2 and B3 that address the need for the integration of infrastructure provisions, planning and funding with land use, and the timely, efficient, and adequate provision of infrastructure, including B2.2.1(1); B2.2.2(2)(c) and (d); B2.2.2(4) and (7); B3.3.1(1)(b); B3.3.2(5).
- 8. Policy B2.2.2(7) is directly relevant to PPC 93 as it applies to Future Urban Zoned land.
 - B2.2.2(7) Enable rezoning of land within the Rural Urban Boundary or other land zoned future urban to accommodate urban growth in ways that do all of the following
 - (a) support a quality compact urban form;
 - (b) provide for a range of housing types and employment choices for the area;
 - (c) integrate with the provision of infrastructure; and

-

¹ Environmental Defence Society Inc v New Zealand King Salmon Company Ltd [2014] NZSC 38 at [77].

- (d) follow the structure plan guidelines as set out in Appendix 1.
- 9. Plan Change 80 amended Policy B2.2.2(7) to integrate the concepts of "well-functioning urban environment" and added the following additional clause: "(caa) provide good accessibility, including by way of efficient and effective public or active transport". The decision on this plan change was notified on 14 September 2023.
- 10. B2.9 Explanation and Principal Reasons for Adoption of the objectives and policies, states:

In addressing the effects of growth, a key factor is enabling sufficient development capacity in the urban area and sufficient land for new housing and businesses over the next 30 years. The objectives and policies guide the location of urban growth areas. They identify how greenfield land which is suitable for urbanisation will be managed until it is re-zoned for urban development. They encourage provision for Mana Whenua to develop and use their resources. They also set out the process to be followed to ensure that urban development is supported by infrastructure on a timely and efficient basis.

They should be considered in conjunction with the Council's other principal strategic plans such as the Auckland Plan, the Long-term plan and the Regional Land Transport Plan. The strategies and asset management plans of infrastructure providers will also be highly relevant.

[Emphasis added]

- 11. The explanatory text at B3.5 of the RPS confirms the intention that "development, especially that associated with growth in greenfield areas, must be integrated and co-ordinated with the provision of infrastructure and the extension of networks".
- 12. Auckland Council recently adopted the Auckland Future Development Strategy 2023-2053 (**FDS**). This replaces the Future Urban Land Supply Strategy (2023-2027). The FDS meets the intent behind the NPS-UD and focuses on the long-term future of Tamaki Makaurau. A key component of the FDS is to integrate long-term land use and infrastructure planning while meeting future climate, environmental, population, housing and employment needs.
- 13. The FDS introduces infrastructure prerequisites, linked to the development readiness of areas. This is to ensure that bulk infrastructure for development is well-coordinated and is able to provide a safe, sustainable environment on which communities can be based. In the previous strategy Warkworth South was proposed to be developed for urban development between 2028 and 2032. The anticipated time for 'live zoned' at Warkworth South is now not before 2040+. This

is to enable various transport upgrades and implementation of the Warkworth Wastewater Growth Strategy.

- 14. Matters concerning the provision, timing and funding of infrastructure are directly relevant to decisions on zoning, and it is poor resource management practice and contrary to the purpose of the RMA to zone land for an activity when the infrastructure necessary to allow that activity to occur without adverse effects on the environment does not exist, or there is a high degree of uncertainty as to whether that infrastructure will be provided in a timely and efficient way.²
- 15. Where infrastructure needed to support a plan change is not planned for in the Long Term Plan and Regional Land Transport Plan³, it is incumbent on the Applicant to show how the infrastructure needed to service the development would be provided.
- 16. A key concern for ACS is therefore that PPC 93 must adequately provide for the strategic integration of transport infrastructure, and the planning / funding of such infrastructure, with land use, otherwise it would be contrary to the thrust of the above provisions.
- 17. The FDS recognises there may be times where alternative funding methods or partners enable all or parts of these future urban areas to be live zoned earlier than where the provision of infrastructure solely rely on council funding.
- 18. As part of the plan change, the Applicant has undertaken to provide all necessary infrastructure to bring forward the 'live zoned' date. Outside of any agreements with the council, a series of objectives, policies and rules/standards are included in the plan change requiring the identified infrastructure to be provided prior to the issuing of s224(c) certification for subdivision. ACS consider this is fundamental to enabling the Future Urban Zoned land to be rezoned for development ahead of forecast.
- 19. ACS consider the provisions are generally strongly worded and most infringements of the standards has full non-complying activity status. ACS supports this but seeks this is applied to all infrastructure and proposes further strengthening commensurate with the significance of the Applicant delivering the infrastructure prerequisites.

³ Documents to which regard must be had under section 74(2)(b)(i) of the RMA.

4

² See, for instance, *Foreworld Developments Ltd v Napier City Council* EnvC Wellington W8/2005, 2 February 2005.

North-South connections

- 20. ACS is concerned that the precinct shows a north-south connection between State-Highway 1 and the wider western link road joining to Woodcocks Road that is over 2.2km.
- 21. A single connection over this distance has the potential to create segregation of communities. The long pedestrian routes through parks and bush areas are not considered a practical solution to providing additional connections. The need for an additional north-south connection requires greater consideration and an indicative connection shown on Precinct Map 3.

Consistency with AUP precinct provisions

22. ACS is concerned that some of the wording in the Waimanawa Precinct is inconsistent with the format used in other precincts in the AUP. To avoid potential ambiguity and enforcement issues, it is essential the wording in the precinct is consistent with standard conventions, such as referencing to other parts of the AUP and provision drafting follows good practice guidelines.⁴

Morrison Heritage Orchard Precinct

- 23. ACS supports the retention, operation, and enhancement of the existing Morrison's Orchard, but is concerned with the potential intensity of uses and development permitted in the precinct plan. Other than for dwellings and workers accommodation, the activity status and the standards do not address the cumulative effects of the activities, either in combination or where more than one of the same activity occurs within the precinct.
- 24. Existing planting, particularly the shelter belt, is considered one of the defining features of Morrison's Orchard. The provisions do not recognise, maintain and enhance these plantings. Similarly, the streams and associated plantings are not identified and therefore could be removed without appropriate consideration of their value to Morrison's Orchard.

DECISION SOUGHT

Waimanawa Precinct

25. ACS seeks the following decisions on the proposed Waimanawa Precinct, or any other alternative or consequential relief to give effect to this submission:

-

⁴ Such as Quality Planning: Writing Provisions for Plans

Funding and infrastructure pre-requisite

a. Amend objective (8) to add the word <u>avoid</u> subdivision and development unless it is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements.

17.1

b. Retain existing non-complying activity status for activities not complying with Standard Ixxx.6.9 Standards for Wastewater and Potable Water Connections and/or Ixxx.6.10 Standards for Stormwater.

17.2

c. Amend all activity tables to require subdivision and development not complying with 1xxx.6.8 Wider Western Link Road to be a non-complying activity.

7.3

d. Amend all activity tables to require subdivision and development not complying with Standard Ixxx.6.15 Transportation Infrastructure to be a non-complying activity.

17.4

e. Amend IXXX.5 Notification to require that any application for resource consent for any of the following non-complying activities must be publicly notified:

17.5

- (i) 1xxx.6.8 Wider Western Link Road
- (ii) Ixxx.6.9 Wastewater and Potable Water Connections
- (iii) Ixxx.6.10 Stormwater Management
- (iv) Ixxx6.15 Transportation Infrastructure

17.6

f. Amend Table IXXX.6.15.1 Transport Infrastructure Requirements to reduce the trigger from 20 residential lots to 3 residential lots.

North-south connection

g. Add an additional indicative north-south connection on Precinct Map 3.

17.7

Consistency with AUP precinct provisions

h. Amend existing provisions to ensure consistency with drafting in other precincts in the AUP, including standard conventions such as referencing to other parts of the AUP, and correct all numbering references.

17.8

Morrison Heritage Orchard Precinct

26. ACS seeks the following decisions on the proposed Morrison Heritage Orchard Precinct, or any other alternative or consequential relief to give effect to this submission:

Intensity of use and activities

a. Amend Table XXX.X.1 Activity table, XXX.6. Standards and make consequential amendments to address the cumulative effects of the activities, either in combination or where more than one of the same activity occurs within the precinct.

17.9

b. Amend XXX.6. Standards and make consequential amendments by adding provisions that:

17.10

- (i) recognise, maintain and enhance the existing planting, particularly the shelter belt; and
- (ii) identify the streams within the precinct and the planting on either side.

APPEARANCES AT THE HEARING

- 27. ACS could not gain an advantage in trade competition through this submission.
- 28. ACS wishes to be heard with regards to its submission.
- 29. If others wish to make a similar submission, ACS will consider presenting a joint case with them at the hearing

DATED 23 November 2023

On behalf of Auckland Council as submitter:



Councillor Richard Hills, Chairperson of the Planning, Environment and Parks Committee

MA-

Councillor Angela Dalton, Deputy Chairperson of the Planning, Environment and Parks Committee

Edward Ashby, Independent Māori Statutory Board member

Address for service:

Craig Cairncross

Team Leader Planning Central/South

Email: craig.cairncross@aucklandcouncil.govt.nz

Telephone: 09 301 0101

Postal address: Auckland Council 135 Albert Street Private Bag 92300 Auckland 1142 Mahurangi Trail Society 591 Sandspit Road RD2 Warkworth



22 November 2023

To: Auckland Council "Have Your Say"

Warkworth South Plan Change: Submission by Mahurangi Trail Society Incorporated

Summary

- MTS supports the development concept plan proposed for the Warkworth South area as shown in the Plan Change documents.
 The Plan Change has been comprehensively prepared, providing an excellent evaluation of the development area within the overall planning context of Warkworth's demand for growth.
- This concept plan provides for a number of cycle and pedestrian path options
 within the Plan Change area, which will also link in with other paths and trails
 being developed in the Warkworth area. This will encourage greater use of
 cycling and walking, which will reduce overall vehicle emissions and promote
 better health.
- MTS does not support the proposed timetable in Council's amended Future
 Development Strategy (FDS), which delays the release of these growth areas,
 such as Warkworth South. Some of the key infrastructure, such as roads and
 services, will be provided by the developers as part of the development of the
 area. This will minimise the need for Council to have that funding available.

Submission

Introduction

The Mahurangi Trail Society (MTS) is one of a number of organisations involved in developing cycle and walking trails through the Mahurangi "region". It has already created sections of trails around the Snells Beach/Warkworth area and is working closely with the "umbrella" organisation, the

Matakana Coastal Trail Trust (MCTT). The network of proposed trails extends from Pūhoi to Mangawhai. These trails are designed to provide more opportunities for people to use alternative means of movement around the area, for both commuting and recreation.

General Approach to Urban Development

MTS has been working on the creation of such off road trails through working closely and effectively with many landowners, developers and other organisations such as DOC and Council. It has taken MTS (and MCTT) a great deal of work to reach the extent of progress to date with the actual construction of sections of trail.

MTS has made a number of similar submissions to recent Private Plan Changes and resource consent applications and fully support those that have made provision for new cycle and footpath links (primarily off road). MTS is fully supportive of such development taking place in the manner shown.

MTS has looked at the overall development concept design in terms of the layout of housing types and densities, the provision of open space and retention of streams and vegetation, the internal roading pattern and external main routes to ensure that appropriate safe links can be created within the development area which will also link appropriately to other actual and proposed links in the regional network espoused by MCTT.

Analysis of Development Concept

The concept plan provides for a good range of housing types and forms to meet varied demands. The housing areas have been designed to fit in with the landform and landscape values.

There are some attractive areas of bush and streams which are to be retained and used as open space links and reserves. Within these, a comprehensive network of pedestrian walk ways and cycle tracks will be created. MTS considers that these are well located and designed to enable ease of movement through the development and to links to adjacent areas and roads.

Development Issues

The recently approved Council Future Development Strategy(FDS), which has been amended from an earlier one, proposes to defer the release of the various growth areas, such as Warkworth South, for many years — in this case until after 2040-2045. The decision was made based on the severe constraints on Council providing the funding for the service infrastructure and roading upgrades. Council also considered that it needed a greater degree of control over the timing of the growth of Warkworth.

MTS supports the early development of this area, as is being proposed in the Plan Change. It considers that with much of the infrastructure costs being borne by the developers, this will enable such development to proceed in the near future. MTS wishes to see as many cycle links coming into operation over the next few years, to encourage people to become more active and have other efficient and sustainable means of movement.

Conclusion

MTS requests that Council approve this Plan Change as proposed. The society expects to be notified as part of the approval process. The development as proposed has considerable merit as an appropriate form of development, with some attractive landscape and environmental features, with a network of cycle ways and pedestrian linkages. The necessary infrastructure (services and roads) can be implemented without any significant reliance on Council funding.

18.1

Hugh Briggs

Secretary

Submission on Proposed Plan Change 93 (Private): Warkworth South

Schedule 1 to the Resource Management Act 1991 (RMA)

.....

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter: Karen and Stefan Richardson

Address of Submitter: 1768 State Highway 1, RD 3, Warkworth 0983

This is a submission on Proposed Private Plan Change 93 ("PPC93") to Auckland Council

Karen and Stefan Richardson could not gain an advantage in trade competition through this submission.

Karen and Stefan Richardson own 1768 State Highway One, Lot 1 DP 578389, and will be directly affected by the Request as our property is within the proposed plan change area.

We are part of the co-operating landowners' group in support of the plan change in principle.

The Submitter's landholding is referred to as Waimanawa Hills(B) in the PPC93 submission. A map showing the property is under **Appendix A**.

The Submitter's **SUPPORT** the Proposed Plan Change Request in principle subject to the points stated in the submission.

2. The Plan Change Request

The purpose of PPC93 is to rezone the location to a mix of residential, business, open space and rural zones. The key features of the plan change are:

- Rezone approximately 159 hectares of land on either side of the old State Highway One, South of Warkworth.
- Introduction of two new precincts "Waimanawa" and "Morrison Heritage Orchard".
- The proposal also includes the introduction of the SMAF1 Overlay and an amendment to the Rural Urban Boundary (RUB) to the south of Warkworth.

SCOPE OF SUBMISSION

Whilst rezoning the land for residential, business, and open space purposes is supported, there are matters of detail regarding the Submitter's landholding that require consideration and an appropriate degree of certainty of outcome/s needs to be secured through the plan change and its related provisions.

As an integral part of the rezoning and future development of Warkworth South, Waimanawa Hills(B) is reliant on the agreed design, planning, infrastructure, and stormwater management submitted in PPC93.

This requires that:

- Reasonable and appropriate access will be retained to the State Highway to allow both for general access and, when required, for the future urban development of the land in line with PPC93.
- Timing and coordination for delivery of infrastructure is aligned and certainty given around the planned Collector Road access and associated infrastructure.
- Stormwater management is designed so as not to impact the planned development outcomes for Waimanawa Hills(B) and the Submitter's land.
- Wastewater drainage will be provided through an extension to the existing network and sufficient capacity will be provided in the network to enable urban development of the Submitter's land in accordance with the Request. Coordination and timing should incorporate Waimanawa Hills(B) for planning and infrastructure delivery purposes.
- Water reticulation is planned to be provided for the proposed development through an extension of the existing rising main and booster pump to a proposed reservoir within the Plan Change Area. Coordination, timing and delivery of water supply infrastructure should incorporate Waimanawa Hills(B) for planning purposes. Final planned location of the proposed reservoir should not impact the planned development outcomes for Waimanawa Hills(B) and the Submitter's land.

The provisions are required to provide greater certainty as to the development outcomes and the timing and coordinated delivery of infrastructure.

4. Decision sought

Karen and Stefan Richardson seek that Plan Change 93 – Warkworth South be **Accepted subject to** the detail of the Request and related provisions securing the outcomes sought in this submission.

Karen and Stefan Richardson wish to be heard in support of this submission.

19.1

If others make a similar submission, Karen and Stefan Richardson will consider presenting a joint case at the hearing.

Yours sincerely

Stefan Richardson Ph: +64 020 40961374

Email: stefan_richardson@cheerful.com

Appendix A - 1768 State Highway 1, Waimanawa Hills(B)

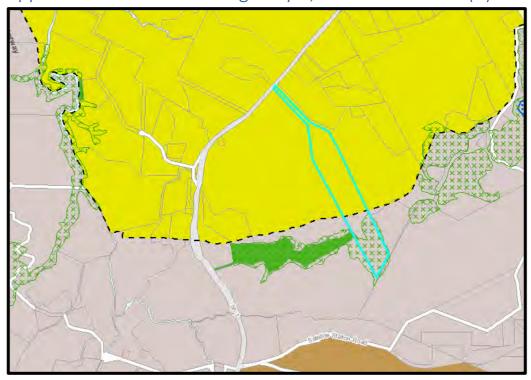


Figure 1 – Auckland Unitary Plan - Operative in Part, 1768 State Highway 1, Warkworth (source: Auckland Unitary Plan maps, 03 July 2023)



Figure 2, Waimanawa Hills(B), excerpt form PPC93



20 Viaduct Harbour Avenue, Auckland 1010 Private Bag 92250, Auckland 1142, New Zealand **Phone** 09 355 3553 **Website** www.AT.govt.nz

23 November 2023

Plans and Places Auckland Council Private Bag 92300 Auckland 1142

Attn: Planning Technician

Email: unitaryplan@aucklandcouncil.govt.nz

Proposed Private Plan Change 93 - Warkworth South

Please find attached Auckland Transport's submission on Proposed Private Plan Change 93 Warkworth South. The applicants are the KA Waimanawa Limited Partnership and Stepping Towards Far Limited.

If you have any queries in relation to this submission, please contact me at katherine.dorofaeff@at.govt.nz or on 021 932 722.

Yours sincerely

Katherine Dorofaeff

Knowtach

Principal Planner, Spatial Planning and Policy Advice

CC:

David Hay - Osborne Hay (North) Ltd; and John Duthie - Tattico Ltd by email: david@osbornehay.co.nz; john.duthie@tattico.co.nz



Submission by Auckland Transport on Private Plan Change 93: Warkworth South

To: Auckland Council

Private Bag 92300 Auckland 1142

Submission on: Proposed Private Plan Change 93 from the KA Waimanawa

Limited Partnership and Stepping Towards Far Limited for land

located at Warkworth South

From: Auckland Transport

Private Bag 92250 Auckland 1142

1. Introduction

- 1.1 The KA Waimanawa Limited Partnership and Stepping Towards Far Limited (the applicants) are seeking a private plan change (PC93 or the plan change) to the Auckland Unitary Plan Operative in Part (AUP(OP)) to rezone approximately 159ha of land (the site) at Warkworth South from a mix of Future Urban, Open Space Conservation, and Rural Rural Production zonings to a combination of residential (Large Lot, Single House, Mixed Housing Urban, Terrace Housing and Apartment Buildings), business (Local Centre), open space (Conservation) and rural (Mixed Rural) zones. The applicants expect that the rezoning will provide capacity for approximately 1600 dwellings. PC93 also proposes two new precincts (Waimanawa and Morrison Heritage Orchard), applies a SMAF 1 Overlay, and seeks an amendment to the Rural Urban Boundary.
- 1.2 Auckland Transport is a Council-Controlled Organisation of Auckland Council (**the Council**) and the Road Controlling Authority for the Auckland region. Its statutory purpose is 'to contribute to an effective, efficient and safe Auckland land transport system in the public interest'. In fulfilling this role, Auckland Transport is responsible for the following:
 - a. The planning and funding of most public transport, including bus, train and ferry services
 - b. Promoting alternative modes of transport (i.e. alternatives to the private motor vehicle)
 - c. Operating the roading network
 - d. Developing and enhancing the local road, public transport, walking and cycling networks.
- 1.3 Urban development on greenfield land not previously developed for urban purposes generates transport effects and needs transport infrastructure and services to support construction, land use activities and the communities that will live and work in these areas. Auckland Transport's submission seeks to ensure that the transport related matters raised by PC93 are appropriately considered and addressed.

¹ Local Government (Auckland Council) Act 2009, section 39.

- 1.4 Auckland Transport is part of the Te Tupu Ngātahi Supporting Growth Alliance (**Te Tupu Ngātahi**) which is a collaboration between Auckland Transport and Waka Kotahi New Zealand Transport Agency (**Waka Kotahi**) to plan and route protect, where appropriate, the preferred transport network in future growth areas such as Warkworth. The Recommended Strategic Transport Network identified by Te Tupu Ngātahi to support growth in Warkworth identifies three projects of direct relevance to this site:
 - 1. Wider Western Link Road linking between State Highway 1 and Woodcocks Road
 - 2. Public transport interchange located on the Wider Western Link Road, near the intersection with State Highway 1.
 - 3. Upgrade urban section of State Highway 1 to accommodate walking and cycling.
- 1.5 Auckland Transport has lodged notices of requirement (NOR) to route protect for the future Warkworth strategic transport network. However Auckland Transport has adopted an alternative route protection strategy for the Wider Western Link Road where it traverses through the plan change area (between the Mahurangi Bridge and State Highway 1), and for the public transport interchange. Rather than lodging NOR for this portion of the Wider Western Link Road and the public transport interchange, Auckland Transport are relying on the plan change process and associated infrastructure agreements (if required) to achieve route protection. The NOR lodged for the Wider Western Link Road North provides for an intersection with State Highway 1, and for the urban arterial road between Woodcocks Road and the Mahurangi River (including the river crossing). A NOR has also been lodged for the upgrade of the existing State Highway 1 south corridor between Fairwater Road and the southern Rural Urban Boundary to an urban arterial corridor with active mode facilities.
- 1.6 Auckland Transport is not a trade competitor for the purposes of section 308B of the Resource Management Act 1991.

2. Strategic context

2.1 The key overarching considerations and concerns for Auckland Transport are described below.

Auckland Plan 2050

2.2 The Auckland Plan 2050 (**Auckland Plan**) is a 30-year plan outlining the long-term strategy for Auckland's growth and development, including social, economic, environmental and cultural goals². The transport outcomes identified in the Auckland Plan include providing better connections, increasing travel choices and maximising safety. To achieve these outcomes, focus areas outlined in the Auckland Plan include targeting new transport investment to the most significant challenges; making walking, cycling and public transport preferred choices for many more Aucklanders; and better integrating land use and transport. The high-level direction contained in the Auckland Plan informs the strategic transport priorities to support growth and manage the effects associated with this plan change.

-

² The Auckland Plan is a statutory spatial plan required under section 79 of the Local Government (Auckland Council) Act 2009.

Sequencing growth and aligning with the provision of transport infrastructure and services

- 2.3 The Auckland Plan 2050 and the Future Development Strategy 2023 (**FDS**) work together to set the high-level direction for Auckland over the long-term. The FDS sets out the timing of when future urban areas will be ready for development to commence.
- 2.4 Most of the site is zoned Future Urban and is therefore identified for growth. Following a structure plan, a plan change is required to rezone future urban land to an appropriate live urban zoning. Residential or business occupation should not occur until the bulk infrastructure / networks are in place. The FDS identifies the future urban land included within the plan change as being mostly in Warkworth South West and South East, with some in Warkworth South Central. Bulk infrastructure delivery is not planned to support development until the following timeframes:
 - Warkworth South Central 2040+
 - Warkworth South West and South East 2045+.
- 2.5 Appendix 6 of the FDS includes infrastructure prerequisites, linked to the development readiness of areas. Transport prerequisites relevant to the plan change area include SH1 Southern Interchange, Woodcocks Road upgrade, Western Link south, Southern Public Transport Interchange, SH1 South upgrade, and Wider Western Link.
- The growth in transport demands across Auckland comes from development in greenfield areas as well as from the smaller scale incremental intensification enabled through the AUP(OP). There is a need to support the movement of the additional people, goods and services resulting from the widespread growth. This increases pressure on the available and limited transport resources. A high level of certainty is needed about the funding, financing and delivery of transport infrastructure and services if the growth enabled by the AUP(OP) and plan changes is to be aligned with the required transport infrastructure and services. Otherwise there will continue to be a significant deficiency in the ability of the transport network to provide and co-ordinate transport responses to dispersed growth across the region. This results in poor transport outcomes including lack of travel choice and car dependency.
- 2.7 Plan changes which allow future urban land to be urbanised need to be carefully considered in the context of the wider staging and delivery of planned transport infrastructure and services. Any misalignment in timing between urbanising greenfield areas and providing infrastructure and services brings into question whether the proposed development area is 'development ready'. The matters that need to be carefully considered include:
 - Whether the plan change includes mechanisms requiring applicants to mitigate the transport effects associated with their development and to provide the transport infrastructure needed to service or meet the demands from their development
 - Whether the development means that any strategic transport infrastructure being planned to service the wider growth area identified in the FDS needs to be provided earlier
 - Whether the development impacts the ability to provide any strategic transport infrastructure identified to service the wider growth area e.g. will it

foreclose route options or hinder future upgrades of existing strategic transport infrastructure.

2.8 The need to coordinate urban development with infrastructure planning and funding decisions is highlighted in the objectives of the National Policy Statement on Urban Development 2020 (NPS-UD). Those objectives are quoted below (with emphasis in bold):

'Objective 3: Regional policy statements and district plans enable more people to live in, and more businesses and community services to be located in, areas of an urban environment in which one or more of the following apply:

- (a) the area is in or near a centre zone or other area with many employment opportunities
- (b) the area is well-serviced by existing or planned public transport
- (c) there is high demand for housing or for business land in the area, relative to other areas within the urban environment.'

'Objective 6: Local authority decisions on urban development that affect urban environments are:

- (a) integrated with infrastructure planning and funding decisions; and
- (b) strategic over the medium term and long term; and
- (c) responsive, particularly in relation to proposals that would supply significant development capacity.'
- 2.9 The Regional Policy Statement (**RPS**) objectives and policies in the AUP(OP) place similar clear emphasis on the efficient provision of infrastructure and on the integration of land use and development with infrastructure, including transport infrastructure. Refer, for instance, to Objectives B2.2.1(1)(c) and (5) and B3.3.1(1)(b), and Policies B2.2.2(7)(c) and B3.3.2(5)(a). For example, Policy B3.3.2(5)(a) is to: 'Improve the integration of land use and transport by... ensuring transport infrastructure is planned, funded and staged to integrate with urban growth'. The alignment of infrastructure to support growth is essential to achieving a well-functioning urban environment.
- 2.10 The Regional Land Transport Plan (**RLTP**) sets out the 10 year programme of transport infrastructure investment required to support the transport network including planned and enabled growth in the Auckland region. The RLTP is aligned with the Council's priority areas and the spend proposed within the Council's 10 Year Budget 2021-2031. Within the current RLTP 2021-2031 there is funding for the Hill Street intersection improvement in Warkworth.
- 3. Specific parts of the plan change that this submission relates to
- 3.1 The specific parts of the plan change that this submission relates to are set out in **Attachment 1**. In keeping with Auckland Transport's purpose, the matters raised relate to transport and transport assets, including integration between transport and land use. Issues raised include:
 - Lack of public transport to service subdivision and development in this location
 - Need for acoustic mitigation to mitigate potential road traffic noise effects for sensitive activities located adjacent to existing and future arterial roads
 - Aligning subdivision and development with the provision of transport infrastructure - including support for provisions which are consistent with this outcome

- Amendments sought to provisions relating to transport provisions achieve greater clarity and robustness.
- 3.2 Auckland Transport **does not oppose** the plan change **if** the matters raised in **Attachment 1** are satisfactorily addressed by the applicant.
- 3.3 Auckland Transport is available and willing to work through the matters raised in this submission with the applicant.

4. Decisions sought

- 4.1 The decisions which Auckland Transport seeks from the Council are set out in **Attachment 1**.
- 4.2 In all cases where amendments to the plan change are proposed, Auckland Transport would consider alternative wording or amendments which address the reason for Auckland Transport's submission. Auckland Transport also seeks any consequential amendments required to give effect to the decisions requested.

5. Appearance at the hearing

- 5.1 Auckland Transport wishes to be heard in support of this submission.
- 5.2 If others make a similar submission, Auckland Transport will consider presenting a joint case with them at the hearing.

Name: Auckland Transport

Signature:

Rory Power

Spatial Planning Manager

Date: 23 November 2023

Contact person: Katherine Dorofaeff

Principal Planner - Spatial Planning and Policy Advice

Address for service: Auckland Transport

Private Bag 92250 Auckland 1142

Telephone: 021 932 722

Email: katherine.dorofaeff@at.govt.nz

Attachment 1

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
Overall	Oppose	Amendments are needed to the plan change to address concerns raised by Auckland Transport about transport matters. These matters must be addressed before Auckland Transport can be satisfied that appropriate provision has been made to ensure that the transport needs of the precinct can be met and that future strategic transport infrastructure is provided for and protected. It is essential to ensure the plan change addresses how transport infrastructure and services will be provided to support the planned growth, mitigate adverse transport effects and achieve a well-functioning urban environment.	Decline the plan change unless the matters set out in this submission, as outlined in the main body of this submission and in this table, are addressed and resolved to Auckland Transport's satisfaction.
Overall	Oppose	The plan change will enable development in a location which does not have frequent public transport services and where there is no Auckland Transport funding available to improve the services. For this reason the plan change does not give effect to some NPS-UD and RPS objectives and policies relating to public transport. In particular it will not: • enable more people to live or be located in areas of an urban environment that is well-serviced by existing or planned public transport (NPS-UD Objective 3(b)) • have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport (NPS-UD Policy 1(c)) • enable 'improved and more effective public transport' (AUP RPS Objective B2.2.1(1)(d)) • achieve 'effective, efficient and safe transport that facilitates transport choices and enables accessibility and mobility for all sectors of the community.' (AUP RPS Objective B3.3.1(1)(e)) • encourage 'land use development and patterns that reduce the rate of growth in demand for private vehicle trips, especially during peak periods' (AUP RPS Policy B3.3.2(5)(b)).	Take into account the public transport deficiencies and assess the proposal against the NPS-UD and RPS objectives and policies relevant to public transport and transport choice.

403 Page 7 of 28 age 7

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
		Given the public transport deficiencies, the plan change will be limited in the extent to which it can 'promote the health, safety and well-being of people and communities by 'enabling walking, cycling and public transport and minimising vehicle movements' (AUP RPS Policy B2.3.2(2)(b)).	
Map 3 - Control: Arterial Roads	Support in part	Auckland Transport supports the identification of the Wider Western Link Road as an arterial road in the AUP(OP). However the map needs amendment to more clearly specify the changes needed to the AUP(OP) to give effect to it.	Amend Map 3 - Control: Arterial Roads, so it is clear that its purpose is to identify the Wider Western Link Road as an arterial road in the controls layer of the AUP(OP) map viewer. Delete from Map 3 the annotations for State Highway 1 and the indicative WWLR / SH1 intersection.
Waimanawa Precinct			
Public Transport Interchange	Support in part	PC93 and the associated Waimanawa Precinct Plan provide for the establishment of a public transport interchange on the western edge of the local centre. Subject to amendments sought in this submission, Auckland Transport generally supports the provision made for this facility. However it not clear whether a sufficient area of land has been identified on Precinct Plan 3 to accommodate the interchange which requires approximately 2500m² of land.	Ensure that a minimum area of 2500m² is identified for the public transport Interchange. Amend plan change as required to ensure that this is provided for.
IXXX.1 Precinct description	Oppose in part	An update is required as the Ara Tūhono - Pūhoi to Warkworth Motorway is now open and forms part of the existing road environment.	Amend the fourth paragraph of IXXX.1 Precinct description, by deleting the following: 'the proposed opening of the Puhoi to Warkworth Motorway in 2023 and'
IXXX.1 Precinct description	Oppose in part	The precinct provisions require the Wider Western Link Road between State Highway 1 and the Mahurangi River Tributary, to be constructed as a two lane, 24m wide road with a median, and active mode facilities. This will function as a collector road but this width and form will also be sufficient to enable it to function as an arterial road for the wider area once it is extended to Woodcocks Road.	Amend paragraph 12 of IXXX.1 Precinct description as follows: 'Construction of the Wider Western Link Road through the precinct to a collector road standard will be integrated with subdivision and development within the Precinct.'
IXXX.1 Precinct description	Oppose in part	Amendments are required to make it clear that the greenway network is an off-road network. It will connect into the walking and cycling facilities on the road network.	Amend paragraph 14 of IXXX.1 Precinct description as follows:

404 Page 8 of 28 age 8

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
			' provision is made for an off-road greenway network providing a network of tracks and walkways through the various open spaces and roads and'	
Acoustic mitigation	Oppose	The proposal will enable residential development adjacent to an existing arterial road (State Highway 1) and a future arterial road (Wider Western Link Road). Residential activity is sensitive to noise and development should be designed to protect people's health and residential amenity while they are indoors. This is not currently adequately addressed by existing AUP(OP) provisions, but has been addressed in a number of recent operative plan changes (e.g. PC49 Drury East, PC50 Waihoehoe, PC61 Waipupuke and PC76 Kohe / Pukekohe East-Central). Relevant objectives, policies and rules should be provided.	Amend the plan change by including precinct provisions (objectives, policies and rules) within the Waimanawa Precinct to require that future developments and alterations to existing buildings mitigate potential road traffic noise effects on activities sensitive to noise from the existing State Highway 1 arterial and the future Wider Western Link Road arterial.	20.8
IXXX.2 Objective 2	Oppose in part	Objective 2 is too long and lacks clarity. The outcome sought by the objective would be clearer if it was divided into two objectives. The objective also refers to a 'national roading network' and it is not clear what this means as the former State Highway 1 will be removed from the state highway network with the opening of the Pūhoi to Warkworth motorway. 'Strategic' is a better term to use. The term 'transport network' is preferred to 'roading network' as it better reflects the different modes that form the network.	Amend Objective 2, and split it into two objectives as follows: '(2) The Warkworth South Precinct is subdivided and developed in a manner that Subdivision and development achieves an accessible urban area with efficient, safe and integrated vehicle, walking and cycle connections internally and to the wider Warkworth urban area. (2A) while Subdivision and development providesing for and supportsing the safety and efficiency of the current and future national strategic and local roading transport network.'	20.9
IXXX.2 Objective 8	Oppose in part	The reference to 'future education infrastructure' is unclear and should be deleted as the precinct provisions do not require education infrastructure to be co-ordinated with subdivision and development. The other infrastructure referred to (transport, stormwater, potable water and wastewater) is required by precinct provisions.	Amend Objective 8 as follows: 'Subdivision and development is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, and wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements.'	20.10

405

Page 9 of 28 age 9

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
IXXX.2 Objective 10	Support in part	Amendments are needed to make Objective 10 clearer, recognise the importance of the interchange being adjacent to the local centre, and focus on safe bus access.	Amend Objective 10 as follows: 'To provide for the opportunity for a future public transportation interchange adjacent to the local centre which can be safely accessed by a range of buses and other required transportation modes.'
IXXX.2 Objectives	Oppose	To support transport land use integration, a robust objective is needed whereby subdivision and development does not occur in advance of the availability of operational transport infrastructure.	Add a new objective as follows: 'Subdivision and development does not occur in advance of the availability of operational transport infrastructure.'
IXXX.2 Objectives	Oppose	An additional objective is needed to address access to, from and within the precinct. In addition, the outcome of safe, effective and efficient access needs to be linked to mitigating the adverse effects of traffic generation on the surrounding road network.	Add a new objective as follows: 'Access to and from and within the precinct for all modes of transport occurs in a effective, efficient and safe manner that mitigates the adverse effects of traffic generation on the surrounding road network.'
IXXX.2 Objectives	Oppose	An additional objective is needed to focus on active modes and public transport. This is consistent with NPS-UD and Regional Policy Statement objectives and policies which emphasis reducing dependence on private vehicle trips and enabling walking, cycling and public transport.	Add a new objective as follows: 'The precinct develops and functions in a way that: (a) supports a mode shift to public and active modes of transport (b) provides safe and effective movement between the local centre, community facilities, housing, jobs, open spaces and the public transport facilities by active modes.'
IXXX.3 Policy 12	Oppose in part	The reference to 'educational infrastructure' in this policy is unclear and should be deleted as the precinct provisions do not require subdivision and development to provide educational infrastructure. The other infrastructure referred to (transport, stormwater, potable water and wastewater) is required by precinct provisions.	Amend Policy 12 as follows: 'Require subdivision and development to provide stormwater, wastewater, potable water, electricity, and communication services and educational infrastructure in a coordinated manner.'
IXXX.3 Policy 13	Support in part	Policy 13 needs amendment to make it clearer and to identify the need to provide walking and cycling connections to existing urban development.	Amend Policy 13 as follows: 'Require subdivision and development to provide for walking and cycling networks within the precinct, including to any future public transport interchange, while also providing connections to the wider transportation

406 Page 10 of 28 ge 10

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
			network and any future public transport interchange existing urban development.'	
IXXX.3 Policy 14	Support in part	The requirement to provide the roading infrastructure in accordance with Precinct Plan 3 is supported. However the policy would benefit from amendment to provide explicit support to the design and functional elements identified in the transport infrastructure standard.	Amend Policy 14 as follows: 'Require subdivision and development to upgrade existing and/or provide new roading infrastructure (which is designed in accordance with Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements for a range of modes of transport and including public transport) within the precinct and to provide connections to adjoining land generally in accordance with Precinct Plan 3.'	20.1
IXXX.3 Policy 15	Support in part	The precinct provisions require the Wider Western Link Road between State Highway 1 and the Mahurangi River Tributary, to be constructed as a two lane, 24m wide road with a median, and active mode facilities. This will initially function as a collector road servicing the precinct but is of the width and form required to function as part an arterial road for the wider area once it is extended to Woodcocks Road. Policy 15 needs amendment to more clearly reflect this.	Amend Policy 15 as follows: 'Provide for and require the Wider Western Link Road to be constructed to a collector road standard in the interim to service subdivision and development within the precinct, while recognising that it will form part of provision is made for its future upgrading by Auckland Transport to provide a future strategic transport connection.'	20.18
IXXX.3 Policy 16	Support in part	Auckland Transport supports the vehicle access restriction applying to development with frontage to the Wider Western Link Road and State Highway 1. However an exemption is needed for the future public transport interchange as this cannot function without vehicle access.	Amend Policy 16 as follows: 'Avoid direct vehicle access from individual sites on to the Wider Western Link Road and State Highway One, while allowing direct pedestrian and cycle access and for bus and service vehicle access to the future public transport interchange.'	20.1
IXXX.3 Policy 19	Support	Minimising direct vehicle access from individual sites on to collector roads will improve safety for pedestrians and cyclists, particularly given the separated cycle facilities that will be provided.	Retain Policy 19	20.2
IXXX.3 Policies	Oppose in part	None of the existing policies explicitly link with Objective 10 which addresses the provision for a public transport interchanges. There is a need to provide a supporting policy.	Include a new policy as follows: 'Provide for the development and operation of a public transport interchange in the indicative location identified on Precinct Plan 3.'	20.2

Page 11 of 28 ge 11

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
IXXX.4 Activity tables	Oppose	The activity tables are long and repetitive and could be made more legible for users. They unnecessarily repeat 'standards to be complied with' rather than relying on blanket rules such as IXXX.6(3) which states that permitted activities must comply with Standards Ixxx.6.	Amend the activity tables to reduce complexity and repetition so that they are easy for the user to understand.
IXXX.4 Activity tables, & Ixxx.7 Assessment - restricted discretionary activities	Oppose in part	While in general, the road design and functional elements set out in Table IXXX.6.15.2 should be complied with, there may be circumstances where some variation in road design is acceptable. This is subject to assessment against relevant precinct policies, consideration of design constraints, and ensuring appropriate interface design treatment at property boundaries (particularly for pedestrians and cyclists). The activity tables should be amended to include an appropriate restricted discretionary activity.	Amend the activity tables to include a restricted discretionary (RD) status for 'Subdivision and / or development that does not comply with Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements'. Consequential to this, amend Ixxx.7 Assessment - restricted discretionary activities, to include appropriate Matters of Discretion and Assessment Criteria to assess proposals that do not comply with Table IXXX.6.15.2.
Table IXXX.4.1 All zones (A17)	Oppose	(A17) relates to 'subdivision not complying with Standard Ixxx.6.14 Greenways - Walking and Cycling Infrastructure'. Such subdivision should still need to comply with Standard Ixxx.6.15 Transportation Infrastructure. It appears this standard may have been omitted in error.	Amend (A17) in Table IXXX.4.1 All zones, to include the following standard in the 'Standards to be complied with' column: 'Ixxxx6.15 Transportation Infrastructure' Make similar amendments to other entries in Table IXXX.4.1 where required.
Table IXXX.4.2 Residential - Large Lot Zone (A3)	Oppose	Subdivision and / or development which does not comply with the standards requiring specified transport infrastructure to be provided should be assessed as a non-complying activity. The transport infrastructure specified in Table IXXX.6.15.1 is critical to servicing subdivision and development within the precinct.	Amend (A3) in Table IXXX.4.2 Residential - Large Lot Zone, to apply a NC activity status to 'Development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'
Table IXXX.4.2 Residential - Large Lot Zone (A4)	Oppose	Subdivision and / or development which does not comply with the standards requiring specified transport infrastructure to be provided should be assessed as a non-complying activity. The transport infrastructure specified in Table IXXX.6.15.1 is critical to servicing subdivision and development within the precinct.	Amend (A4) in Table IXXX.4.2 Residential - Large Lot Zone, to apply a NC activity status to 'Subdivision not complying with Standard Ixxx6.15 (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'
Table IXXX.4.3 Residential - Single House Zone	Oppose in part	Auckland Transport supports the non-complying activity status applying to subdivision not complying with Standard Ixxx.6.7 Limited Access Restrictions and Pedestrian Connections (A5).	Amend Table IXXX.4.3 Residential - Single House Zone to include the following as a non-complying activity (NC).

Page 12 of **2%**ge 12

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
		However a similar entry needs to be included in the table for development that does not comply with this standard.	' <u>Development not complying with Standard Ixxx.6.7</u> <u>Limited Access Restrictions and Pedestrian Connections'</u>	
Table IXXX.4.4 Residential - Mixed Housing Urban Zone (A6)	Oppose in part	Restaurants and cafes are provided for as a permitted activity within the existing former Ransom Vineyard Building. The scale and transport effects of this activity have not been addressed in either the planning assessment or the ITA provided to support the application. It is not clear why this is provided for as a permitted activity in the Mixed Housing Urban zone.	Amend (A6) Table IXXX.4.4 to apply a discretionary (D) or restricted discretionary (RD) status (with appropriate assessment matters, including transport effects) to restaurants and cafes within the existing former Ransom Vineyard Building. In the alternative, provide supporting information about transport effects sufficient to satisfy Auckland Transport that no additional assessment is required via a resource consent process.	20.28
Table IXXX.4.4 Residential - Mixed Housing Urban Zone (A7)	Oppose in part	Education facilities are provided for as a permitted activity within the existing former Ransom Vineyard Building. The scale and transport effects of this activity have not been addressed in either the planning assessment or the ITA provided to support the application. It is not clear why this is provided for as a permitted activity in the Mixed Housing Urban zone.	Amend (A7) Table IXXX.4.4 to apply a discretionary (D) or restricted discretionary (RD) status (with appropriate assessment matters, including transport effects) to education facilities within the existing former Ransom Vineyard Building. In the alternative, provide supporting information about transport effects sufficient to satisfy Auckland Transport that no additional assessment is required via a resource consent process.	20.29
Table IXXX.4.4 Residential - Mixed Housing Urban Zone (A8)	Oppose in part	Subdivision and / or development which does not comply with the standards requiring specified transport infrastructure to be provided should be assessed as a non-complying activity. The transport infrastructure specified in Table IXXX.6.15.1 is critical to servicing subdivision and development within the precinct.	Amend (A8) in Table IXXX.4.4 Residential - Mixed Housing Urban Zone, to apply a non-complying (NC) status to 'Development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements).'	20.30
Table IXXX.4.4 Residential - Mixed Housing Urban Zone (A11)	Oppose in part	Subdivision and / or development which does not comply with the standards requiring specified transport infrastructure to be provided should be assessed as a non-complying activity. The transport infrastructure specified in Table IXXX.6.15.1 is critical to servicing subdivision and development within the precinct.	Amend (A11) in Table IXXX.4.4 Residential - Mixed Housing Urban Zone, to apply a non-complying (NC) status to 'Subdivision not complying with Standard Ixxx6.15 (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements).'	20.31
Table IXXX.4.5 Residential - Terrace	Oppose in part	Subdivision and / or development which does not comply with the standards requiring specified transport infrastructure to be	Amend (A6) in Table IXXX.4.5 Residential - Terrace Housing and Apartment Buildings, to apply a non-complying (NC)	20.32

Page 13 of 28age 13

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
Housing and Apartment Buildings (A6)		provided should be assessed as a non-complying activity. The transport infrastructure specified in Table IXXX.6.15.1 is critical to servicing subdivision and development within the precinct.	status to 'Development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements).'	
Table IXXX.4.5 Residential - Terrace Housing and Apartment Buildings (A9)	Oppose in part	Subdivision and / or development which does not comply with the standards requiring specified transport infrastructure to be provided should be assessed as a non-complying activity. The transport infrastructure specified in Table IXXX.6.15.1 is critical to servicing subdivision and development within the precinct.	Amend (A9) in Table IXXX.4.5 Residential - Terrace Housing and Apartment Buildings, to apply a non-complying (NC) status to 'Subdivision not complying with Standard Ixxx6.15 (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements).'	20.3
Table IXXX.4.6 Business – Local Centre (A1)	Support in part	For the avoidance of doubt, the listed activity (A1) should provide for the 'operation and maintenance of a public transport interchange'. It is appropriate to apply a permitted activity to the operation and maintenance of a public transport interchange once it is established. However the standards listed in the activity table are not relevant to the operation of such a facility. They are relevant at the construction phase which is covered elsewhere in the activity table.	Amend (A1) in Table IXXX.4. 6 Business – Local Centre, to describe the activity as 'Operation and maintenance of a public transport interchange', and to delete the list of standards to be complied with as none are relevant to operation and maintenance but relate to the construction phase which is covered elsewhere in the table. Retain permitted (P) status for 'Operation of a public transport interchange'.	20.3
Table IXXX.4.6 Business – Local Centre (A6)	Support in part	Auckland Transport supports the vehicle access restriction applying to development with frontage to the Wider Western Link Road and State Highway 1. However an exemption is needed for the future public transport interchange as this has a functional need for vehicle access. It is appropriate to apply a controlled activity status for the 'Development of a public transport interchange and associated facilities' so that the detail of the proposal can be assessed.	Amend (A6) in Table IXXX.4. 6 Business – Local Centre, to delete Ixxx.6.7 Limited Access Restrictions, from the list of standards to be complied with. Retain controlled (C) status for 'Development of a public transport interchange and associated facilities'.	20.35
Table IXXX.4.6 Business – Local Centre (A7)	Oppose in part	Subdivision and / or development which does not comply with the standards requiring specified transport infrastructure to be provided should be assessed as a non-complying activity. The transport infrastructure specified in Table IXXX.6.15.1 is critical to servicing subdivision and development within the precinct.	Amend (A7) in Table IXXX.4. 6 Business – Local Centre, to applying a non-complying (NC) activity status for 'Development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'.	20.30
Table IXXX.4.6 Business – Local Centre	Oppose in part	Subdivision and / or development which does not comply with the standards requiring specified transport infrastructure to be	Amend (A11) in Table IXXX.4. 6 Business – Local Centre, to applying a non-complying (NC) activity status for 'Subdivision	20.3

410 Page 14 of 28age 14

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
(A11)		provided should be assessed as a non-complying activity. The transport infrastructure specified in Table IXXX.6.15.1 is critical to servicing subdivision and development within the precinct.	not complying with Standard Ixxx6.15 (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'.	
IXXX.6 Standards (3)	Oppose	All activities in the tables (including D and NC activities) should be required to comply with the standards unless non-compliance is specifically addressed as part of a consent application. This is the standard approach in recent precincts. Where the precinct provisions do not specifically address non-compliance with individual standards, this can be addressed under the AUP(OP) general rules at C1.9 Infringement of standards.	Amend IXXX.6 Standards (3) as follows: 'Permitted All activities listed in Activity Tables Ixxx.4.1 to Ixxx.4.7 must comply with Standard Ixxx.6.'	20
Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities	Support in part	Ixxx.6.7 seeks to address vehicle access restrictions as well as pedestrian connections and cycle facilities. However the application of this rule to pedestrian and cycle facilities is unclear and amendments are needed to address this. Clause (3) requires pedestrian connections to be provided generally as shown on Precinct Plan 3. The only reference to pedestrians on Precinct Plan 3 is at the Wider Western Link Road / State Highway One intersection. Ixxx.6.7 does not require any cycle facilities to be required. However there are other standards elsewhere in the precinct provisions that do require pedestrian and cycle facilities to be provided - Ixxx.6.14 Greenways - Walking and Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure. It appears that Ixxx.6.7 does not need to include any requirements for pedestrian connections and cycle facilities, other than supporting their safety through vehicle access restrictions.	Amend Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities to clarify whether the standard requires any pedestrian and cycle facilities to be provided, or whether it only includes vehicle access restrictions. Amend the title and Ixxx.6.7(3) accordingly.	20
Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities	Support in part	Some amendments are required to the title and purpose statement of Ixxx.6.7 to clarify the purpose of the standard. Such restrictions are generally called vehicle access restrictions (rather than limited access restrictions) elsewhere in the AUP(OP), particularly in Chapter E27 Transport. The first bullet point should be amended to include Green Avenue and other collector roads, given that Standard Ixxx.6.7(2) and (4) includes vehicle access restrictions for those roads.	Amend the title and purpose statement of lxxx.6.7 as follows: 'Limited-Vehicle Access Restrictions, Pedestrian Connections and Cycle Facilities Purpose: • to avoid direct vehicle access from individual sites onto State Highway One, and the Wider Western Link Road, Green Avenue, and collector roads; and • to have-promote safe and efficient operation of	20

Page 15 of **2%**ge 15

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
		The second bullet point should refer to ' to promote safe and efficient operation' rather than 'to have safe and efficient operation'. The third bullet point should include 'safe' as the vehicle access restriction is important for achieving safe pedestrian and cycle connections. The last part of the sentence should be deleted as its meaning is unclear and therefore it does not add value to the purpose statement.	transport infrastructure; and to achieve <u>safe</u> , accessible and high-quality pedestrian and cycle connections within the Precinct and including to the Local Centre and any future public transportation interchange-that provides positively for the needs to the local community.'
Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities	Support in part	Some amendments are required to lxxx.6.7 (2), (3) and (4). As mentioned elsewhere in this submission, the public transport interchange has functional requirements which mean it needs to be exempt from the vehicle access restriction. The references to providing access via a rear driveway should be deleted, and it is not clear what this means. Rather vehicle access can be provided by rear lanes (access lots) or side roads. An amendment is required to (3) to make it clear that pedestrian connections shown in Precinct Plan 3 should be provided in conjunction with subdivision as well as in conjunction with development.	Amend Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, (1) to (4) as follows: '(1) Any new road intersections with State Highway One or the Wider Western Link Road servicing the precinct, shall be generally located as identified as "Access Points" on IXXX.10.3 Waimanawa: Precinct Plan 3. (2) Sites that front onto the Wider Western Link Road, Green Avenue and State Highway One must not have direct vehicle access to the road except where required for the public transport interchange. and Sites, other than the public transport interchange, must be provided with access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision. (3) At the time of adjacent land subdivision and / or development, pedestrian connections, generally as shown in Precinct Plan 3, shall be provided. (4) Residential sites that front a collector road other than the 'Green Avenue" as shown on Precinct Plan 3, must not have direct vehicle access to the road and must be provided with access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision.'
1xxx.6.8 Wider Western Link Road	Oppose	Ixxx.6.8 Wider Western Link Road can be deleted. This standard is not required as:	Delete 1xxx.6.8 Wider Western Link Road in its entirety. Retain the non-complying activity status for subdivision and development which does not construct the Wider Western Link Road by applying an non-complying activity status to a

20.41

20.42

Page 16 of **2%**ge 16

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
		 the requirement to construct the Wider Western Link Road through the precinct, and the intersection with State Highway 1 is covered in Ixxx.6.15. the location of intersections for local roads connecting with the Wider Western Link Road is covered in Ixxx.6.7 the developer is required to construct a 24m wide road as set out in Table IXXX.6.15.2 and no additional land needs to be acquired by Auckland Transport for future upgrading to an arterial road. 	'Subdivision and development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements), as sought elsewhere in this submission.	
Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands	Oppose in part	An earlier proposal sought to include 6m width of land alongside the Wider Western Link Road as riparian planting within the road to vest. This was not acceptable to Auckland Transport. Bullet point 3 should be deleted accordingly as it suggests that the riparian yard would be included within the road reserve.	Amend Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, by deleting the third bullet point under the purpose statement as follows: 'To integrate the section of watercourse along the Wider Western Link Road within a wide road berm or as a separate open space integrated with the road berm.'	20.4
Ixxx.6.14 Greenways - Walking and Cycling Infrastructure	Oppose in part	Amendments are required to focus Ixxx.6.14 on off-road walking and cycling infrastructure. On-road active mode facilities are addressed under Ixxx.6.15 Transportation infrastructure.	Amend Ixxx.6.14 Greenways - Walking and Cycling Infrastructure, as follows: 'Purpose: To provide for off-road walkways and cycleways which Council wants vested in Council to form part of the public greenway network. (1) Walkways and cycleways that are to be vested in the Council (other than those vested as road) shall be provided within the greenways shown on Precinct Plan 1 and: (a) Shall be constructed either to a walking track standard similar to that constructed in Regional Parks if not part of a vested formed road, or in the case where the greenway is part of a vested formed road, constructed to normal footpath standards as appropriate;'	20.4
Ixxx.6.15 Transportation Infrastructure	Support in part	Amendments are required to the title and purpose statement relating to transport infrastructure to:	Amend the title and purpose statement of Ixxx.6.15 as follows:	20.4

Page 17 of 28age 17

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
		 refer to 'transport infrastructure' rather than 'transportation infrastructure' make it clear that the transport infrastructure it to be provided, not just provided for reflect the need to provide a pedestrian and cycle connection further northwards along State Highway 1 (past the McKinney Road intersection) as outlined elsewhere in this submission. 	 'Transportation Infrastructure Purpose: To achieve the integration of land use and transportation infrastructure (including walking and cycling). To ensure transportation infrastructure is appropriately provided for. To provide a pedestrian and cycle connection to the McKinney Road/ northwards along State Highway One Intersection to the existing urban area.'
Ixxx.6.15 Transportation Infrastructure (1) and (2)	Oppose in part	Amendments are required to make it clear that subdivision and development within the Precinct must not exceed the triggers in the relevant Table until the identified transport infrastructure upgrade is constructed and operational, in the general location shown on Precinct Plan 3. Transport upgrades should be identified on Precinct Plan 3 Transportation, and there should be no need to reference Precinct Plan 1 Spatial Provisions.	Amend Ixxx.6.15 Transportation Infrastructure, (1) and (2) as follows: '(1) Subdivision and development within the Precinct must not exceed the triggers in Table IXXX.6.15.1 until the identified transport infrastructure upgrades are constructed and operational, The development of any part of the Precinct shall provide the relevant transport infrastructure, including walking and cycling, as indicated in Ixxx10.1 and applying to the development site, in the general location shown on Precinct Plans 1 and 3. (2) Subdivision and development (including construction of any new road) must comply with the standards in Table I4XX.6.4.2.1'
Table IXXX.6.15.1 Transportation Infrastructure Requirements (T1)	Oppose in part	Table IXXX.6.15.1 Transport Infrastructure Requirements does not include a clear requirement to upgrade the Valerie Close / State Highway 1 intersection. Instead it requires an assessment to be undertaken to confirm whether or not upgrading is required as part of any subdivision with frontage to Valerie Close or with a new road connection to Valerie Close. As currently worded the trigger is unclear and is more like an assessment matter than a rule. Amendment is required to achieve a more robust trigger and upgrading requirement.	Amend (T1) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to set a clear and appropriate trigger for upgrading of the Valerie Close / State Highway 1 intersection.

Page 18 of 28age 18

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
Table IXXX.6.15.1 Transportation Infrastructure Requirements (T2)	Support in part	Amendments are required to better describe the location and form of the upgrade to State Highway 1 so it is clearer what is required.	Amend (T2) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to describe the upgrade as follows: 'Upgrading of State Highway One though where it has frontage to the WW South Precinct to an urban arterial standard with active mode facilities'
Table IXXX.6.15.1 Transportation Infrastructure Requirements (T2)	Support in part	Amendments are required to clearly identify the trigger for upgrading of State Highway 1.	Amend (T2) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, by deleting the existing trigger for the State Highway 1 upgrade and replacing it with the following: 'Any subdivision and/or development: • within the Business - Local Centre zone; • for a retirement village; or • resulting in a cumulative total of 20 residential lots or dwellings within the Precinct.'
Table IXXX.6.15.1 Transportation Infrastructure Requirements (T3) and (T4)		Amendments and clarification are needed to ensure appropriate provision for active modes along State Highway 1. It is important to provide such facilities as part of the State Highway 1 upgrade (T2 in Table IXXX.6.15.1). In addition, an active mode connection should be provided along State Highway 1 to the connect in to the existing urban area to the north. This extended connection beyond the precinct area may need to be interim or temporary in nature to fit within the existing road reserve until the upgrades planned for State Highway 1 can be undertaken. (T3) and (T4) of Table IXXX.6.15.1 provides for a pedestrian/ cycle path on the eastern side of State Highway 1 to McKinney Road, and on the western side of State Highway 1 to Morrisons Heritage Orchard Entrance. Auckland Transport has the following concerns about the provisions: • it is not clear how the transport infrastructure requirements in (T3) and (T4) of Table IXXX.6.15.1 fit in with (T1) along the precinct frontage to State Highway 1 • the connection to the north should extend to the northern end of Wech Drive to provide connection to the	 Amend the provisions relating to active mode connections along State Highway 1 to: require pedestrian and cycle facilities to be provided in their ultimate form and location as part of the upgrade of State Highway 1 where it has frontage to the precinct clarify which pedestrian and cycle facilities are to be provided in an interim or temporary form require pedestrian and cycle facilities to be provided along State Highway 1 from the precinct to the northern end of Wech Drive. This is likely to require amendments to Table IXXX.6.15.1(T1), (T3) and (T4), Table IXXX.6.15.2 Note 2, and possibly Precinct Plan 3 Transportation. Require the applicant to provide additional detail to demonstrate that safe pedestrian and cycle facilities can be provided along SH1 from the precinct to the northern end of

Page 19 of 28age 19

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
		 more detail is needed to demonstrate that a safe active modes connection can be provided to the north given constraints (such as power poles) within the existing road reserve. 		
Table IXXX.6.15.1 Transportation Infrastructure Requirements (T5)	Support in part	Amendments are required to clearly identify the trigger for the construction of the Wider Western Link Road / State Highway 1 intersection	Amend (T5) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, by deleting the existing trigger for the Wider Western Link Road / State Highway 1 intersection and replacing it with the following: 'Any subdivision and/or development: • within the Business - Local Centre zone; • for a retirement village; or • resulting in a cumulative total of 20 residential lots or dwellings within the Precinct.'	20.51
Table IXXX.6.15.1 Transportation Infrastructure Requirements (T7) and (T8)	Support in part	(T7) applying to Green Avenue can be deleted and combined with the requirements applying to other collector roads. As currently worded, Green Avenue would need to be constructed as part of the first subdivision for residential development, rather than when there is subdivision or development with frontage to that road. This wording does not match with the recommendations in Section 5 of the the ITA and would appear to be an error. Amendments are required to: • refer to 'construction' in keeping with the other entries in	Amend (T8) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to describe the transport infrastructure as follows: 'Construction of Collector Roads (including Green Avenue)' Consequential deletion of (T7)	20.5
		 refer to construction in keeping with the other entries in the table note that there is more than one collector road include specific reference to Green Avenue. 		
Table IXXX.6.15.1 Transportation Infrastructure Requirements (T9)	Support in part	Amendments are required to better describe the upgrading required to Mason Heights. The upgrading should include filling in any gaps in the existing footpath network to provide a safe connection between the precinct and the intersection with Woodcocks Road.	Amend (T9) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to better describe the transport infrastructure upgrade as follows; 'Upgrading of Mason Heights including filling in any gaps in the existing footpath network to provide a continuous	20.5
		Mason Heights is expected to provide access to a limited number of lots within the Residential - Large Lot zoned area of the precinct.	connection between the precinct and the intersection of Mason Heights with Woodcocks Road'	

Page 20 of **2%**ge 20

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
Table IXXX.6.15.1 Transportation Infrastructure Requirements (T9)	Support in part	Amendments are required to better define the trigger for upgrading to Mason Heights. There are some footpath upgrades required on Mason Heights to provide a safe connection from the Precinct through to Woodcocks Road.	Amend (T9) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to better describe the trigger as follows: 'Any subdivision or development with access to frontage to that section of Mason Heights or in the event that Mason Heights is extended or a new road is connected to it within the Waimanawa Precinct.'	20.54
Table IXXX.6.15.1 Transportation Infrastructure Requirements Note	Oppose in part	Consequential to the amendment to (T9) sought elsewhere in this submission, the note under Table IXXX.6.15.1 Transportation Infrastructure Requirements needs to be amended. The upgrades required to Mason Heights are not limited to the area adjacent to the subdivision or development as there are some gaps in the footpath network that need to be completed.	Amend the note under Table IXXX.6.15.1 Transportation Infrastructure Requirements, as follows: 'Note: Development relevant to any of the Standards T6, and T8 and T9 only apply to the section of the road adjacent to the development or subdivision area.'	20.55
Table IXXX.6.15.2 Minimum Road Width, Function, and Required Design Elements	Support in part	The title given to the table should be shortened, consistent with the naming used in other recent plan changes (though there are some variations).	Amend the title of Table IXXX.6.15.2 as follows: 'Minimum Road width, Function and Required Design Elements'	20.56
Table IXXX.6.15.2 Minimum Road Width, Function, and Required Design Elements	Oppose in part	Amendments are required as the access restrictions recorded in Table IXXX.6.15.2 for Green Avenue and other collector roads do not match with the vehicle access restrictions applying under Standard Ixxx.6.7(2) and (4).	Amend Table IXXX.6.15.2, including Note 6, to be consistent with the rules in Standard Ixxx.6.7(2) and (4) which applies a vehicle access restriction to Green Avenue and other collector roads.	20.57
Table IXXX.6.15.2 Minimum Road Width, Function, and Required Design Elements Note 3	Oppose in part	As noted in an earlier submission point (relating to Table IXXX.6.15.1 Transport Infrastructure Requirements) amendments and clarification are need to ensure appropriate provision for active modes along State Highway 1. It is important to provide such facilities as part of the State Highway 1 upgrade (T2 in Table IXXX.6.15.1). In addition, an active mode connection should be provided along State Highway 1 to the connect in to the existing urban area to the north. The connection to the north should extend to the northern end of Wech Drive to provide connection to the existing urban area.	Amend Table IXXX.6.15.2, Note 3 to require better provision for active modes along State Highway 1 as described elsewhere in this submission.	20.58

Page 21 of **2%**ge 21

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
		Auckland Transport is not satisfied that the standard of walking and cycling facility along State Highway 1 as described in Note 3 is adequate.		
Table IXXX.6.15.2 Minimum Road Width, Function, and Required Design Elements Note 4	Support in part	A minor amendment is required to clarify that it is bus stop 'form and location', as well as bus routes that will be determined with Auckland Transport as part of later consent processes.	Amend Table IXXX.6.15.2, Note 4 as follows: Carriageway and intersection geometry capable of accommodating buses. Bus stop form and locations and bus route shall be determined with Auckland Transport at resource consent and engineering plan approval stage.	20.5
Table IXXX.6.15.2 Minimum Road Width, Function, and Required Design Elements Note 5	Oppose in part	The applicant has suggested that a bi-directional cycle facility be provided along part of Wider Western Link Road, rather than uni-directional cycleways on each side of the road. This may be an appropriate design response, but at this stage of the consenting process Auckland Transport is not able to confirm that it is acceptable. The wording in Note 5 needs to be amended accordingly.	Amend Table IXXX.6.15.2, Note 5 as follows: Cycle lane will only be provided Bi-directional cycle facility may be appropriate on the northern side of wWider wWestern ILink Road in the section where road boundary abutting existing stream riparian yard adjoining the Morrison Orchard Precinct.	20.6
Ixxx.7.2 Assessment criteria – Controlled Activities	Support in part	The public transport interchange is expected to provide offline facilities to serve starting / terminating services and through facilities. This would include driver facilities (e.g. breakrooms and toilets) and layover spaces with charging facilities. Some cycle parking and storage could be included. At this stage it is not clear that pedestrian and cyclist access would be a key requirement for the interchange. A modification to the assessment criterion is therefore recommended.	Amend Ixxx.7.2(1)(b) as follows: 'For public transport interchanges, whether safe and efficient vehicle, pedestrian and cyclist access (as relevant) into and within the public transport interchange is achieved.'	20.6
Ixxx.8.1 Matters of discretion (1)	Oppose in part	An amendment is required so that the matters of discretion applying to subdivision also apply to development. Substantive development, such as retirement villages, can occur without subdivision.	Amend Ixxx.8.1 Matters of discretion, (1) as follows: 'Subdivision and new buildings prior to subdivision'	20.6
lxxx.8.1 Matters of discretion (1)(b)	Oppose in part	Amendments are required to better describe the matters of discretion relating to transport.	Amend Ixxx.8.1 Matters of discretion, (1)(b) as follows: 'Transport including: (a) access, walking and cycling infrastructure, (b) traffic generation, (c) access to public transport and parking	20.6

418 Page 22 of 28age 22

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
			(d) location and design of the Wider Western Link Road, collector roads, key local roads and connections with neighbouring sites to achieve and integrated street network and appropriately provide for all modes (e) provision of cycling and pedestrian networks and connections (f) provision of public transport facilities (bus stops and shelters) (g) design and sequencing of upgrades to the transport network.	
Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities (1)	Oppose in part	An amendment is required so that the assessment criteria applying to subdivision also apply to development. Substantive development, such as retirement villages, can occur without subdivision.	Amend Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities, (1), as follows: 'Subdivision and for new buildings prior to subdivision'	20.
Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities (1)	Oppose in part	An amendment is required so that development, as well as subdivision, is assessed for consistency with the precinct plans.	Amend Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities, (1)(a)(ii) as follows: 'Subdivision and development layout is consistent with Precinct Plans 1 to 4'	20.
Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities (1)(c)	Oppose in part	The assessment criteria relating to transport should be strengthened by requiring a consideration as to 'whether' they are met, rather than 'the extent to which' they are met.	Amend Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities, (1)(c) as follows: 'Transport The extent to which Whether:'	20
Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities (1)(d)	Oppose in part	The assessment criteria for stormwater management need to explicitly consider the whole of life costs and long-term effectiveness of publicly vested stormwater assets. Auckland Transport has a particular concern in ensuring appropriate design and use of any communal devices (such as raingardens) proposed to treat road runoff.	Amend Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities, (1)(d) Stormwater management, by adding the following: '(ii) The design and efficacy of infrastructure and devices with consideration given to the likely effectiveness, ease of access, operation, ongoing viability and maintenance, and integration with the surrounding environment including the road corridor where relevant'	20.6

Page 23 of **2%**ge 23

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities (2)	Support in part	The reference to providing a suitable pedestrian and cyclist connection between the Local Centre and any public transport interchange should be amended to refer to any public transport facilities. Bus stops could be provided on Wider Western Link Road separate from the public transport interchanges. It is also likely that such bus stops would be provided before the public transport interchange is established.	Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities, (2)(i) as follows: 'The design of the Local Centre shall achieve a connected and functional design that reflects a high quality of architectural design, landscape architecture and best practise urban design principles, including the extent to which a suitable pedestrian and cyclist connection is provided between the Local Centre and any public transport interchange-facilities, the land to the west, south and to the pedestrian and cycle crossing at the Wider Western Link Road and State Highway One Intersection.'
Ixxx.9.1 Transport and safety	Oppose in part	A special information requirement should be added specifying that a transport design report must be provided to support any proposed new key road intersections or upgrading of existing key road intersections. This signals the additional information and assessment that will be required to support resource consent applications. It is also consistent with special information requirements included in other recent plan changes which are now operative e.g. Plan Changes 48 Drury Centre, 49 Drury East, 50 Waihoehoe and 76 Pukekohe East-Central.	Amend the special information requirements under lxxx.9.1 Transport and safety, by adding the following as clause (2): 'Transport Design Report Any proposed new key road intersection or upgrading of existing key road intersections illustrated on the Precinct Plan or otherwise identified in the precinct provisions must be supported by a Transport Design Report and Concept Plans (including forecast transport modelling and land use assumptions), prepared by a suitably qualified transport engineer confirming the location and design of any road and its intersection(s) supports the safe and efficient function of the existing and future (ultimate) transport network and can be accommodated within the proposed or available road reserves. This may be included within a transport assessment supporting land use or subdivision consents.
			In addition, where an interim upgrade is proposed, information must be provided, detailing how the design allows for the ultimate upgrade to be efficiently delivered. For the avoidance of doubt, the key road intersections for the purposes of this requirement are identified on Precinct Plan 3 as 'Indicative Access Points onto WWLR'

Page 24 of 28 ge 24

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
			and 'Indicative WWLR / SH1 Intersection'. In addition the Valerie Close / SH1 intersection is a key road intersection.'
Ixxx.9.4 Waimanawa Precinct Plan 1 Spatial provisions	Oppose in part	Some transport information shown on Precinct Plan 3 Transportation is unnecessarily duplicated on Precinct Plan 1 which could cause confusion. In addition Precinct Plan 1 is already difficult to read and would be clearer if unnecessary information was removed.	Amend Ixxx.9.4 Waimanawa Precinct Plan 1 Spatial provisions by removing the following information (which already appears on Precinct Plan 3): Indicative WWLR / SH1 Intersection Indicative Future Public Transport Hub Indicative Dedicated On-Road Cycle Path.
Ixxx.9.4 Waimanawa Precinct Plan 3 Transportation	Support in part	A minor amendment is required to the key in Precinct Plan 3 to ensure that consistent terminology is used for referring to the future Public Transport Interchange. In addition, it would be helpful to identify the approximate size of the public transport interchange.	Amend the key for lxxx.9.4 Waimanawa Precinct Plan 3 Transportation, as follows: 'Indicative Future Public Transport Hub Interchange (approximately 2100m²)'
Ixxx.9.4 Waimanawa Precinct Plan 3 Transportation	Oppose in part	Precinct Plan 3 shows the location of some but not all of the separated cycle facilities required to be provided. Either, all of the cycle facilities should be shown. Or alternatively, none should be shown because they are difficult to show clearly on the precinct plan, and all the requirements can be adequately described in the relevant standards (Table IXXX.6.15.1 and Table IXXX.6.15.2.	Amend Ixxx.9.4 Waimanawa Precinct Plan 3 Transportation, to show the cycle facilities proposed on State Highway 1. Or in the alternative, delete all of the 'Indicative Dedicated On-Road Cycle Path' from Precinct Plan 3 as these can be covered by the requirements in Table IXXX.6.15.1 and Table IXXX.6.15.2.
Morrison Heritage Orch	ard Precinct		
XXX Morrison Heritage Orchard Precinct	Oppose	The precinct provisions do not adequately address traffic and other transport effects including how development will be integrated with effective, efficient and safe transport. None of the objectives and policies include transport matters. A wide range of potential traffic generating activities are provided for as permitted activities. While there are limits on the scale of some of these activities it is not clear that these are sufficient to address cumulative transport effects. The standard relating to access and traffic generation lacks robustness and would be difficult to monitor and enforce.	Amend precinct provisions, including objectives, policies and rules, to more rigorously address transport effects and promote good transport land use integration.

Page 25 of **2%**ge 25

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
Acoustic mitigation	Oppose	The proposal will enable residential activities such as dwellings, camping grounds, and other accommodation, adjacent to an existing arterial road (State Highway 1) and a future arterial road (Wider Western Link Road). Residential activity is sensitive to noise and development should be designed to protect people's health and residential amenity while they are indoors. This is not currently adequately addressed by existing AUP(OP) provisions, but has been addressed in a number of recent plan changes (e.g. PC49 Drury East, PC50 Waihoehoe, PC61 Waipupuke and PC76 Kohe / Pukekohe East-Central). Relevant objectives, policies and rules should be provided.	Amend the plan change by including precinct provisions (objectives, policies and rules) within the Morrison Heritage Orchard Precinct to require that future developments and alterations to existing buildings mitigate potential road traffic noise effects on activities sensitive to noise from the existing State Highway 1 arterial and the future Wider Western Link Road arterial.	20.74
Table XXX.X.1 Activity table	Oppose	The ITA provided to support the plan change does not propose any vehicle access from the Wider Western Link Road to service the Morrison Heritage Orchard Precinct. Rather the ITA has considered vehicle trips using the access point on State Highway 1. Given that no vehicle access to Wider Western Link Road is proposed or has been assessed in the ITA, it is appropriate to include an activity status of non-complying in the activity table. This is consistent with the approach in the adjacent Waimanawa Precinct.	Amend Table XXX.X.1 Activity table, to include the following as a non-complying (NC) activity: 'Subdivision and development with vehicle access to the Wider Western Link Road'	20.75
Table XXX.X.1 Activity table (A13)	Oppose	Weddings and functions are provided for as a permitted activity. There is no limit on scale, and it is not clear from the AUP(OP) what fits into the category of 'function' as it is not a defined term. Amendments are required to ensure that transport effects can be adequately assessed and addressed.	Amend the precinct provisions applying to weddings and functions to ensure that transport effects can be appropriately assessed and addressed. This is likely to require (but is not limited to) amendments to Table XXX.X.1 Activity table, and the standards in XXX.6.9 Weddings and functions.	20.76
XXX.5 Notification	Oppose	It is not appropriate for all applications for restricted discretionary activities to be considered without public or limited notification or the need to obtain written approval from affected parties. There will be some proposals with potential effects on the transport network where Auckland Transport as road controlling authority would want to be considered as an affected party for a restricted discretionary proposal, with Council making its decision on notification on the merits of the particular proposal.	Delete or amend XXX.5 Notification (1) to enable public or limited notification of applications which have a potential adverse effect on the transport network.	20.77

Page 26 of **2%**ge 26

Issue / Provision	Support / oppose	Reasons for submission	Decision requested	
XXX.6.1 General access and traffic generation	Support in part	Amendments are required to more clearly set out the vehicle access restriction applying on State Highway 1.	Amend XXX.6.1 General access and traffic generation standard, (1), as follows:	20.7
standard (1)			'All activities shall obtain Vehicle access is limited to State Highway One in accordance with at the Approved Entry Point (AEP) shown on the Precinct Plan.'	
XXX.6.1 General access and traffic generation standard (2)	Oppose	The standard relating to access and traffic generation lacks robustness and would be difficult to monitor and enforce.	Amend or replace XXX.6.1 General access and traffic generation standard (2), with robust, and enforceable standards which can be easily measured by the Council and applicants and which appropriately address transport effects and transport land use integration and provide for the access to the precinct to be upgraded if required.	20.79
XXX.6.1 General access and traffic generation standard	Oppose in part	The ITA and other documentation suggests that there is no intention to provide vehicle access from the Wider Western Link Road to the Morrisons Orchard. This should be reflected in precinct provisions. This is consistent with the approach in the Waimanawa Precinct.	Amend XXX.6.1 General access and traffic generation standard, by adding a new clause as follows: 'Subdivision and development that has frontage to the Wider Western Link Road must not be provided with vehicle access to that road.'	20.80
Xxxx8.1 Transportation and Safety	Support in part	It is appropriate to require transport assessments to be provided to support applications which have potential transport effects, particularly in relation to the access point on State Highway 1. However the cross-reference to E27.9 requirements should be replaced by a requirement which is more specific to the precinct.	Amend Xxxx8.1 Transportation and Safety by replacing the reference to E27.9 with a special information requirement for a transport assessment which is more specific to the precinct, and includes consideration of the access point on State Highway One.	
			Amend Xxxx8.1 Transportation and Safety as follows: The special information requirements under E27.9 apply. The Council may require applications which affect the transport network to include a transport assessment prepared by a suitably qualified transport planner or traffic engineer.	20.8
			Any upgrading of existing State Highway One access illustrated on the Precinct Plan as the Approved Entrance Point must be supported by a Transport Design Report and Concept Plans (including forecast transport modelling and land use assumptions), prepared by a suitably qualified transport engineer confirming the	

Page 27 of **2%**ge 27

Issue / Provision	Support / oppose	Reasons for submission	Decision requested
			location and design of any access supports the safe and efficient function of the existing and future (ultimate) transport network and can be accommodated within the proposed or available road reserves. This may be included within a transport assessment supporting land use or subdivision consents.
			In addition, where an interim upgrade is proposed, information must be provided, detailing how the design allows for the ultimate upgrade to be efficiently delivered.

424 Page 28 of 28 ge 28



Submission on Proposed Private Plan Change 93 – Warkworth South - Waimanawa

Clause 6 of Schedule 1, Resource Management Act 1991 (Form 5)

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter(s): Ash Hames and Fiona Rayner

This is a submission on Proposed Private Plan Change 93 ("PPC93") to the Auckland Unitary Plan – ("AUP").

Ash Hames and Fiona Rayner could not gain an advantage in trade competition through this submission.

The Submitter's own the land at 1684A State Highway 1, Warkworth, legally described as Lot 2 DP 119449. The Submitter's land will be directly affected by the Proposed Plan Change Request. A map showing the property is **Attachment A**.

The Submitter's land is situated within the PPC 93 area.

The Submitter's **SUPPORT** the Proposed Plan Change Request in principle, subject to the matters stated in this submission being addressed and for the reasons stated.

2. The Plan Change Request

PPC93 – Warkworth South - Waimanawa seeks a comprehensive rezoning and the introduction of Precinct provisions for Waimanawa (comprising of Waimanawa Valley and Waimanawa Hills) and the Morrison Orchard areas. The stated purpose of PPC93 is:

The purpose of the plan change is to re-zone land in Warkworth South to:

- (a) Provide for the continuation and expansion of the Morrison Heritage Orchard and further development of this site with supporting activities and limited residential development.
- (b) Enable the urban development of the remainder of the area (referred to as Waimanawa) to proceed generally in accordance with the outcomes sought through the Warkworth Structure Plan.

SCOPE OF SUBMISSION

3. SUBMISSION

3.1 General

Whilst rezoning the land for urban purposes is <u>supported in principle</u>, there are matters of detail that need to be secured through the plan change process. This submission addresses those matters that need to be

addressed and secured via the plan change provisions.

PPC93 proposes two new Precincts – "Waimanawa" and "Morrison Heritage Orchard". This submission focuses on the plan change itself and the "Waimanawa" Precinct only.

3.2 Plan Change Provisions

The Submitter's support the proposed Residential – Large Lot zoning shown for their land. This is appropriate for the location, character and values of the land. The proposed zoning will enable an appropriate self-serviced development outcome for the land which is at the southern extent of the planned urban area identified for Warkworth.

21.1

The Submitter's support the proposed Landscape Protection Area – Eastern Escarpment as shown on Precinct Plan 1 – Spatial Provisions. This overlay is appropriate to respect the landscape, ecological and other values associated with the adjacent Avice Miller Scenic Reserve. For these reasons the Submitter's also support the proposed Indicative Special Yard – Avice Miller Scenic Reserve as a 6-metre setback. It is noted that Precinct Plan 1 refers to this as a 3m setback whereas the Special Yard provisions say the yard setback is 6-metres and that of this 6-metres a 3m strip of the special yard is to be planted with indigenous vegetation. The Precinct plan and wording of the Rule should be amended to achieve clarity.

21.2

The Submitter's oppose proposed Precinct policy (16) which seeks to avoid direct vehicle access onto the old State Highway 1. Existing vehicle access onto State Highway 1 will be retained and the Policy needs to be reworded to ensure it enables existing access points, such as that for the Submitter's land to be retained and also to be used as a shared, or jointly owned access, point for the future urban development enabled by PPC93. A suggested rewording of the Policy is as follows – the additional text is shown underlined:

21.3

(16) <u>Subdivision, use and land development shall</u> avoid direct vehicle access from <u>newly created</u> individual sites on to the Wider Western Link Road and State Highway One [rename to reflect the AT road name eg Great North Road], while allowing direct pedestrian and cycle access.

21.4

It is also suggested that the references to State Highway 1 be updated when the road is reverted to Auckland Transport so there is no confusion with Ara Tūhono.

21.5

To this end the Submitter's oppose the proposed Rule Ixxx.6.7 – Limited Access Restrictions, Pedestrian Connections and Cycle Facilities (2). The Rule needs to be amended so it is clear that the rule applies only to new sites being created as a result of subdivision and land development within the PPC93 area and associated Precinct. In the Residential - Large Lot zone this rule only appears to apply to Supported Residential Care accommodating greater than 10 people per site, so this needs to be clarified with respect to the policy discussed above.

21.6

The Submitter's oppose Rule (A3) in Table IXXX.4.2 relating to the Residential – Large Lot zone. The development of the Submitter's land and the adjoining Residential - Large Lot zoned land is unlikely to require construction of the pedestrian links specified in Ixxx.6.15 and therefore this Rule should apply only to the Residential - Mixed Housing Urban and Residential - Terrace Housing and Apartment Buildings zoned land within PPC93.

0.1

Proposed Precinct Rule Ixxx.6.11 proposes a minimum site size of 1,000m² in the Eastern Escarpment Area. The Submitter's land is within the Eastern Escarpment Protection Area as shown on Precinct Plan 1 but is also

21.7

proposed to be zoned Residential – Large Lot which has a minimum site size of 4,000m². The rule requires clarification.

The Submitter's support the Restricted Discretionary activity status specified for Rule (A10) in Activity Table IXXX.4.1 All zones that alters the activity status for subdivision of parent sites with an area of greater than 1-hectare. It is appropriate for the activity status to be the same as for parent sites less than 1-hectare.

21.8

Rule (A6) in Activity Table IXXX.4.1 is opposed because Non-complying activity status for an infringement of the proposed 6-metre yard and associated indigenous vegetation planting standard for the Avice Miller Scenic Reserve boundary is too onerous. Restricted Discretionary activity status is appropriate for infringements to the Standards. This activity status is also consistent with the AUP as it currently exists.

21.9

3.3 Decisions Sought

Ash Hames and Fiona Rayner seek that PPC93 – Warkworth South plan change be **approved** with changes to provisions to address the matters raised in this submission.

Ash Hames and Fiona Rayner wish to be heard in support of this submission.

If others make a similar submission, the Submitters will consider presenting a joint case at the hearing.

Yours sincerely

Burnette O'Connor Director | Planner

The Planning Collective Limited

Butte O' Corror

Ph: +64 021 422 346

Email: burnette@thepc.co.nz

Attachment A – Submitter's Property Location Map



DISCLAIMER:
This map/plan is illustrative only and all information should be independently verified on site before taking any action. Copyright Auckland Council. Land Parcel Boundary information from LINZ (Crown Copyright Reserved). Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and plan completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information. Height datum: Auckland 1946.







Submission on Proposed Private Plan Change 93 – Warkworth South - Waimanawa

Clause 6 of Schedule 1, Resource Management Act 1991 (Form 5)

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter: Barry Blennerhassett and Lorraine Margaret Blennerhassett (Blennerhassett family)

This is a submission on Proposed Private Plan Change 93 ("PPC93") to the Auckland Unitary Plan – ("AUP").

The Blennerhassett family could not gain an advantage in trade competition through this submission.

The Blennerhassett family own the land at 50 Mason Heights Road, legally described as Lot 2 DP336865 and will be directly affected by the Request. A map showing the property is **Attachment A**.

The Submitter's land is directly adjoining the PPC 93 area. The Submitter's land accesses Mason Heights Road and parts of the PPC93 land will access via Mason Heights Road.

The Submitter **SUPPORTS** the Proposed Plan Change Request in principle, subject to the matters stated in this submission and for the reasons stated.

2. The Plan Change Request

PPC93 – Warkworth South - Waimanawa seeks a comprehensive rezoning and the introduction of Precinct provisions for Waimanawa (comprising of Waimanawa Valley and Waimanawa Hills) and the Morrison Orchard areas. The stated purpose of PPC93 is:

The purpose of the plan change is to re-zone land in Warkworth South to:

- (a) Provide for the continuation and expansion of the Morrison Heritage Orchard and further development of this site with supporting activities and limited residential development.
- (b) Enable the urban development of the remainder of the area (referred to as Waimanawa) to proceed generally in accordance with the outcomes sought through the Warkworth Structure Plan.

SCOPE OF SUBMISSION

3. SUBMISSION

3.1 General

Whilst rezoning the land for urban purposes is <u>supported in principle</u>, there are matters of detail that need to be secured through the plan change process. The development of Warkworth South is an important and necessary component for the continued development of Warkworth into a satellite town which is critical in

terms of ensuring that Warkworth becomes a sustainable urban area.

This submission addresses those matters that need to be addressed and secured via the plan change provisions.

PPC93 proposes two new Precincts – "Waimanawa" and "Morrison Heritage Orchard". This submission focuses on the plan change itself and the "Waimanawa" Precinct only.

3.2 Plan Change Assessments

General:

The Plan Change report states that the Blennerhassett family, the owners of 50 Mason Heights Road, are not a cooperating landowner. It is assumed this statement is made on the basis that the Blennerhassett family land is not included in the plan change area.

The Submitter met with Bill Endean regarding his plans for some of the Warkworth South area on or around 18 November 2020 and attended an open day for adjoining landowners hosted by the Warkworth South team on 9 April 2022. This engagement provided a high-level opportunity to see some of the plans and have an informal discussion. The Submitter subsequently received a draft masterplan and zoning map from Mr David Hay by email on 14 April 2022. There have not been any formal one on one meetings with the Warkworth South team.

In any event the Blennerhassett family is supportive of PPC93 subject to the matters raised in this submission.

Infrastructure:

The Plan Change report states that there will be an Infrastructure Funding Agreement ("IFA") and this is currently being negotiated with Auckland Council and presumably the relevant CCO's ("Council Controlled Organisations"). The Plan Change report states that "An IFA will ensure that all relevant infrastructure required for any stage of the project is in place prior to residential connections for that stage".

The infrastructure servicing is designed to be delivered from the south, within the PC93 area and then extend north back towards the existing Warkworth urban area.

The infrastructure for the PPC93 area needs to be designed and constructed to enable servicing capacity for the Future Urban land between the plan change area and existing urban area of Warkworth, including the Submitter's land.

The Submitter understands that PPC93 does not currently require access through the Submitter's land for services to Warkworth South, however the Submitter wishes to identify that if changes to the site servicing are required then the Submitter is open to discussions regarding providing necessary services through its property in order to ensure that the Warkworth South Area (and the Submitter's land) can be efficiently developed. If this outcome were to occur there would be better outcomes achieved from incorporating the Submitter's land in the plan change and rezoning their land to an appropriate urban zone such as Residential – Mixed Housing Urban, consistent with the likely zoning outcome for the residential development to the east of Mason Heights Road.

The assessments for infrastructure capacity need to consider the existing infrastructure in Warkworth and whether any upgrades are required to that existing infrastructure, to enable infrastructure servicing now and

into the future for both the plan change 93 area *and* the 'stranded' future urban land located between PPC93 and the existing urban area (including the Submitter's land). It is not acceptable to leave reticulation or capacity issues to the resource consent stage. If there is insufficient capacity in the reticulated network, or at the plant, then this will result in inefficient outcomes and there will not be the required integration between the delivery of urban land and the effective and efficient of infrastructure to support that urban development.

The infrastructure assessment also needs to assess the capacity of the Snells Beach plant and the reticulated infrastructure in the context of all the development planned for Warkworth.

These important assessments are not apparent from the Infrastructure report in Appendix 5 of the Plan Change documentation.

Compact Urban Form / Integrated Planning and Quality Urban Environment:

The Submitter's land is to the north of the plan change area and is zoned Future Urban. The approach of PPC93 leaves out areas of Future Urban zoned land between the plan change area and the existing urban zoned areas of Warkworth, including the Submitter's land. The outcome is further plan changes will be required to provide urban zonings to the Future Urban land 'stranded' between PPC93 and the existing urban area.

The Submitter questions why their land, and adjacent Future Urban zoned land was not included in the Plan Change area. Inclusion of the Submitters' land would assist in achieving a more integrated outcome with respect to integrated planning and a coordinated and efficient delivery of infrastructure.

3.3 Effects on the Environment

The proposed infrastructure servicing does not provide sufficient detail to show how the stranded land could be serviced in the future. Without this information it is likely that there will be inefficient outcomes in relation to the provision of infrastructure. This in turn could lead to adverse effects on the quality of the urban environment as land areas adjacent to the existing urban area may not be able to be developed.

3.4 Policy Framework

The National Policy Statement Urban Development ("NPS UD") objective 1 seek well-functioning urban environments. Objective 6 requires that "…local authority decisions on urban development that affects environments are integrated with infrastructure planning and funding decisions and strategic over the medium term and long term and are responsive, particularly in relation to proposal that would supply significant development capacity".

The Auckland Regional Policy Statement ("RPS") – Chapter B2 Urban growth B2.2.1 (1) seeks a quality compact urban form that enables **all** of the following:

- (a) a higher-quality urban environment;
- (b) greater productivity and economic growth;
- (c) better use of existing infrastructure and efficient provision of new infrastructure;
- (d) improved and more effective public transport;
- (e) greater social and cultural vitality;
- (f) better maintenance of rural character and rural productivity; and
- (g) reduced adverse environmental effects.

The current proposal in the PPC93 documentation for infrastructure servicing will not achieve the integrated

outcomes sought by the NPS UD or the RPS.

3.5 Precinct Provisions

Zoning:

Land to the east of the Submitter's land, within the plan change area is proposed to be zoned Residential – Large Lot and Residential – Mixed Housing Urban.

The Submitter supports the zoning as set out on the proposed zoning map and the extent of the proposed Waimanawa Precinct as shown on Map 4.

The Submitter supports the proposed Landscape Protection Area – Northern Escarpment extent to apply over the Residential – Large Lot zoned land as shown on Precinct Plan 1 – Spatial Provisions.

The 20-metre riparian yard as shown on Precinct Plan 1- Spatial Provisions is also generally supported with the exception that the useability and land use opportunities for the land to the north of the riparian yard in the north-western extent of the plan change area adjacent to the Submitter's land should be addressed. What is intended for this land? The plan shows proposed Open Space – Conservation. However, if there is urban development on the portion of land to the west of the riparian yard then dwellings may be close to the Submitter's land. This could lead to reverse sensitivity issues as the Submitter farms their land in keeping with the Future Urban zoning intent for land to be used for rural activities until it is zoned for urban land uses. The Open Space – Conservation zone is therefore supported.

Confirmation is required that the identified 'Bat Flight Corridor' does not extend further north to the Submitter's land.

3.6 Statutory Assessment

The effects of PPC93 on the environment are uncertain and not adequately managed by the plan change provisions with respect to the design and delivery of infrastructure.

The Request does not achieve the required outcomes of the National Policy Statement Urban Development, particularly with respect to the integration of infrastructure and urban development, strategic planning over the medium term and long term. All existing and future urban areas of Warkworth need to be taken into consideration in the assessment of infrastructure capacity.

The Request is not in keeping with the provisions of the Regional Policy Statement that it has to give effect to. Particularly with respect to infrastructure servicing and urban form.

In its current form the Request does not meet the objectives of the NPS UD or the Auckland Unitary Plan.

3.6 Conclusions

The Blennerhassett family seek that Plan Change 93 – Warkworth South plan change be **refused** or preferably **approved** with changes to provisions to address the matters raised in this submission.

The Blennerhassett family wish to be heard in support of this submission.

If others make a similar submission, the Submitter will consider presenting a joint case at the hearing.

22 1

Yours sincerely

Burnette O'Connor

Director | Planner

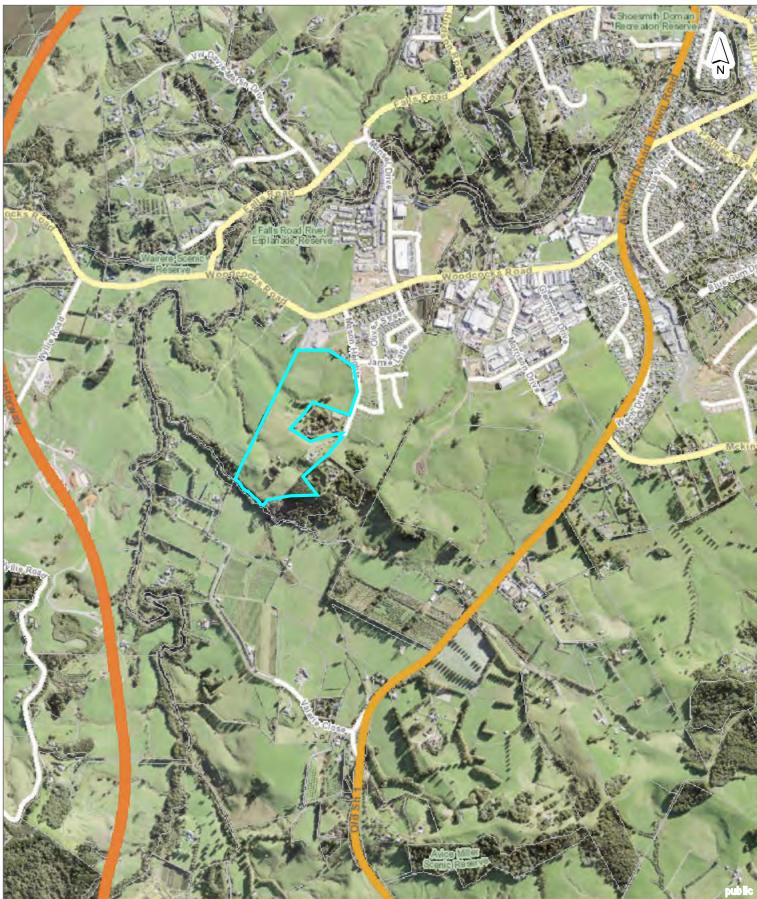
The Planning Collective Limited

Swette O' Coence

Ph: +64 021 422 346

Email: burnette@thepc.co.nz

Attachment A – Submitter's Property Boundaries



DISCLAIMER:
This map/plan is illustrative only and all information should be independently verified on site before taking any action. Copyright Auckland Council. Land Parcel Boundary information from LINZ (Crown Copyright Reserved). Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and plan completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information. Height datum: Auckland 1946.





From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: <u>Unitary Plan</u>

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - David Lawrence Morrison

Date: Thursday, 23 November 2023 9:15:25 am

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: David Lawrence Morrison

Organisation name:

Agent's full name:

Email address: dmorrison@davcoelectrical.co.nz

Contact phone number:

Postal address:

1773 Old State Highway One

Warkworth Auckland 0983

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Complete plan change PC93

Property address: Warkworth South

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

The proposed development aligns with the future plans of myself and my family

I or we seek the following decision by council: Approve the plan change without any amendments

Details of amendments:

Submission date: 23 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

23.1

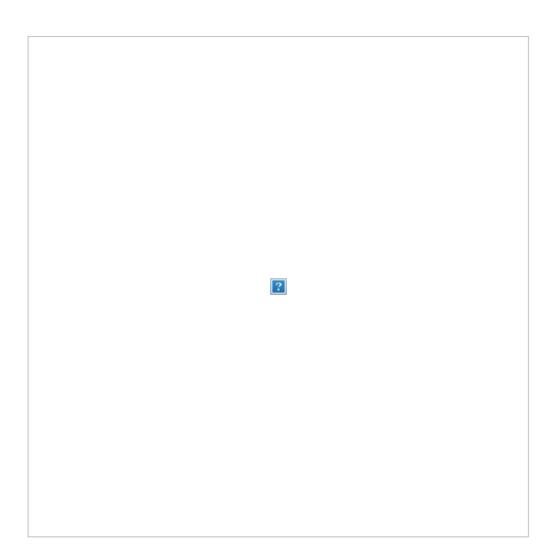
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

24

SUBMISSION ON PROPOSED PRIVATE PLAN CHANGE 93 – WARKWORTH SOUTH PRECINCT TO THE

AUCKLAND UNITARY PLAN (OPERATIVE IN PART)

To: Auckland Council

Name: KA Waimanawa Limited Partnership and Stepping Towards Far Limited (jointly The

Submitters)

Date: 23rd November 2023

Submitter Details

1. This is a submission on Proposed Private Plan Change 93 (PC93) to the Auckland Unitary Plan -

Operative in Part.

2. The Submitters are the applicant for PC93, which seeks to rezone approximately 159ha of Future

Urban and Rural – Rural Production zoned land in Warkworth to a mix of residential, business, open

space and rural zones through the introduction of two new precincts - Waimanawa and Morrison

Heritage Orchard.

3. KA Waimanawa Limited Partnership is a wholly owned subsidiary of Kaha Ake, a partnership between

The New Zealand Super Fund and Classic Group. Kaha Ake brings together long-term financial support

and experienced development capability to support the creation of homes at pace and scale around

New Zealand. Classic Group is a privately owned, integrated portfolio of businesses in the property

sector including Classic Developments. Stepping Towards Far Limited has the right to develop part of

the Waimanawa Precinct land and has partnered with KA Waimanawa Limited Partnership.

4. The Submitters could not gain an advantage in trade competition through this submission.

Scope of Submission

5. This submission is in support of PC93 in its entirety, incorporating the amendments specified below.

6. The specific aspects and provisions of PC93 that this submission relate to include those outlined in

detail within Attachment A.

24

24.2

Reasons for submission

7. Since notification of PC93, the Submitters have identified particular aspects of PC93 which warrant

amendments to provide clarity and consistency and for the sustainable management of natural and

physical resources. Without limiting the generality of the above, the specific reasons for the

submission include those set out in **Attachment A**.

Decision Sought

8. The Submitters seek that PC93 is approved with any amendments necessary to clarify provisions,

including those as set out in **Attachment A** of this submission.

9. The Submitters seek any further or alternative relief or any consequential amendments that may be

required to address the matters raised in this submission or any other related matters.

10. The Submitters wish to be heard in support of their submission.

11. The Submitters will consider presenting a joint case with others making a similar submission.

Ian Smallburn

Senior Associate I Tattico

De frallhin_

for and on behalf of KA Waimanawa Limited Partnership and Stepping Towards Far Limited

Address for service:

Contact person: Ian Smallburn

Electronic address for service: ian.smallburn@tattico.co.nz

24.3

24.4

24.5

Attachment A

No.	Submission Point	Reasons	Relief Sought
1	Reference to State Highway One throughout PC93.	Due to changes to the road network in the Warkworth area post lodgement of this request, and the construction of the new State Highway One, the reference could become confusing and is out of date.	Update all references to 'State Highway One' in the Precinct Plan to 'Old State Highway One'.
2	Update column headings in Tables IXXX.4.1, IXXX.4.2, IXXX.4.3, IXXX.4.4, IXXX.4.5, IXXX.4.6, and IXXX.4.7	The current term 'Standards to be complied with' may cause confusion, given the intent is for this to relate only to the Precinct Standards that need to be complied with.	Update right hand column on all Tables from 'Standards to be complied with' to 'Precinct Standards to be complied with'
3	Delete (A2) – 'New buildings and additions to buildings which meet Standard Ixxx.6.13 High Contaminant Yield Material' from Table IXXX4.1	This development activity is not required, as it is a double up of Standard Ixxx6.13, which adequately controls building materials.	Delete (A2) – 'New buildings and additions to buildings which meet Standard Ixxx.6.13 High Contaminant Yield Material' from Table IXXX4.1
4	Update (A4) – 'New reclamation or drainage, including filling over or piping of a stream shown as a Retained Stream on Precinct Plan 2' in Table IXXX4.1	The current wording potentially suggests that any reclamation or drainage works require consent. The intent of the Rule is to only control reclamation and drainage works within the identified retained streams.	Reword and update (A4) to 'New reclamation and drainage of a Retained Stream on Precinct Plan 2, including filling within the stream and piping of a stream, but excluding drainage works underneath a stream or bridging over a stream' in Table IXXX4.1
5	Update standards which do not apply under IXXX6(2)(a) bullet points 2 and 3.	The exemption currently references 'special subdivision control area' which is not shown on Precinct Plan 1. This area relates to the 'Landscape Protection Area – Eastern Escarpment', which has its own subdivision standard Ixxx6.11	Reword and update IXXX6(2)(a) bullet points 2 and 3 by removing 'special subdivision control area' and adding 'Landscape Protection Area – Eastern Escarpment'.
6	Update standards which do not apply under IXXX6(2)(g) bullet point 1.	The exemption currently references (A1) in Table lxxx4.6 Business Local Centre — 'Operation of a public transport interchange'. The exemption relates to yard controls and in turn physical construction. The correct references should be (A2) — 'New buildings' and (A3) — 'Additions and alterations to buildings not otherwise provided for'	Update IXXX6(2)(a) bullet point 1 by removing reference to A1 and adding reference to (A2) – 'New buildings' and (A3) – 'Additions and alterations to buildings not otherwise provided for'.

Illing within the am, but excluding a a stream or Table IXXX4.1

(2)(a) bullet points all subdivision and scape ascarpment'.

Oint 1 by and adding wildings' and (A3) at to buildings not

439 Page 3 of 8

24.9

7	Update standard lxxx6.12(1) and lxxx6.12(2)	This standard, within sections (1) and (2), currently refers to 'land development' within the opening sentence as a trigger point. This does not provide enough certainty and could refer to land development within the whole precinct. The term 'site development' is considered more appropriate as planting of a riparian yard will relate to the specific site and area of development.	Update standard lxxx6.12(1) and lxxx6.12(2) by removing the reference to 'land development' within the opening sentence and replacing it with 'site development'.
		This standard, within sections (1) and (2), also currently refers to exemptions 'or along the riparian yard' within the final sentence. This does not provide enough certainty and should refer to effects directly relating to the riparian yard. The term 'or within the riparian yard' is considered more appropriate.	Update standard Ixxx6.12(1) and Ixxx6.12(2) by removing the reference to 'or along the riparian yard' within the final sentence and replacing it with 'or within the riparian yard'.
8	Update standard lxxx.6.14(2)	The current wording of this section of the standard refers to 'walkway', however, this could be clearer to also include 'cycleway'.	Update standard lxxx.6.14(2) with the following wording 'Where the Council does not want or is unable to accept vesting of the walkway/cycleway and associated riparian yard and stream bank, then there is no requirement to provide the walkway/cycleway'.
9	Update Table IXXX.6.15.1 Transport Infrastructure Requirements (T2)	The current wording of the trigger within (T2) is open to interpretation. It is proposed to re-word this section to provide more clarity.	Update the Trigger within the third column of Table IXXX.6.15.1 relating to (T2) with the following wording: 'As part of the first subdivision for any land: (a) within the Business – Local Centre zone: or (b) for a retirement village; or

440 Page 4 of 8

			(c) for a residential development creating more than 20 residential lots.'
10	Update Table IXXX.6.15.1 Transport Infrastructure Requirements (T2), (T3) and (T4)	The interaction of the required transport infrastructure upgrades within (T2), (T3) and (T4) are open to interpretation given multiple references to the upgrade of old State Highway One and the extent of the required upgrades. This is made clearer within an amended Precinct Plan 3, which is Attachment B , updating the wording within T3 and deleting T4 due to duplication.	Update the Transport Infrastructure Upgrade within the second column of Table IXXX.6.15.1 relating to (T2) with the following wording: 'Upgrading of old State Highway One though the WW South Precinct to the extent shown on Precinct Plan 3.' Update the Transport Infrastructure Upgrade within the second column of Table IXXX.6.15.1 relating to (T3) with the following wording: 'Construction of the temporary pedestrian/cycle path on old State Highway One from the Wider Western Link Road/old State Highway One Intersection to McKinney Road.' Delete row (T4).
11	Update Table IXXX.6.15.1 Transport Infrastructure Requirements (T5)	The current wording of the trigger within (T5) is open to interpretation. It is proposed to re-word this section to provide more clarity.	Update the Trigger within the third column of Table IXXX.6.15.1 relating to (T2) with the following wording: 'As part of the first subdivision for any land:
			(a) within the Business – Local Centre zone: or (b) for a retirement village; or

441 Page 5 of 8

24.12

2/ 12

12	Update Table IXXX.6.15.1 Transport Infrastructure Requirements (T7)	The current wording of the trigger within (T7) is open to interpretation. It is proposed to re-word this section to provide more clarity as it currently relates to the first subdivision for residential development in the whole precinct, as opposed to the area influencing the requirement for the construction of Green Avenue. This is made clearer within an amended Precinct Plan 3, which is Attachment B .	(c) for a residential development creating more than 20 residential lots.' Update the Trigger within the third column of Table IXXX.6.15.1 relating to (T7) with the following wording: As part of the first subdivision for residential development within Waimanawa Valley, as shown on Precinct Plan 3, which has vehicle access to Valerie Close.'
13	Update Note 3 to Table IXXX.6.15.2	The current wording of Note 3 to Table IXXX.6.15.2 needs to align with submission point no. 10 above and the physical extent of the cycle path upgrade. Based on preliminary designs and taking into account the current extent of the road reserve, the temporary cycling and walking facility is like to be on the western side of Old State Highway One up to just north of Toovey Road, before crossing over Old State Highway one and continuing up the eastern side of Old State Highway One to the McKinney Road/Old State Highway One Intersection.	Update Note 3 to Table IXXX.6.15.2 with the following wording: 'Note 3: The shared walking and cycle path provision on old State Highway One will be a temporary cycling and walking facility from the Wider Western Link Road/old State Highway One intersection to the McKinney Road/old State Highway One intersection.'
14	Update Ixxx.8.1 Matters of discretion	The matters of discretion under lxxx.8.1 are narrow and only refer to Subdivision. Matters of discretion should also be incorporated regarding new buildings and alterations and additions to buildings within the Local Centre zone.	Update Ixxx.8.1 Matters of discretion to incorporate or cross reference the matters of discretion from the Local Centre zone being H11.8.1(4). One additional amendment to the Matters of discretion in H11.8.1(4) is proposed which

24.14

24.15

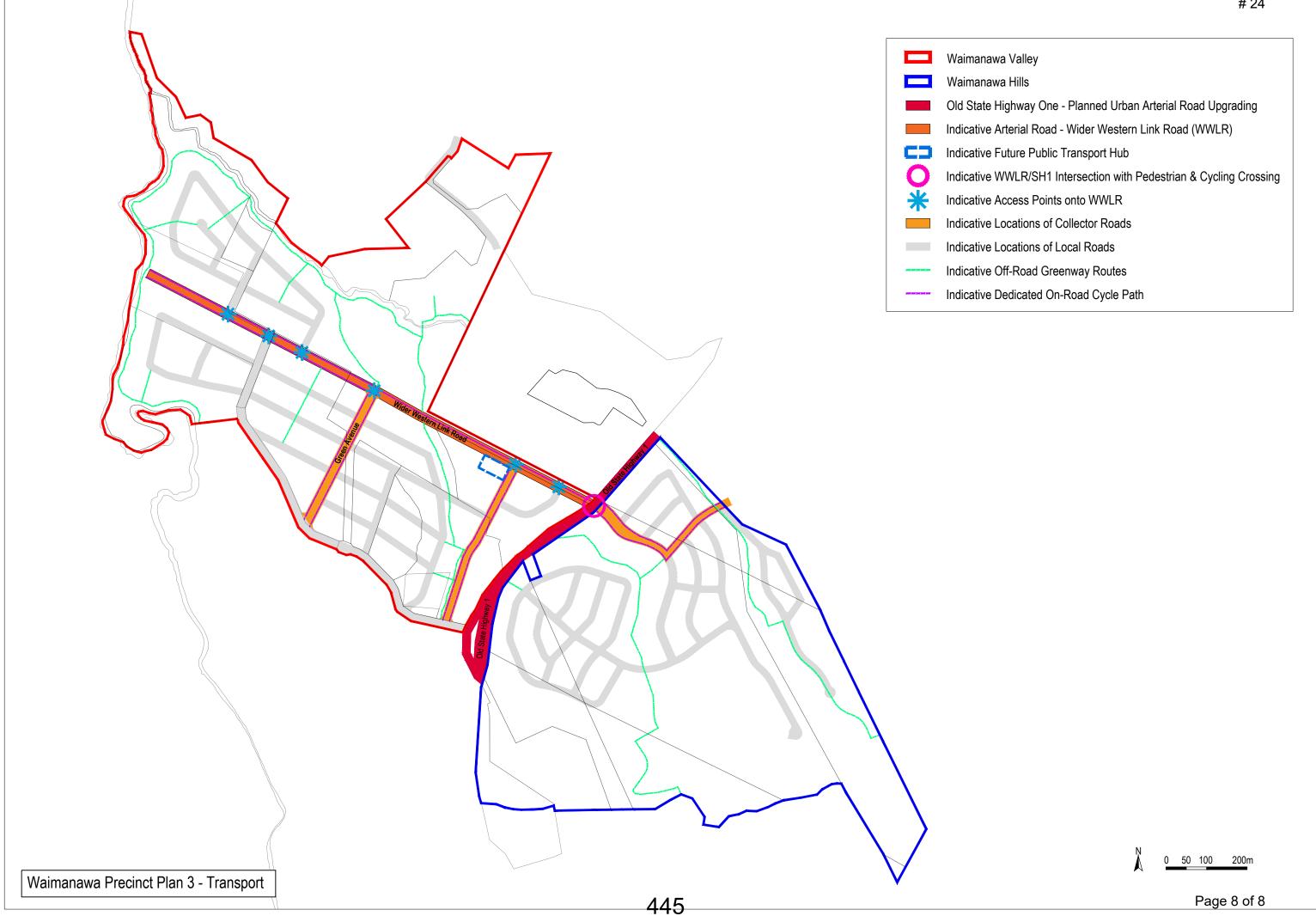
24.16

442 Page 6 of 8

24.17

			relates to H11.8.1(4)(a)(i) with the following wording:
			'the contribution that such buildings make to the attractiveness pleasantness and enclosure of the public space (including the watercourse);'
15	Plan Change 78: Intensification	Plan Change 78 to the Auckland Unitary Plan (Operative in Part) is a significant plan change and its future is uncertain.	Updates and amendments to PC93 to align with the progression and outcomes of PC78.
		Potential changes to PC93 may be needed to ensure alignment, appropriate cross-referencing and consistency with PC78. The extent (if any) of changes required will be determined as PC93 progresses through the Schedule 1 process.	

443 Page 7 of 8





Submission on Proposed Private Plan Change 93 – Warkworth South - Waimanawa

Clause 6 of Schedule 1, Resource Management Act 1991 (Form 5)

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter(s): Mikel Jon Thorogood (Mike Thorogood)

This is a submission on Proposed Private Plan Change 93 ("PPC93") to the Auckland Unitary Plan – ("AUP").

Mike Thorogood could not gain an advantage in trade competition through this submission.

Mike Thorogood owns the land at 43 McKinney Road, Warkworth, legally described as Lot 1 DP 550765 - refer **Attachment A**. The Submitter's land is located in a recently rezoned area subject to Precinct provisions – I555 – Warkworth McKinney Road Precinct, in the Auckland Unitary Plan. The Submitter's land is zoned Residential – Mixed Housing Suburban.

The Submitter **SUPPORTS** the Proposed Plan Change Request in principle, subject to the matters stated in this submission.

2. The Plan Change Request

PC93 – Warkworth South - Waimanawa seeks a comprehensive rezoning and the introduction of Precinct provisions for Waimanawa (comprising of Waimanawa Valley and Waimanawa Hills) and the Morrison Orchard areas. The stated purpose of PPC93 is:

The purpose of the plan change is to re-zone land in Warkworth South to:

- (a) Provide for the continuation and expansion of the Morrison Heritage Orchard and further development of this site with supporting activities and limited residential development.
- (b) Enable the urban development of the remainder of the area (referred to as Waimanawa) to proceed generally in accordance with the outcomes sought through the Warkworth Structure Plan.

SCOPE OF SUBMISSION

Whilst rezoning the land for urban purposes is supported in principle, there are matters of detail that need to be secured through the plan change process. This submission addresses those matters that need to be addressed and secured via the plan change provisions.

PPC93 proposes two new Precincts – "Waimanawa" and "Morrison Heritage Orchard". This submission focuses on the plan change itself and the "Waimanawa" Precinct only.

3. SUBMISSION

3.1 Background – Warkworth McKinney Road Precinct

3.2 Warkworth South – Waimanawa - Plan Change Provisions

The focus of this submission is on securing and ensuring the coordinated and integrated delivery of infrastructure. There are several plan changes – approved, and in process - around Warkworth along with resource consents for urban development. Whilst the Submitter considers the developments are positive for Warkworth and assist in the delivery of infrastructure in a planned and timely manner, there are matters of detail that need to be addressed.

It cannot be assumed that the Warkworth McKinney Road Precinct area will develop ahead of the PPC93 area. Therefore, the effects of this plan change on the State Highway 1 / McKinney Road intersection have to be considered as does the pedestrian and cycle path connection proposed for the eastern side of the old State Highway 1.

<u>Warkworth – McKinney Road Precinct:</u>

The McKinney Road Precinct contains rules requiring the upgrade of the McKinney Road intersection with the old State Highway 1. The rules also require pedestrian and cycling links from Wech Drive to the McKinney Road Precinct boundary.

Wech Drive has recently been upgraded and there is a footpath stub newly constructed on the southern extent of Wech Drive.

A copy of the Warkworth McKinney Road Precinct is Attachment B. Relevant provisions are highlighted yellow.

Warkworth South – Waimanawa Precinct Provisions:

If Warkworth South proceeds ahead of the McKinney Road Precinct development, then Warkworth South — Waimanawa Precinct needs to secure the upgrade of the McKinney Road State Highway 1 intersection and also the formed pedestrian and cycle connection to Wech Drive. Without requiring formation of this connection and the intersection upgrade there will be inadequate pedestrian and cycle connectivity to the established urban area, including schools and areas of employment. It is also likely that the volume increase in traffic associated with Warkworth South development would adversely impact on the functioning of the McKinney Road / State Highway 1 intersection particularly as it is not known when public transport services will be available to Warkworth South.

3.3 Infrastructure – Assessments and Plan Change Provisions:

The Plan Change report states that there will be an Infrastructure Funding Agreement ("IFA"), and this is currently being negotiated with Auckland Council and presumably the relevant CCO's ("Council Controlled Organisations"). The reports states that "An IFA will ensure that all relevant infrastructure required for any stage of the project is in place prior to residential connections for that stage".

The infrastructure servicing is designed to be delivered from the south, within the PC93 area and then extend

north back towards the existing Warkworth urban area.

The infrastructure for the PPC93 area needs to be designed and constructed to enable servicing capacity for the Future Urban land between the plan change area and existing urban area of Warkworth, including the Submitter's land.

The assessments for infrastructure capacity need to consider the existing infrastructure in Warkworth and whether any upgrades are required to that existing infrastructure, to enable infrastructure servicing now and into the future for both the plan change 93 area and the 'stranded' future urban land. It is not acceptable to leave reticulation or capacity issues to the resource consent stage. If there is insufficient capacity in the reticulated network, or at the plant, then this will result in inefficient outcomes and there will not be the required integration between the delivery of urban land and the effective and efficient delivery of infrastructure to support that urban development.

The Infrastructure report in Appendix 5 of the Plan Change lodgment documents, does not detail any cumulative effects associated with other consented development in Warkworth including the Warkworth – McKinney Road Precinct that contains provisions servicing permitting up to 30 dwellings to be constructed and occupied prior to the Snells Beach plant connection becoming available – refer Rule I555.6.1 – Wastewater infrastructure upgrade and staging. A more detailed capacity assessment is required for both the upgraded Snells Beach plant and the reticulated network to connect to it. This needs to include all anticipated future development and consented development that is not yet under construction.

The infrastructure assessment also needs to assess the capacity of the Snells Beach plant and the reticulated infrastructure in the context of all the development planned for Warkworth.

These important assessments are not apparent from the Infrastructure report in Appendix 5 of the Plan Change documentation.

Without greater detail of the capacity in the existing and proposed network the effects of PPC93 are unknown and therefore cannot be determined to be acceptable.

3.4 Policy Framework – Integrated Planning and a Well-Functioning Urban Environment

The National Policy Statement Urban Development ("NPS UD") objective 1 seeks well-functioning urban environments are created. Policy 1 details what is meant by well-functioning urban environment. Whilst Policy 1 does not specifically relate to infrastructure delivering urban capacity and making that capacity affordable is related to the planned and coordinated delivery of infrastructure and ensuring that when infrastructure is constructed it caters for the reasonably expected demands on that infrastructure in terms of capacity.

Objective 6 requires that "...local authority decisions on urban development that affects environments are integrated with infrastructure planning and funding decisions and strategic over the medium term and long term and are responsive, particularly in relation to proposal that would supply significant development capacity".

The Auckland Regional Policy Statement ("RPS") – Chapter B2 Urban growth B2.2.1 (1) seeks a quality compact

urban form that enables all of the following:

- (a) a higher-quality urban environment;
- (b) greater productivity and economic growth;
- (c) better use of existing infrastructure and efficient provision of new infrastructure;
- (d) improved and more effective public transport;
- (e) greater social and cultural vitality;
- (f) better maintenance of rural character and rural productivity; and
- (g) reduced adverse environmental effects.

The current proposal in the PPC93 documentation for infrastructure servicing will not achieve the integrated outcomes sought by the NPS UD or the RPS.

Until these matters are addressed PPC93 is not in keeping with the relevant policy framework.

3.5 Decisions Sought

Mikel Jon Thorogood seeks that Plan Change 93 – Warkworth South plan change be **approved** with changes to provisions to address the matters raised in this submission. If the matters addressed in the submission cannot be addressed PPC93 should be **refused**.

Mikel Jon Thorogood wishes to be heard in support of this submission.

If others make a similar submission, the Submitters will consider presenting a joint case at the hearing.

Yours sincerely

Burnette O'Connor Director | Planner

The Planning Collective Limited

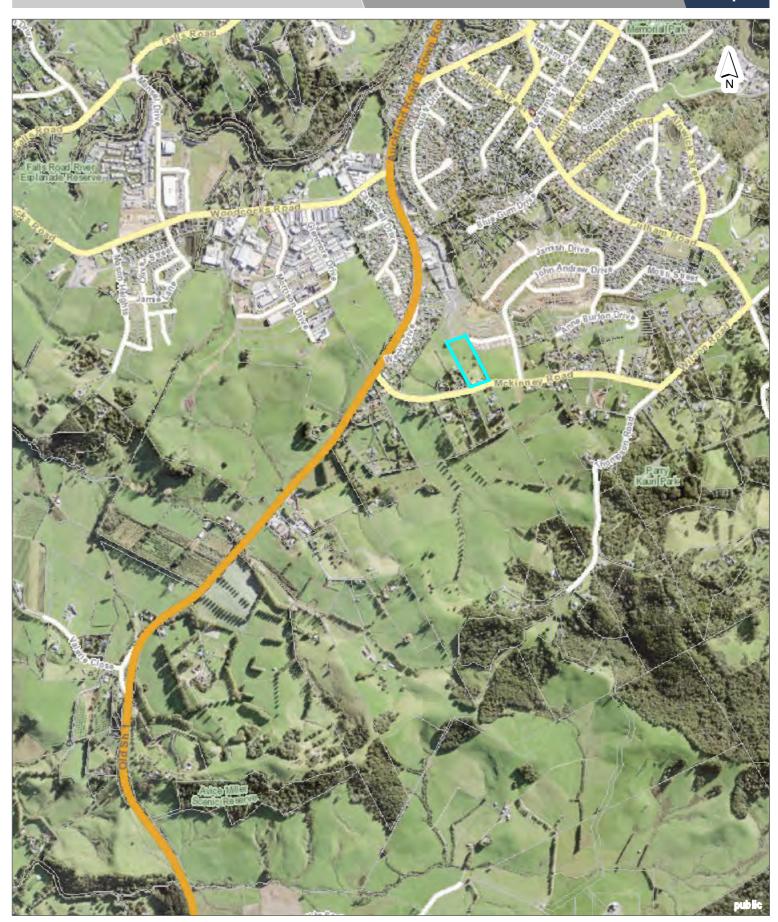
Butte O'Canow

Ph: +64 021 422 346

Email: burnette@thepc.co.nz

Attachment A – Submitters Land Location

Attachment B – Warkworth McKinney Road Precinct provisions



DISCLAIMER:
This map/plan is illustrative only and all information should be independently verified on site before taking any action. Copyright Auckland Council. Land Parcel Boundary information from LINZ (Crown Copyright Reserved). Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and plan completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information. Height datum: Auckland 1946.



Date Printed:



ATTACHMENT B

1555. Warkworth McKinney Road Precinct

I555.1. Precinct Description

The Warkworth McKinney Road Precinct is located in the south of Warkworth, north of McKinney Road and to the east of State Highway 1 and applies to approximately 7.6ha of land held in six titles. State Highway 1 in this locality is to be revoked once the new section of State Highway 1 opens - Te Ara Tuhono - Puhoi to Warkworth and downgraded to an arterial route. For the purposes of this precinct it is still referred to as State Highway 1, and the provisions of this precinct will still apply to the road should the state highway status no longer apply.

Development is anticipated in accordance with the Residential – Mixed Housing Suburban zone provisions. The transport network shall be integrated across all the sites. Key pedestrian, cycle and road links, including required upgrading is provided for. Significant wetlands are identified and watercourses protected.

A comprehensive approach to managing stormwater has been designed and will be delivered in accordance with the Stormwater Management Plan for the Precinct. A new stormwater wetland to cater for stormwater from land in catchment A2 will be provided.

The land within the Precinct will be connected to the upgraded Warkworth - Snells Beach Wastewater Treatment Plant. Provision is made for limited development in advance of a wastewater network connection being available.

The zoning of the land within this precinct is Residential - Mixed Housing Suburban.

1555.2. Objectives

- (1) Development shall be coordinated with the upgrading of the Snells Beach Wastewater Treatment Plant and completion of the conveyance network from Warkworth to Snells Beach to avoid adverse effects on the environment.
- (2) An integrated, low-speed transport and movement network is established with safe and convenient road, pedestrian and cycling connections within the Precinct and along State Highway 1 from Wech Drive to McKinney Road, McKinney Road, John Andrew Drive and to Fairwater Road and The Grange commercial centre.
- (3) Improvements to the safety of the transport network at the intersection of McKinney Road with State Highway 1 and the intersection of McKinney Road and John Andrew Drive to be delivered in conjunction with development in the Precinct.
- (4) Subdivision and development enhances the ecological values and water quality of the precinct including by undertaking comprehensive stormwater management in accordance with the approved Stormwater Management Plan.

The overlay, Auckland-wide and zone objectives apply in this precinct in addition to those specified above.

1555.3. Policies

- (1) Require subdivision and development to be in accordance with the Warkworth McKinney Road Precinct Plan.
- (2) Require subdivision, use and development to align with the upgrading and provision of wastewater services, particularly the Snells Beach Wastewater Treatment Plant and a new conveyance network from Warkworth to Snells Beach.
- (3) Subdivision, use and development shall provide for integrated roading, pedestrian and cycling infrastructure, including safe and accessible separated pedestrian and cycling access to Wech Drive and the potential for safe and accessible separated pedestrian and cycling links to The Grange commercial centre, to achieve full connectivity of all development as shown in the Warkworth McKinney Road Precinct Plan.
- (4) Deliver the required upgrading of the McKinney Road and State Highway 1 intersection to achieve a safe intersection design, and to take into account the design requirements and any necessary land vesting for a future upgrade of the McKinney Road and John Andrew Drive intersection.
- (5) Require at least one vehicular local road connection from Titapu Road to McKinney Road, with an intersection on McKinney Road as indicated on the Warkworth McKinney Road Precinct Plan.
- (6) Require subdivision and development to protect and enhance water quality, ecology and morphology of the streams and natural wetlands identified in the Warkworth McKinney Road Precinct Plan.
- (7) Provide a new stormwater pond as indicated on the Precinct Plan to accommodate stormwater flows from Catchment A2 as provided for in the approved Stormwater Management Plan for the Precinct.

The overlay, Auckland-wide and zone policies apply in this precinct in addition to those specified above.

1555.4. Activity table

The activity tables in any relevant overlays, Auckland-wide and zones apply unless the activity is listed in Table I555.4.1 Activity table below.

Table I555.4.1 Land use and subdivision activities in Warkworth McKinney Road Precinct

Activity		Activity status
(A1)	Vacant sites subdivision involving parent sites of less than or greater than 1 ha complying with Standard E38.8.3.1	RD
(A2)	Subdivision or development complying with Standard I555.6.1. Wastewater infrastructure and staging, prior to the Snells Beach Wastewater Treatment Plant and the conveyance network from Warkworth to Snells Beach becoming operational	RD

(A3)	Subdivision or development that does not comply with Standard I555.6.1. Wastewater infrastructure and staging prior to the Snells Beach Wastewater Treatment Plant and the conveyance network from Warkworth to Snells Beach becoming operational	NC
(A4)	Development that does not comply with Standard I555.6.1 Wastewater infrastructure and staging once the Snells Beach Wastewater Treatment Plant and the conveyance network from Warkworth to Snells Beach is operational	P
(A5)	Subdivision or development complying with:	RD
	Standard I555.6.2. Transport Connections	
	Standard I555.6.3. Streams and wetlands protection and enhancement	
(A6)	Subdivision or development that does not comply with:	D
	Standard I555.6.2. Transport Connections or does not deliver the safety upgrades required for the McKinney Road / State Highway 1 intersection as determined by Special Information requirement I555.9(2)	
	Standard I555.6.3. Streams and wetlands protection and enhancement	
	Standard I555.6.4. New Buildings and additions – High Contaminant Yielding Materials	
(A7)	Development complying with Standard I555.6.4. New Buildings and additions – High Contaminant Yielding Materials	P
(A8)	Any vehicle crossing that accesses McKinney Road or John Andrew Drive	RD

1555.5. Notification

(1) Any application for resource consent for an activity listed in Table 1555.4.1 Activity Table above will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991. When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4).

1555.6. Standards

- (1) The standards in the overlays, Auckland-wide and zones apply to all activities listed in Table I555.4.1 Activity table in this precinct.
- (2) Activities listed in Table I555.4.1 Activity table must comply with the specified standards in I555.6.1 I555.6.4, and the Special Information requirements of I555.9.

1555.6.1. Wastewater infrastructure upgrade and staging

Purpose: To ensure development is appropriately serviced by wastewater infrastructure prior to completion of the Snells Beach Wastewater Treatment Plant and the conveyance network from Warkworth to Snells Beach.

- (1) No dwellings may be occupied within the precinct until the upgrades to the Snells Beach Wastewater Treatment Plant and a new conveyance network from Warkworth to Snells Beach are operational.
 - (a) Provided that a maximum of 30 lots/dwellings may be constructed and occupied on Lot 1 DP558809 and Lot 2 DP 481942 within the precinct prior to the upgrades to the Snells Beach Wastewater Treatment Plant and a new conveyance network from Warkworth to Snells Beach becoming operational.

I555.6.2. Transport Connections

Purpose: To establish a safe and efficient transport network:

- (1) Road, and pedestrian and cycling links along State Highway 1 from Wech Drive to the McKinney Road Precinct boundary, McKinney Road and John Andrew Drive, and within the Precinct, as identified in the Warkworth McKinney Road Precinct Plan, shall be provided:
 - (a) At subdivision or land development stage other than for boundary relocation subdivision or bulk earthworks, prior to the occupation of dwellings in the Precinct.
 - (b) In perpetuity for both private and public access;
 - (c) With separated pedestrian and cycling along internal connecting route B if this is constructed as a vehicular through-road.
- (2) The McKinney Road and State Highway 1 intersection shall be upgraded to safely accommodate precinct development at subdivision or land development stage, other than for boundary relocation subdivision or bulk earthworks, prior to the occupation of dwellings in the Precinct.
- (3) The requirements of (1) and (2) above will be considered to be complied with if the identified upgrade forms part of the same resource consent, or a separate resource consent which is given effect to prior to release of section 224(c) for any subdivision OR prior to occupation of any new building(s) for a land use only.

1555.6.3. Streams and wetlands protection and enhancement

Purpose: To restore and enhance water quality, ecology and morphology of the streams and natural wetlands shown in the Warkworth McKinney Road Precinct Plan including the prevention of stream bank erosion.

(1) All wetlands, wetland buffers and riparian yards of the permanent and intermittent streams shown in the Warkworth McKinney Road Precinct Plan (being the land comprised in Lot 1 DP558809 and Lot 2 DP 481942) must be restored and their margins planted at the time of subdivision or land development, whichever occurs first, from the stream bed to a minimum width of 10m measured from the top of the stream bank.

- (2) The planting required in Standards I555.6.3(1) above must:
 - (a) Use eco-sourced native vegetation;
 - (b) Be consistent with local biodiversity;
 - (c) Be planted at a density of 10,000 plants per hectare;
 - (d) Planting must be undertaken in accordance with the Special Information Requirements in I555.9(1);
 - (e) Planting shall be legally protected and maintained in perpetuity.

1555.6.4. New Buildings and additions – High Contaminant Yielding Materials

Purpose: To protect water quality in streams, and the Mahurangi Catchment, by limiting the release of contaminants from building materials.

(1) New buildings, and additions to buildings must be constructed using inert cladding, roofing and spouting building materials that do not have an exposed surface made from contaminants of concern to water quality (i.e. zinc, copper and lead).

1555.7. Assessment - controlled activities

1555.7.1. Matters of control

There are no controlled activities in this precinct.

1555.8. Assessment - restricted discretionary activities

1555.8.1. Matters of discretion

The Council will restrict its discretion to all the following matters when assessing a restricted discretionary activity resource consent application, in addition to the matters specified for the relevant restricted discretionary activities in the overlay, Auckland wide or zone provisions:

- (1) Subdivision and development:
 - (a) Infrastructure and servicing, including interim wastewater disposal methods;
 - (b) The effects of development on wastewater infrastructure timing and capacities;
 - (c) The suitability of, and effects associated with the location and design of the roads and pedestrian / cycle linkages for public access;
 - (d) The effects of development on the safety and performance of the McKinney Road and State Highway 1 intersection and provision for the future upgrading of the McKinney Road and John Andrew Drive intersection;

- (e) The provision and maintenance of riparian planting for streams and natural wetlands;
- (f) Management of effects of stormwater including water quality.
- (2) Any vehicle crossing that accesses McKinney Road or John Andrew Drive
 - (a) The effects on the safe and efficient operation of existing or future cycleways including design, location and cumulative effects of multiple crossings.

1555.8.2. Assessment criteria

The Council will consider the relevant assessment criteria below for restricted discretionary activities, in addition to the assessment criteria specified for the relevant restricted discretionary activities in the overlay, Auckland wide or zone provisions, and the information required by the Special Information requirements in I555.9 below.

- (1) Subdivision and development:
 - (a) The extent to which any subdivision or development is consistent with and achieves the objectives and policies of the Warkworth McKinney Road Precinct Plan;
 - (b) The extent to which McKinney Road and State Highway 1 Intersection achieves safe intersection design and accommodates walking and cycling;
 - (c) For development of up to 30 dwellings or non-residential activity with equivalent traffic generation within the Precinct, consideration of the combined measures used to improve safety of the McKinney Road and State Highway 1 intersection, by improving visibility for turning traffic at the McKinney Road and State Highway 1 intersection and lowering of the operating speed on State Highway 1. Measures considered should include:
 - (i) Berm widening to improve visibility for traffic turning out from McKinney Road and for pedestrian and cycleway construction on the northern side of McKinney Road, and the eastern side of State Highway 1 to Wech Drive;
 - (ii) Intersection warning signage on State Highway 1 and measures to reduce speeds on State Highway 1, for traffic approaching the intersection from the north;
 - (iii) Surface treatment on State Highway 1 approaching the McKinney Road intersection from the north, to increase the surface friction of this section of State Highway and enhance safe stopping ability of vehicles leading up to the intersection
 - (d) For any development beyond 30 dwellings or non-residential activity with equivalent traffic generation within the Precinct, the safety and performance of McKinney Road and State Highway 1 intersection for all modes shall be

- considered, which may include monitored speed reduction on State Highway 1 and/or other measures.
- (e) The extent to which the location and design of the roads, intersections, and pedestrian / cycle linkages result in:
 - (i) an integrated network between McKinney Road and John Andrew Drive and to The Grange;
- (ii) McKinney Road and State Highway 1 Intersection upgrades, that meet the needs of the residents within the Precinct and the public generally.
 - (f) Whether the existing or any proposed road reserve provides for any necessary future upgrade of the McKinney Road and John Andrew Drive intersection.
 - (g) The extent to which the ecological values and water quality of existing watercourses and wetlands are maintained or enhanced by the proposed subdivision and development.
 - (h) Whether any subdivision or development can be served by reticulated wastewater treatment and disposal, or acceptable short term alternative methods for safe and legal disposal in advance of reticulated treatment and disposal.
 - (i) The extent to which subdivision and development implements stormwater management that:
 - (i) Is in accordance with the approved Stormwater Management Plan and Policies E1.3 (1) (14);
 - (ii) Implements a treatment train approach to treat stormwater runoff from impervious surfaces so that all contaminant generating surfaces are treated, including cumulative effects of lower contaminant generating surfaces.
 - (iii) The design and efficacy of stormwater devices considers the likely effectiveness, ease of access, operation and integration with the surrounding environment.
 - (j) For buildings that do not comply with Standard I555.6.4 New Buildings and additions High Contaminant Yielding Materials:
 - (i) Is in accordance with the approved Stormwater Management Plan and Policies E1.3 (1) (10) and (12) (14);
 - (ii) Implements a treatment train approach to treat runoff from impervious surfaces so that all contaminant generating surfaces are treated including cumulative effects of lower contaminant generating surfaces.
- (2) Any vehicle crossing that accesses McKinney Road or John Andrew Drive

(a) the proposed vehicle access is able to be located, formed, and used without resulting in actual or potential conflict between road users and to protect cycle safety.

1555.9. Special information requirements

(1) Riparian Planting for streams and natural wetlands

An application for any subdivision or land development that requires the planting of a riparian yard or buffer area under Rule I555.6.3 must be accompanied by the following information as a minimum:

- (a) A restoration plan prepared by a suitably qualified person.
- (b) The restoration plan must:
 - (i) Identify the location, species, planting bag size and density of the plants;
 - (ii) Confirm detail on the eco-sourcing proposed for the planting;
 - (iii) Confirm the maintenance of the planting for 5yrs, including weed and pest animal control;
 - (iv) Take into consideration the local biodiversity and ecosystem extent.
- (2) Transport connections, road and intersection upgrading on McKinney Road and State Highway 1:
 - (a) Any application for subdivision and / or dwellings or non-residential activity with equivalent traffic generation, other than boundary relocation subdivision and bulk earthworks, shall provide a Traffic Assessment addressing the traffic effects of the Precinct on the intersection of McKinney Road and State Highway 1. The Assessment shall detail any intersection upgrading works required to ensure the intersection is safe for traffic associated with development in the Precinct;
 - (b) A Transport Design Report and Concept Plans prepared by a suitably qualified transport engineer must be provided confirming the location and design of any road and its intersection(s) supports the safe and efficient function of the existing and future (ultimate) transport network and can be accommodated within the proposed or available road reserves. This may be included within a transport assessment supporting land use or subdivision consents. In addition, when an interim upgrade is proposed, information must be provided, detailing how the design allows for the ultimate upgrade to be efficiently delivered.
- (3) Subdivision or land development of Lot 1 DP 187649

An application for any subdivision or land development of Lot 1 DP 187649 must be supported by a Transport Design Report and Concept Plans prepared by a suitably qualified transport engineer confirming the proposed or available road reserve at the

intersection of McKinney Road and John Andrew Drive can accommodate a future safe and efficient intersection in accordance with the applicable standards for these roads.

1555.10. Warkworth McKinney Road Precinct Plan





Submission on Proposed Private Plan Change 93 – Warkworth South - Waimanawa

Clause 6 of Schedule 1, Resource Management Act 1991 (Form 5)

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter: **Guy Matches**

This is a submission on Proposed Private Plan Change 93 ("PPC93") to the Auckland Unitary Plan – ("AUP").

Guy Matches could not gain an advantage in trade competition through this submission.

Guy Matches and JT Trustee Co Limited own the land at 127 Woodcocks Road, legally described as Lot 2 DP341541, Allot 62A Psh of Mahurangi DO 1150E, Pt Allot 62 Psh of Mahurangi SO 891E and will be directly affected by the Request. A map showing the property is **Attachment A**.

The Submitter's land is directly adjoining the PPC93 area. The Submitter's land accesses from Woodcocks Road and adjoins the PPC93 area along the southern boundary adjacent to the river tributary, and to the north of the proposed Open Space — Conservation zoned area and small portion of common boundary that directly adjoins proposed Residential Mixed Housing Urban zone..

The Submitter **SUPPORTS** the Proposed Plan Change Request in principle, subject to the matters stated in this submission.

2. The Plan Change Request

PPC93 – Warkworth South - Waimanawa seeks a comprehensive rezoning and the introduction of Precinct provisions for Waimanawa (comprising of Waimanawa Valley and Waimanawa Hills) and the Morrison Orchard areas. The stated purpose of PPC93 is:

The purpose of the plan change is to re-zone land in Warkworth South to:

- (a) Provide for the continuation and expansion of the Morrison Heritage Orchard and further development of this site with supporting activities and limited residential development.
- (b) Enable the urban development of the remainder of the area (referred to as Waimanawa) to proceed generally in accordance with the outcomes sought through the Warkworth Structure Plan.

3. SCOPE OF SUBMISSION

3.1 General

Whilst rezoning the land for urban purposes is <u>supported in principle</u>, there are matters of detail that need to be secured through the plan change process. The development of Warkworth South is an important and necessary component for the continued development of Warkworth into a satellite town which is critical in terms of ensuring that Warkworth becomes a sustainable urban area.

This submission addresses those matters that need to be addressed and secured via the plan change provisions.

PPC93 proposes two new Precincts – "Waimanawa" and "Morrison Heritage Orchard". This submission focuses on the plan change itself and the "Waimanawa" Precinct only.

3.2 Plan Change Assessments

General:

The Plan Change report does not address the adjacent land at 127 Woodcocks Road although page 17 does discuss other adjoining landowners.

Infrastructure:

The Plan Change report states that there will be an Infrastructure Funding Agreement ("IFA") and this is currently being negotiated with Auckland Council and presumably the relevant CCO's ("Council Controlled Organisations"). The Plan Change report states that "An IFA will ensure that all relevant infrastructure required for any stage of the project is in place prior to residential connections for that stage".

The infrastructure servicing is designed to be delivered from the south, within the PC93 area and then extend north back towards the existing Warkworth urban area.

The infrastructure for the PPC93 area needs to be designed and constructed to enable servicing capacity for the Future Urban land between the plan change area and existing urban area of Warkworth, including the Submitter's land.

The Submitter understands that PPC93 does not currently require access through the Submitter's land for services to Warkworth South, however the Submitter wishes to identify that if changes to the site servicing are required then the Submitter is open to discussions regarding providing necessary services through its property in order to ensure that the Warkworth South Area (and the Submitter's land) can be efficiently developed. If this outcome were to occur there would be better outcomes achieved from incorporating the Submitter's land in the plan change and rezoning their land to an appropriate urban zone such as Residential – Mixed Housing Urban, consistent with the likely zoning outcome for the residential development to the east of Mason Heights Road.

The assessments for infrastructure capacity need to consider the existing infrastructure in Warkworth and whether any upgrades are required to that existing infrastructure, to enable infrastructure servicing now and into the future for both the plan change 93 area *and* the 'stranded' future urban land located between PPC93 and the existing urban area (including the Submitter's land). It is not acceptable to leave reticulation or capacity issues to the resource consent stage. If there is insufficient capacity in the reticulated network, or at the plant, then this will result in inefficient outcomes and there will not be the required integration between the delivery

of urban land and the effective and efficient of infrastructure to support that urban development.

The infrastructure assessment also needs to assess the capacity of the Snells Beach plant and the reticulated infrastructure in the context of all the development planned for Warkworth.

These important assessments are not apparent from the Infrastructure report in Appendix 5 of the Plan Change documentation.

Compact Urban Form / Integrated Planning and Quality Urban Environment:

The Submitter's land is to the north of the plan change area and is zoned Future Urban. The approach of PPC93 leaves out areas of Future Urban zoned land between the plan change area and the existing urban zoned areas of Warkworth, including the Submitter's land. The outcome is further plan changes will be required to provide urban zonings to the Future Urban land 'stranded' between PPC93 and the existing urban area.

The Submitter questions why their land, and adjacent Future Urban zoned land was not included in the Plan Change area. Inclusion of the Submitters' land would assist in achieving a more integrated outcome with respect to integrated planning and a coordinated and efficient delivery of infrastructure.

3.3 Effects on the Environment

The proposed infrastructure servicing does not provide sufficient detail to show how the stranded land could be serviced in the future. Without this information it is likely that there will be inefficient outcomes in relation to the provision of infrastructure. This in turn could lead to adverse effects on the quality of the urban environment as land areas adjacent to the existing urban area may not be able to be developed.

3.4 Policy Framework

The National Policy Statement Urban Development ("NPS UD") objective 1 seek well-functioning urban environments. Objective 6 requires that "...local authority decisions on urban development that affects environments are integrated with infrastructure planning and funding decisions and strategic over the medium term and long term and are responsive, particularly in relation to proposal that would supply significant development capacity".

The Auckland Regional Policy Statement ("RPS") – Chapter B2 Urban growth B2.2.1 (1) seeks a quality compact urban form that enables **all** of the following:

- (a) a higher-quality urban environment;
- (b) greater productivity and economic growth;
- (c) better use of existing infrastructure and efficient provision of new infrastructure;
- (d) improved and more effective public transport;
- (e) greater social and cultural vitality;
- (f) better maintenance of rural character and rural productivity; and
- (g) reduced adverse environmental effects.

The current proposal in the PPC93 documentation for infrastructure servicing will not achieve the integrated outcomes sought by the NPS UD or the RPS.

3.5 Precinct Provisions

Zoning:

Land to the south of the Submitter's land, within the plan change area is proposed to be zoned Residential –

Mixed Housing Urban and Open Space – Conservation zone. The Submitter supports the zoning as set out on the proposed zoning map and the extent of the proposed Waimanawa Precinct as shown on Map 4.

The Submitter supports the proposed 20-metre riparian yards and the Indicative Off-Road Greenway routes as shown on Precinct Plan 1 – Spatial Provisions.

The plan shows proposed Residential – Mixed Housing Urban zoned land adjoining the Submitter's land. It is assumed given the riparian yard and the Indicative Off-Road Greenway that this boundary will in fact be esplanade reserve, or at least urban development / buildings will need to be set back at least 20-metres from the common boundary. However, if there is urban development on the portion of land to the south of the Submitter's land, on the portion where there is directly adjoining residential zoned land proposed, then dwellings may be close to the Submitter's land. This could lead to reverse sensitivity issues as the Submitter farms their land in keeping with the Future Urban zoning intent for land to be used for rural activities until it is zoned for urban land uses. The Open Space – Conservation zone is therefore supported.

Confirmation is required that the identified 'Bat Flight Corridor' does not extend further north to the Submitter's land.

3.6 Statutory Assessment

The effects of PPC93 on the environment are uncertain and not adequately managed by the plan change provisions with respect to the design and delivery of infrastructure.

The Request does not achieve the required outcomes of the National Policy Statement Urban Development, particularly with respect to the integration of infrastructure and urban development, strategic planning over the medium term and long term. All existing and future urban areas of Warkworth need to be taken into consideration in the assessment of infrastructure capacity.

The Request is not in keeping with the provisions of the Regional Policy Statement that it has to give effect to. Particularly with respect to infrastructure servicing and urban form.

In its current form the Request does not meet the objectives of the NPS UD or the Auckland Unitary Plan.

3.6 Conclusions

Guy Matches seeks that Plan Change 93 – Warkworth South plan change be **refused** or preferably **approved** with changes to provisions to address the matters raised in this submission.

Guy Matches wishes to be heard in support of this submission.

If others make a similar submission, the Submitter will consider presenting a joint case at the hearing.

Yours sincerely

Burnette O'Connor Director | Planner

The Planning Collective Limited

Butte O'Canow

Ph: +64 021 422 346

Email: burnette@thepc.co.nz

Page 4 of 6

26.1

Attachment A – Submitter's Property Boundaries



DISCLAIMER:
This map/plan is illustrative only and all information should be independently verified on site before taking any action. Copyright Auckland Council. Land Parcel Boundary information from LINZ (Crown Copyright Reserved). Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and plan completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information. Height datum: Auckland 1946.







Submission on Proposed Private Plan Change 93 – Warkworth South - Waimanawa

Clause 6 of Schedule 1, Resource Management Act 1991 (Form 5)

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter: John and Sue Wynyard (Wynyard family)

This is a submission on Proposed Private Plan Change 93 ("PPC93") to the Auckland Unitary Plan – ("AUP").

The Wynyard family could not gain an advantage in trade competition through this submission.

The Wynyard family own land adjacent to the plan change area. A map showing the property is **Attachment A**. The Wynyard land is at 317 Woodcocks Road, is held in three Records of Title, and has the following legal descriptions:

- Lot 2 DP 473567 RoT 647897
- Lot 1 DP 437211 RoT 581654
- Lot 4 DP 473567 RoT 647898

The Submitter **SUPPORTS** the Proposed Plan Change Request in principle, subject to the matters stated in this submission and for the reasons stated.

2. The Plan Change Request

PPC93 – Warkworth South - Waimanawa seeks a comprehensive rezoning and the introduction of Precinct provisions for Waimanawa (comprising of Waimanawa Valley and Waimanawa Hills) and the Morrison Orchard areas. The stated purpose of PPC93 is:

The purpose of the plan change is to re-zone land in Warkworth South to:

- (a) Provide for the continuation and expansion of the Morrison Heritage Orchard and further development of this site with supporting activities and limited residential development.
- (b) Enable the urban development of the remainder of the area (referred to as Waimanawa) to proceed generally in accordance with the outcomes sought through the Warkworth Structure Plan.

SCOPE OF SUBMISSION

3. SUBMISSION

3.1 General

Whilst rezoning the land for urban purposes is <u>supported in principle</u>, there are matters of detail that need to be secured through the plan change process. The development of Warkworth South is an important and

necessary component for the continued development of Warkworth into a satellite town which is critical in terms of ensuring that Warkworth becomes a sustainable urban area.

This submission addresses those matters that need to be addressed and secured via the plan change provisions.

PPC93 proposes two new Precincts – "Waimanawa" and "Morrison Heritage Orchard". This submission focuses on the plan change itself and the "Waimanawa" Precinct only.

3.2 Plan Change Issues

Infrastructure:

The Plan Change report states that there will be an Infrastructure Funding Agreement ("IFA") and this is currently being negotiated with Auckland Council and presumably the relevant CCO's ("Council Controlled Organisations"). The Plan Change report states that "An IFA will ensure that all relevant infrastructure required for any stage of the project is in place prior to residential connections for that stage".

The infrastructure servicing is designed to be delivered from the south, within the PC93 area and then extend north back towards the existing Warkworth urban area.

The infrastructure for the PPC93 area needs to be designed and constructed to enable servicing capacity for the Future Urban land between the plan change area and existing urban area of Warkworth, including the Submitter's land.

The Submitter's land is effectively part of the 'stranded' land to the north of the Plan Change area and Woodcocks Road. Better outcomes would be achieved from incorporating the Submitter's land in the plan change and rezoning their land Business – Heavy Industry as indicated in the Adopted Auckland Council Structure Plan – June 2019.

The assessments for infrastructure capacity need to consider the existing infrastructure in Warkworth and whether any upgrades are required to that existing infrastructure, to enable infrastructure servicing now and into the future for both the plan change 93 area and the 'stranded' future urban land located between PPC93 and the existing urban area (including the Submitter's land). It is not acceptable to leave reticulation or capacity issues to the resource consent stage. If there is insufficient capacity in the reticulated network, or at the plant, then this will result in inefficient outcomes and there will not be the required integration between the delivery of urban land and the effective and efficient of infrastructure to support that urban development.

The infrastructure assessment also needs to assess the capacity of the Snells Beach plant and the reticulated infrastructure in the context of all the development planned for Warkworth.

These important assessments are not apparent from the Infrastructure report in Appendix 5 of the Plan Change documentation.

Compact Urban Form / Integrated Planning and Quality Urban Environment:

The Submitter's land is to the north of the plan change area and is zoned Future Urban. The approach of PPC93 leaves out areas of Future Urban zoned land between the plan change area and the existing urban zoned areas of Warkworth, including the Submitter's land. The outcome is further plan changes will be required to provide urban zonings to the Future Urban land 'stranded' between PPC93 and the existing urban

area.

The Submitter questions why their land, and adjacent Future Urban zoned land was not included in the Plan Change area. Inclusion of the Submitters' land would assist in achieving a more integrated outcome with respect to integrated planning and a coordinated and efficient delivery of infrastructure.

Woodcocks Properties has a resource consent, currently subject to appeal, for residential development on the Future Urban zoned land to the east of mason Heights Road. If this consent is granted the land at 50 Mason Heights, 127 Woodcocks Road and the Submitter's land will be the only remaining land areas excluded from zoned or consented urban development. As these land areas are at the western extent of the town, and as the Submitter's land is the only land planned for Business — Heavy Industry land uses in Warkworth, the land could be excluded from urban development for some time if it is not included in a comprehensive plan change such as PPC93.

The Submitter understands Auckland Council has no budget or plans to undertake plan changes at Warkworth.

Transportation:

The intention is for the Wider Western Link Road intersection with the old State Highway 1, and the connection through to the Submitter's land in the west, is to be delivered by the plan change. There are provisions in the proposed Waimanawa Precinct.

The Submitter questions whether the Wider Western Link Road will ever be delivered. But if it is then the Submitter seeks that the bridge location as sought in the Notice of Requirement for NOR 8 – Wider Western Link Road, also be shown on Warkworth South Map 3 – Indicative Arterial Roads and on Precinct Plan 1 – Spatial Provisions. The location of the bridge is significant in terms of its potential impacts on the Submitter's land in the future and therefore they seek certainty as to the location outcome.

Notice of Requirement #8 is not yet confirmed, and the Waimanawa Precinct Plan 1 does not show the Wider Western Link Road extending to the Submitter's land. The Precinct Plan needs to extend the road to Wynyard's land so that future development of the Wynyard land can connect to the Wider Western Link Road. It cannot be left to the Submitter, or a future developer of their land, to have to connect to the PPC93 land. This may not be legally or practically possible if the land has been subdivided and potentially on sold.

The Precinct Plan needs to provide for the connection direct to the Submitter's land with the bridge in the location it is shown in proposed Notice of Requirement #8 – Warkworth – Wider Western Link Road.

3.3 Effects on the Environment

The proposed infrastructure servicing does not provide sufficient detail to show how the stranded land could be serviced in the future. Without this information it is likely that there will be inefficient outcomes in relation to the provision of infrastructure. This in turn could lead to adverse effects on the quality of the urban environment as land areas adjacent to the existing urban area may not be able to be developed.

3.4 Policy Framework

The National Policy Statement Urban Development ("NPS UD") objective 1 seek well-functioning urban environments. Objective 6 requires that "…local authority decisions on urban development that affects environments are integrated with infrastructure planning and funding decisions and strategic over the medium term and long term and are responsive, particularly in relation to proposal that would supply significant

The Auckland Regional Policy Statement ("RPS") – Chapter B2 Urban growth B2.2.1 (1) seeks a quality compact urban form that enables **all** of the following:

- (a) a higher-quality urban environment;
- (b) greater productivity and economic growth;
- (c) better use of existing infrastructure and efficient provision of new infrastructure;
- (d) improved and more effective public transport;
- (e) greater social and cultural vitality;
- (f) better maintenance of rural character and rural productivity; and
- (g) reduced adverse environmental effects.

The current proposal in the PPC93 documentation for infrastructure servicing will not achieve the integrated outcomes sought by the NPS UD or the RPS.

3.5 Precinct Provisions

Zoning:

The Submitter supports the zoning as set out on the proposed zoning map and the extent of the proposed Waimanawa Precinct as shown on Map 4.

Confirmation is required that the identified 'Bat Flight Corridor' does not extend further west or north to the Submitter's land.

As set out above, the Submitter seeks identification of the Wider Western Link Road bridge location. The location put forward in NOR 8 – Wider Western Link Road is supported, and it is sought this location be secured and identified on Precinct Plan 1 – Spatial Provisions.

3.6 Statutory Assessment

The effects of PPC93 on the environment are uncertain and not adequately managed by the plan change provisions with respect to the design and delivery of infrastructure.

The Request does not achieve the required outcomes of the National Policy Statement Urban Development, particularly with respect to the integration of infrastructure and urban development, strategic planning over the medium term and long term. All existing and future urban areas of Warkworth need to be taken into consideration in the assessment of infrastructure capacity.

The Request is not in keeping with the provisions of the Regional Policy Statement that it has to give effect to. Particularly with respect to infrastructure servicing and urban form.

In its current form the Request does not meet the objectives of the NPS UD or the Auckland Unitary Plan.

3.6 Conclusions

The Wynyard family seek that Plan Change 93 – Warkworth South plan change be **approved** with changes to provisions to address the matters raised in this submission.

The Wynyard family wish to be heard in support of this submission.

27.2

If others make a similar submission, the Submitter will consider presenting a joint case at the hearing.

Yours sincerely

Burnette O'Connor Director | Planner

The Planning Collective Limited

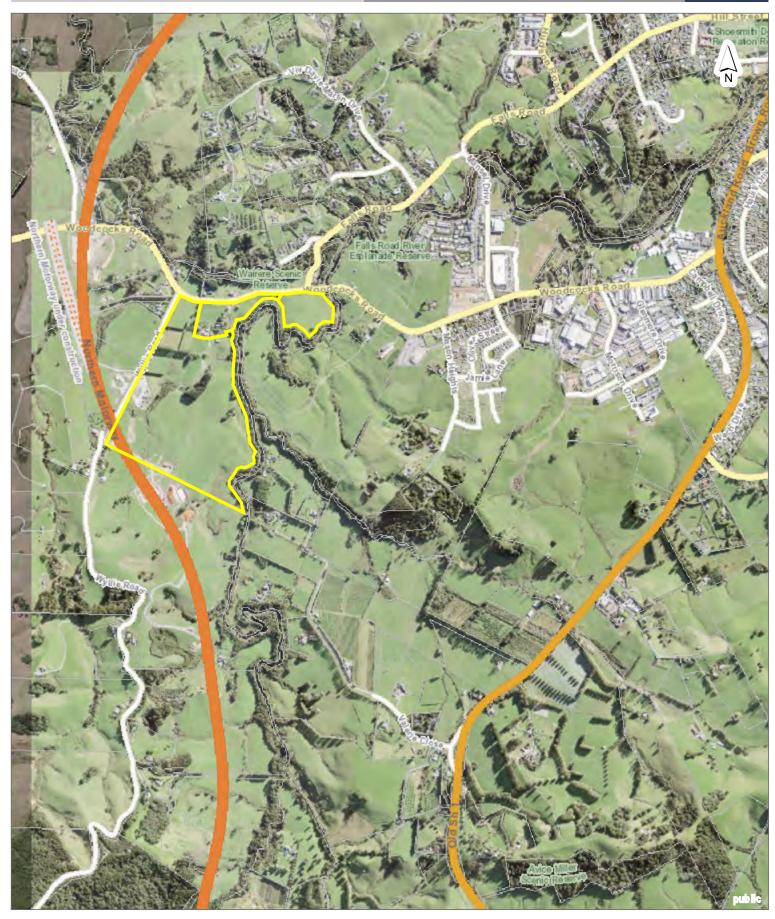
Swette O'Corror

Ph: +64 021 422 346

Email: burnette@thepc.co.nz

Attachment A – Submitter's Property Boundaries





DISCLAIMER:
This map/plan is illustrative only and all information should be independently verified on site before taking any action. Copyright Auckland Council. Land Parcel Boundary information from LINZ (Crown Copyright Reserved). Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and plan completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information. Height datum: Auckland 1946.





Form 5: Submission on notified proposal for policy statement or plan, change or variation

Pursuant to clause 6 of the First Schedule of the Resource Management Act 1991

To: Auckland Council (the Council)

Name of submitter: Penny Nelson, Director-General of Conservation (the Director-

General)

1. This is a submission following proposed plan change proposed to the plan:

Auckland Unitary Plan - Private Plan Change Warkworth South

- 2. I could not gain an advantage in trade competition through this submission.
- 3. The specific provisions of the proposal that my submission relates, and the detailed decisions sought to are set out in **Attachment 1** to this submission.
- 4. I **seek** the following decision from the Council:
 - a. That the particular provisions of Proposed Plan 93 that I support, as identified in Attachment 1, are retained;
 - That the amendments, additions and deletions to Proposed Plan 93 sought in Attachments 1 are made; and
 - c. Further or alternative relief to like effect to that sought in 4. a. and 4. b. above.
- 5. The decisions sought in this submission are required to ensure that the Warkworth South:
 - a. Gives effect to the National Policy Statement on Indigenous Biodiversity 2023 and the Auckland Unitary Plan.
 - b. Recognises and provides for the matters of national importance listed in section 6 of the Act and to has particular regard to the other matters in section 7 of the Act;
 - c. Promotes the sustainable management of natural and physical resources; and

- d. The changes sought are necessary, appropriate and sound resource management practice.
- 6. I wish to be heard in support of my submission, and if others make a similar submission, I will consider presenting a joint case with them at the hearing.

000

Rebecca Rush

Operations Manager

Tamaki Makaurau

Department of Conservation

Acting pursuant to delegated authority on behalf of Penny Nelson, Director-General of Conservation

Date: 22 November 2023

Note: A copy of the Instrument of Delegation may be inspected at the Director-General's office at Conservation House Whare Kaupapa Atawhai, 18/32 Manners Street, Wellington 6011

Address for service:

Attn: Christina Schipper, RMA Planner

cschipper@doc.govt.nz

+64 027 254 0683

Department of Conservation

Level 4, 73 Rostrevor Street, Hamilton, 3240

ATTACHMENT 1:

WARKWORTH SOUTH PRIVATE PLAN CHANGE 93 SUBMISSION BY THE DIRECTOR-GENERAL OF CONSERVATION

The Chapters that my submission relates to are set out in the table below. My submissions are set out immediately following these headings, together with the reason and the decision I seek from the Council.

The decision that has been requested may suggest new or revised wording for identified sections of the proposed plan. This wording is intended to be helpful but alternative wording of like effect may be equally acceptable. Text quoted from Proposed Plan 93 is shown in *Italics*. The wording of relief sought shows new text as <u>underlined</u> and original text to be deleted as *strikethrough*.

Unless specified in each-submission point, my reasons for supporting are that the provisions are consistent with the purposes of the Act.

PLAN PROVISION	SUPPORT/OPPOSE	REASON	RELIEF SOUGHT
General	Oppose	Long-tailed bats have a threat status under the New Zealand Threat Classification	Undertake further surveying in the PPC site to
		System as Threatened – Nationally Critical. Long-tailed bats are considered	fully understand the population size and
		absolutely protected under the Wildlife Act 1953. ¹ The NPS-IB applies to indigenous	location of long-tailed bats.
		biodiversity in the terrestrial environment and aims to maintain indigenous	
		biodiversity so there is no net loss across the country. To do so it requires that	
		indigenous biodiversity is protected and restored where degraded. Policies 3, 8, and	
		15 are specifically important due to long-tailed bats being identified as a highly	
		mobile species.	
		The disturbance from the proposed activities has the potential to result in the loss	
		of critical habitat. This includes potential maternity and other roost trees, reducing	
		the available roosting and foraging habitat, and limit the connectivity of the	
		remaining suitable bat habitat in the surrounding area potentially rendering habitat	

¹ Wildlife Act 1953, s 3.

28.1

475 Page 3 of 132

PLAN PROVISION	SUPPORT/OPPOSE	REASON	RELIEF SOUGHT
		unavailable. It is therefore critical that adequate information is gathered around the	
		use of this habitat before a decision is made on its use and development.	
		AR4 Acoustic Recording Devices (ARDs) can detect long-tailed bats up to fifty metres	
		away in all directions (360°). Therefore, the first survey (using two AR4s) covered	
		up to 1.6ha, or 0.001% of the 159ha site, and the second survey (using five AR4s)	
		covered up to 4ha, or 0.02% of the site. While it is impractical to cover the whole	
		site, the gaps in coverage are large, particularly as most of the recorders were at	
		the margins of the site. Due to the low survey coverage, long-tailed bat activity over	
		most of the site is unknown, therefore the effects of such a large change in land use	
		cannot be adequately assessed or addressed. This lack of information thus requires	
		that under the NPS-IB a precautionary approach is taken.	
		The survey was stated to be conducted in accordance with <i>Sedgeley et al</i> (2012). ²	
		Sedgeley et al (2012) does not recommend any particular number of recorders per	
		site and is largely irrelevant to the question of whether the coverage of the site is adequate.	
		There is no evidence provided, other than the two surveys conducted, to support	
		the claim that bat activity beyond the Mahurangi River corridor would be low to not	
		at all, or that the identified activity is highly likely to be associated with forest to the	
		south-west. The second survey was more thorough in scope however bat activity	
		can vary widely over a short distance. The recorders did not cover enough of the	
		site to get an accurate understanding of where the bats are. For the large change in	
		land use that is proposed, comprehensive on-site surveys are needed rather than	
		extrapolation and speculation to ensure that adverse effects to the long-tailed bats	
		are avoided.	
		are avoided.	

² J A Sedgeley "Bats: counting away from roosts – automatic bat detectors Version 1.0 Inventory and monitoring toolbox: bats" Series DOCDM-590733, Department of Conservation, Christchurch New Zealand.

476 Page 4 of 132

477 Page 5 of 132

28.3

³ Department of Conservation "Protocols for minimising the risk of felling bat roosts Version 2" (October 2021).

PLAN PROVISION	SUPPORT/OPPOSE	REASON	RELIEF SOUGHT
FLANTROVISION	SOFFORT/OFFOSE	gathering identifies adverse effects on bats are likely the PPC will need to ensure that the AUP and NPS-IB are given effect to. It is proposed that the provisions in the higher order documents can be given effect to by the following: The proposed zoning of the bat flight corridor is Residential – Mixed Housing Urban Zone. Under the AUP, there can be up to three dwellings on a singular site as a permitted activity in the Residential – Mixed Housing Urban Zone, with four or more dwellings being a restricted discretionary activity. Having medium density housing directly adjacent to the bat flight corridor will have adverse effects on the bats due to multiple lighting and noise concerns.	"National Light Pollution Guidelines for Wildlife". Require that development in, and adjacent to, the bat flight corridor utilises the Department of Conservation's Protocols for minimising the risk of felling occupied bat roosts (2021). Require a prohibition in keeping
		The Special Yard: Bat Flight Corridor in its entirety is inadequate to protect the long-tailed bats from adverse effects. As written, the onus would fall on the property owners to maintain their backyards to abide by the PPC when greater protection would be possible if the entirety of the bat flight corridor was zoned as Open Space – Conservation.	domestic cats within one kilometre of the bat flight corridor.
		The purpose of the Special Yard: Bat Flight Corridor is "to provide an unobstructed flight corridor for bats". Limiting landscaping to two metres, assuming this refers to planting, does not make sense because shrubs and trees do not obstruct flying bats. Obstructions are more likely to include buildings, light, traffic and noise. Zoning the area as Open Space — Conservation would provide a more effective buffer as it would prohibit the aforementioned activities from occurring in the zone.	
		It would be incredibly difficult to enforce lighting restrictions in the Residential – Mixed Housing Urban Zone when lighting is numerous and varied in urban areas. Examples include security lighting, light spill from windows and vehicles, outside lights accidentally left on, special occasion lighting, and street lighting.	
		Recent study has shown that long-tailed bat activity is adversely affected by artificial light. The Australian Government produced National Light Pollution Guidelines for	

478 Page 6 of 132

PLAN PROVISION	SUPPORT/OPPOSE	REASON	RELIEF SOUGHT
		Wildlife. ⁴ Lighting in the vicinity of the bat flight corridor should adhere to the best	
		practice lighting design as laid out in the guidelines.	
		Noise may additionally deter bats from using the area. While the effects on long-	
		tailed bats from noise is still an emerging area of research, the precautionary	
		approach should be taken as per required by the Act and the NPS-IB.	
		It is assumed that the Bat Flight Corridor has been proposed to enable bats to	
		continue to travel along the Mahurangi River and associated riparian vegetation.	
		The correlation between increased urbanisation and bat exclusion is well	
		understood, with bats now extinct in most urban areas. It is unknown exactly how	
		much urbanisation bats can tolerate before they are excluded, therefore a	
		cautionary approach should be followed including a 100m buffer between the Bat	
		Flight Corridor and the urban area to buffer for the effects of light and noise. Tree	
		planting in the buffer would further reduce light and noise in the Bat Flight Corridor.	
		In the Appendix 2 Urban Design Report at 5.4, there is an indicative masterplan of	
		what the proposed subdivision would look like. There is a proposed walking and	
		cycling path that is adjacent to the bat flight corridor. It is recommended that no	
		lighting be provided alongside the paths to prevent additional adverse effects.	
		Domestic and feral cats are significant predators of long-tailed bats. A prohibition	
		should be imposed on houses that are within one kilometre of the bat flight corridor	
		and the Avice Miller reserve as per the findings by Kays et al (2020). Prohibiting	
		cats would provide the best outcome to assist in avoiding adverse effects on long-	
		tailed bats that is required under the NPS-IB and the AUP.	

⁴ Department of the Environment and Energy "National Light Pollution Guidelines for Wildlife Version 1.0" January 2020.

479 Page 7 of 132

⁵ R Kays, R R Dunn, A W Parsons, B Mcdonald, T Perkins, S A Powers, L Shell, J L McDonald, H Cole, H Kikillus, L Woods, H Tindle, and P Roetman "The small home ranges and large local ecological impacts of pet cats" (2020) 23 Animal Conservation 516.

PLAN PROVISION	SUPPORT/OPPOSE	REASON	RELIEF SOUGHT
Special Yard: Avice Miller	Oppose	The Avice Miller Scenic Reserve is Public Conservation Land administered by the	Amend the plan to adequately cover the
Scenic Reserve		Department of Conservation. The concerns that were raised in the Bat Flight	following issues:
		Corridor have equal application to the Special Yard: Avice Miller Scenic Reserve. Similar to the bat flight corridor, there should be a prohibition on keeping domestic cats. There is already a prohibition within three meters but there is a logistical concern on enforcing the requirement on property owners.	 Require a prohibition in keeping domestic cats within one kilometre of the Avice Miller Scenic Reserve.
		As stated earlier, Kays <i>et al</i> (2020) found that cats generally have a maximum stalking range of one kilometre. It would protection to the likely present 'At Risk' species including forest, elegant and pacific gecko, copper and ornate skink and the kauri snail at the Reserve. The failure to detect lizards does not necessarily indicate they are not present because native lizards can be hard to detect particularly at sites where they exist at low population densities due to introduced predators.	
		A flat prohibition for properties within one kilometre of the Avice Miller Scenic Reserve is necessary to give effect to the NPS-IB and AUP objectives and policies. Additionally, if long-tailed bats are found within the Avice Miller Scenic Reserve after further investigations, similar restrictions should be imposed on the boundary	
		as required by the Bat Flight Corridor as previously mentioned.	

28.4

480 Page 8 of 132

Protocols for minimising the risk of felling bat roosts

(Bat Roost Protocols (BRP))

Version 2: October 2021 approved by the New Zealand Department of Conservation's Bat Recovery Group

The use of these protocols should be a final step in the avoid/remedy/mitigate hierarchy. Avoidance of felling bat roost trees should be the first step in any project.

Purposes of this document:

- 1. To outline why protection of roosts is important for the persistence of New Zealand bats and why removal of known and potential roosts should be avoided.
- 2. Where roost removal cannot be avoided, to set out the minimum requirements and protocols for removing trees in areas where bats are present, to minimise the risk of killing bats.

This protocol does not eliminate the risk to bats of death or injury because bats or active bat roosts can be missed. The best way to eliminate risk of felling an active roost is to **avoid** felling any known or potential roosts.

Context

The status of New Zealand bats

New Zealand's two extant bat species (pekapeka) are classified as threatened.

Long-tailed bats are classified as 'Nationally Critical' because the species is likely to have a 70% decline in numbers within three generations.

Lesser short-tailed bats comprise three subspecies. The northern subspecies is classified as 'Nationally Vulnerable' because there are 1000-5000 mature individuals and the predicted decline in numbers is 10-50% within three generations. The central subspecies is 'Declining' because there are 20 000-100 000 mature individuals, and the predicted decline is 10-50% within three generations. The southern subspecies is 'Recovering' because there are 1000-5000 individuals, and the predicted increase is >10% within three generations.

Threats to bats

This document deals specifically with roost protection; however, roost protection is only part of the wider issue of habitat loss. Habitat loss through land clearance, habitat degradation, fragmentation and disturbance and loss of roosts reduces roosting, foraging and socialising areas. Individual bats and colonies are also threatened by the local felling of individual trees.

Bats have large home ranges which can include unprotected peri-urban habitat. Protecting habitat and maintaining connectivity of vegetation are crucial for bats being able to persist and flourish in the environment.

Predation and competition by introduced predators: mustelids, rats, cats, and possums have all been implicated in the decline of bats¹.

Roosts are critical to the survival of bats

Roosts are where bats gather to shelter during the day and at night. They are used to socialise, mate, give birth, and raise young. Bats have very specific requirements when they are choosing roosts and are not just choosing any

¹ O'Donnell CFJ; Christie JE; Hitchmough RA; Lloyd B; Parsons S 2010. The conservation status of New Zealand bats, 2009. New Zealand Journal of Zoology 37: 297–311.

tree². The specialised features of roosts make them rare and almost irreplaceable in any landscape or habitat type except over very long-time frames. People sometimes falsely suggest that "bats can just move to another tree". This is not the case, particularly where trees suitable as roosts are limited³.

Bats demonstrate high site fidelity to existing roosts and their specific roosting areas, and they move on a rotation among these. Because roost trees are likely to be rare, and are occupied to fulfil specialised requirements, felling breeding roost trees even when bats are absent will have a significant negative effect. If the number of suitable roosts and their surrounding habitat is reduced in the landscape, bats are forced to use roosts that are less thermally efficient. This means they will use more energy to survive, resulting in reductions in survival and lower reproductive success. In this way, roost removal is likely to result in higher risk of local extinction.

Bats can roost in native or exotic vegetation – therefore it should not be presumed that exotic species such as pine trees will not support bats. Roosts, including maternity roosts, have been found in many exotic species including, but not limited to, pine, poplar, oak, and acacia species, black locust, willow, eucalyptus and Tasmanian blackwoods.

Bats are at risk of being injured or killed when trees are felled

If a tree is felled with a bat in it, it is highly likely that the bat will be injured or killed, although this may not be apparent at the time because injuries, such as bruises and fractures, which would hinder bats' ability to fly well, may take time to be obvious.

The highest risk of injuring or killing bats or trapping them within their roosts is when they are heavily pregnant, when young are still dependent on the roost (late November – February) and when bats are more likely to be in torpor (May – September). Heavily pregnant bats are slower and less agile, and young bats cannot fly, so their chances to escape are reduced when roost trees are felled. Also, it is possible that if the larger female-dominated maternity roosts are cut down when females are raising their young to independence (October-March), a whole colony of bats could be destroyed at one time.

During winter bats use torpor (a type of hibernation) more often than during other times of year, so if trees are cut down in winter, bats may be unable to rouse from torpor and to fly away in time to escape. Additionally, it is significantly harder, sometimes impossible, to detect bats roosting in trees during torpor. For these reasons, trees with potential bat roost features must not be cut down in winter. Bats also use torpor for short periods during summer, for example, if the weather gets cold, so the risk of killing or injuring bats that cannot escape falling trees exists at any time of the year.

Bat roost protocols and the RMA

The occurrence of bats and bat habitat is a matter of 'significance' under Section 6(c) of the Resource Management Act (RMA). Bat roost protocols have become a standard part of bat management plans that may be required under RMA consents. Where developments require consents, and bats (a threatened species) are present, the developments should 'Avoid' impacting bats and bat habitat. Bat roost protocols only attempt to minimise the number of bats killed by tree felling, therefore implementing bat roost protocols where bats are present should be considered a last resort after following the RMA hierarchy of "avoid, remedy, mitigate, offset, compensate".

² Whilst we use the word tree frequently in this document, we acknowledge that bats also use non-tree vegetation as roosts and the terms tree and vegetation should be considered as interchangeable in the context of this document. We acknowledge that there are also non-vegetation roosts that are used and require protection. These include rocky bluffs, caves and occasionally buildings.

³ Many references available, for example, Borkin KM; Parsons S. 2011. Sex-specific roost selection by bats in clearfell harvested plantation forest: improved knowledge advises management. Acta Chiropterologica 13(2): 373-383; Borkin KM; O'Donnell CFJ; Parsons S. 2011. Bat colony size reduction coincides with clear-fell harvest operations and high rates of roost loss in plantation forest. Biodiversity and Conservation 30; Sedgeley JA; O'Donnell CFJ 1999b. Roost selection by the long-tailed bat, *Chalinolobus tuberculatus*, in temperate New Zealand rainforest and its implications for the conservation of bats in managed forests. Biological Conservation 88:261–276; Sedgeley JA; O'Donnell CFJ 2004. Roost use by long-tailed bats in South Canterbury: Testing predictions of roost site selection in a highly fragmented landscape. New Zealand Journal of Ecology 28:1-18.

This protocol has therefore been framed following the RMA hierarchy by first focusing on the avoidance of effects, helping to identify and avoid the removal of roost trees, and to minimise the risk to bats of death or injury if avoidance is not possible. This approach is usually informed by gathering data on bats in the local areas and seeking advice from a competent bat ecologist.

Identifying and protecting both active and inactive (i.e., trees used by bats at other times of year) roosts by avoiding their removal is an important step in supporting the survival and persistence of bats.

Bat roost protocols and the Wildlife Act 1953

NZ bats are absolutely protected species under the Wildlife Act 1953. It is an offence to catch alive or kill, hunt, possess, molest, or disturb bats under the Act. Any projects where tree or vegetation removal overlaps with the occurrence of bats, there is a risk of killing or injuring any bats that may be present. Following the bat roost protocols minimises the chance of killing or injuring bats.

Bat roost protocol

When and how to use the protocol

Whenever vegetation removal is proposed in areas where bats are potentially present and where their habitat may be impacted, follow the decision tree (Figure 1) below as a guide to what sort of action should be undertaken. The decision tree is designed firstly to avoid felling bat roost trees, secondarily aimed at moving roost trees, and only if unavoidable, felling roost trees (but only once vacated).

None of the methods of inspecting roosts described below eliminates the risk of failing to identify bats when they are present. Therefore, techniques such as filling in cavities with expandable foam are not supported as a tool. This is because there is a risk of trapping bats that have not been detected within cavities. In addition, this method removes roosts from the landscape that bats are dependent on.

Definitions

Competencies: a set of competencies developed by the NZ Bat Recovery Group⁴ to ensure that anyone working with bats is competent to do so. Contact bathandler@doc.govt.nz for a list of competencies and requirements to become an authorised competent bat worker.

Competencies referred to in this document:

- 2.1 Bagging storage, handling, measuring, weighing, sexing, aging, temporary marking and releasing appropriately: For long-tailed bats: 50 individuals

 For short-tailed bats: 50 individuals
 - 3. High risk activities Roost felling (all of these competencies include the understanding of what to do when bats are found during tree felling as per Appendix 6 of 'Initial veterinary care for New Zealand Bats' https://cdn.ymaws.com/www.nzva.org.nz/resource/resmgr/docs/other-resources/Initial Vet Care NZ Bats.pdf)
 - 3.1 Assessing roost tree use using Automatic Bat Monitors Demonstrate correct timing, placement, and interpretation of data for 10+ times according to DOC's Tree Felling Protocols.
 - 3.2 Undertake roost watches/emergence counts at 10+ occupied roosts where the entrance is visible.
 - 3.3 In at least two different forest/habitat types, including the forest/habitat type where trees are going to be assessed: evaluate 10+ potential roost features in trees (e.g., cavities, peeling bark, epiphytes).

Authorised competent bat worker: A bat worker who has met the required ethical standards to be registered as a competent, authorised bat worker by the New Zealand Bat Recovery Group for the work which they are undertaking.

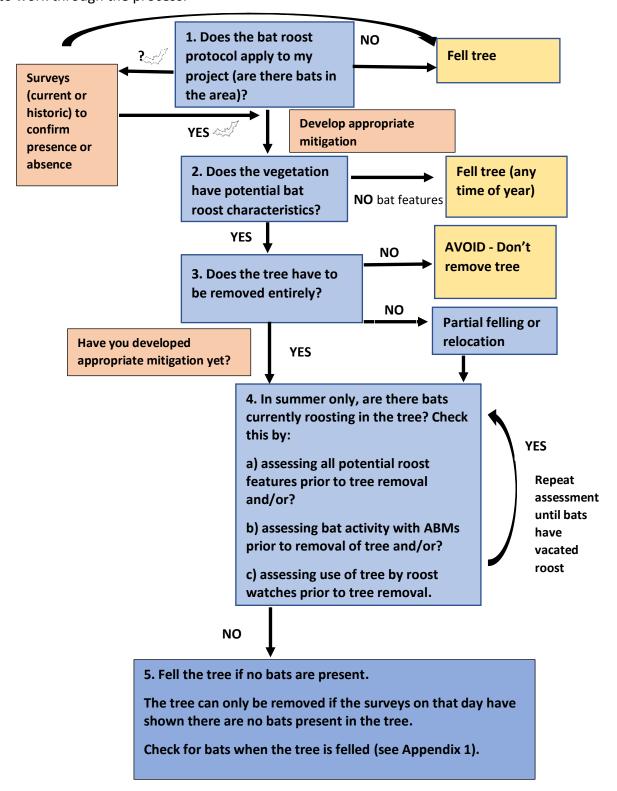
ABM: automated bat monitoring unit/detector

⁴ A group of bat specialists that advise on bat issues and assess bat competencies

_

Figure 1. Tree removal in bat areas flow chart

Each numbered step relates to a step in the Decision Tool for Tree Removal. Follow each step fully in the text to work through the process.



Mitigation/compensation

If trees are felled and habitat lost, then compensation measures should be considered to address the adverse effects. What these measures should be is beyond the scope of this document. Provision of artificial roosts in the short-term and planting for the long-term are some of the methods commonly used in development projects, but their effectiveness is untested and a future research need.

Step by step decision tool for tree removal in bat areas (to be used in conjunction with Figure 1).

Step 1. Does the bat roost protocol apply to my project?	Response	Who can make this assessment?	When?
a) Is there known bat activity within a radius of 25 km of the vegetation to be removed (see ⁵ and ⁶ notes below)?	a) If Yes, proceed to b If No, consider whether survey work needs to be done.	Evidence can come from on-the-ground surveys and reports from the national DOC database, consultants, and/or other credible sources. Evidence should be interpreted by an experienced bat ecologist.	Any time
b) Are bats present in the Project Area?	b) If Yes, go to step c If unknown, undertake comprehensive survey if bats are likely to be present. If no bats are present after comprehensive survey, you do not need to follow protocol.	If surveys are required to support the assessment, then these will need to be designed by an experienced bat ecologist to adequately cover the Project Area (see note below).	Acoustic surveys to determine presence should be undertaken when bats are most active and environmental conditions are suitable (October 1 st to April 30 th) ⁸ . Surveys undertaken at other times of year are considered less reliable for determining absence.
c) Is the tree known to provide a roost location for bats? (Previous knowledge).	c) If yes, go to step 3 If no (but bats are present in the project area), go to step 2.		

Notes for Step 1

1a) Bats are a highly mobile species. Long-tailed bats can have home ranges (the areas that they regularly use) as wide as 19km, and short-tailed bats about 24km. Three colonies of long-tailed bats in the Eglinton Valley collectively had a home range of 100km².

5

⁵ The largest home range span for the long-tailed bat in the Eglinton Valley was 19 km (O'Donnell 2001. J. Zool., Lond. 253, 253-264).

⁶ The largest home range span for the lesser short-tailed bat in the Eglinton Valley was 23.6 km (O'Donnell et al. 1999. New Zealand Journal of Ecology 23(1): 21-30).

⁷ Adequately covering the project area means including all habitat that are likely to be used by bats bearing in mind that the detectors most commonly used (DOC-manufactured AR4s) have an estimated 30-60m radius within which they can record bats.

⁸ Borkin K.M. 2010. Ecology of New Zealand's Long-tailed bat (*Chalinolobus tuberculatus*) in exotic plantation forest. Unpublished PhD thesis, University of Auckland.

When assessing whether bats might be present at a site you have to consider any surveys that have been done in the wider area, how long ago the surveys were done and whether more surveys are required.

1b) If you are doing a new survey then you should design the survey to cover the project area. Examples of surveys are shown in the Bat Inventory and Monitoring Toolbox (https://www.doc.govt.nz/our-work/biodiversity-inventory-and-monitoring/bats/). See 'Bats: Counting away from bat roosts: bat detectors on line transects' and 'Counting away from bat roosts: automatic bat detectors'.

Send bat data (processed csv files and GPS locations) to batdatabase@doc.govt.nz on a standard spreadsheet available by emailing this address.

Step 2. Does the vegetation proposed to be removed have potential bat roost characteristics?	Response	Who can make this assessment?	When?
a) Is the tree ≥15 cm DBH (Diameter at Breast Height) ⁹ ?	If yes, further assessment is required (2b). If no, the vegetation can be removed at any time ¹⁰ .	Anyone who can measure a tree DBH.	Any time
 b) On visual inspection, does the tree (dead or alive) have features that indicate roost potential? These features include: hollows cavities knot holes cracks flaking, peeling, and decorticating bark epiphytes broken or dead branches or trunk cavities/hollows/shelter formed by double leaders This may require climbing the tree if you can't see all the tree from the ground. 	If yes go to step 3 If unsure, further assessment is required. This may include climbing the tree. If no potential roost features are present, the vegetation can be removed at any time ¹¹ , but if upon felling you find a bat follow section 5.	Anyone that can identify these features. 12 If further assessment required, then use an approved person at Competency Level 3.3.	Visual inspections can occur at any time. If there are NO potential roost features, felling can occur at any time of year.

⁹ This diameter at breast height is based on dimensions of roosts used by south Hamilton long-tailed bats that were identified by Dekrout (2009, Unpublished PhD thesis, University of Auckland) - the smallest roosts were 15.5 cm DBH; but note that in South Canterbury Sedgeley and O'Donnell (2004, New Zealand Journal of Ecology 28(1): 1-18) found that 25% of long-tailed bat roosts were smaller than 18.8 cm DBH.

10 Note that there may be roosts that have smaller diameter at breast height (DBH). If any vegetation is suspected to have a bat roost present, then removal shall be halted immediately, and protocols reviewed.

¹¹ All surveys to assess whether trees are potential roosts shall take place within 6 months of final felling does not take place within this time then assessments will be repeated. This is intended to account for any changes in trees which may occur over time.

 $^{^{\}rm 12}$ It is intended that training on identifying roost features will be developed.

Step 3. Does the tree have to be removed entirely?	Response	Who can make this assessment?	When?
a) Is the only option to remove the tree entirely?	If yes, continue to step 4	Project leader	Any time
	If no, consider leaving the tree		
	in place, cutting off specific		
	limbs only or relocating the		
	tree. If any felling, partial		
	felling (where the part to be		
	felled has potential bat roost		
	features) or tree relocation		
	takes place you MUST		
	proceed to step 4.		
	If a roost (active/inactive) is		
	confirmed, then advice should		
	be obtained at a project level		
	in writing from DOC before		
	proceeding.		

Notes for Step 3

Trees must only be relocated when bats are absent and when standard automated bat monitoring unit (ABM) weather conditions are met (see notes section 4b for appropriate weather conditions), and in consultation with an authorised bat ecologist with all competencies of level 3: 'High risk activities – Roost felling'.

Ste	p 4. Are there bats currently roosting in the tree? (Follow a or b	Response	Who can make this assessment?	When
or	c or a combination)			
a)	Are potential features being used by roosting bats? A tree	If yes, THE TREE MUST NOT	An approved person at	October 1 st to April 30 th when
	climber may be required to check all features (see notes for 4a	BE FELLED UNTIL BATS	Competency Level 3.3 or an	the temperature is 7°C or
	below).	HAVE VACATED IT.	experienced tree-climber (e.g., an	greater at official sunset in
	If roost is occupied repeat 4a another day until roost is vacated.	If no, the tree can be removed on the day of the	arborist) working with an approved person at Competency Level 3.3.	the South Island or 10 °C or greater in the North Island.
		tree inspection following	If the latter, the tree climber must	
		step 5.	provide information along with	
		If bats continue to use the roost, then the tree must not be cut down until the bats leave the roost. At this point re-consider again	photographs or video footage, to the approved person at Competency Level 3.3 who assesses and decides whether the tree can be removed.	

		whether this tree must be felled. Advice must be obtained at a project level in writing from DOC prior to felling the tree.	If roosts are known or confirmed through this process, then this information must be communicated to the nominated DOC bat ecologist for this project.	
b)	Is bat activity recorded at any time during two consecutive, valid survey nights preceding tree felling ¹³ ? At least two nights are required as it is possible for bats to enter or leave a roost without echolocating, or to not leave the roost for a night.	If yes (bats are detected), survey must continue on subsequent nights ¹⁴ until no bat activity is recorded for two consecutive nights (to indicate bats have left the area) prior to felling. OR roost features of each tree must be visually assessed via climbing as in 3. If bat activity is consistent in the area and 2 nights with zero bat passes cannot be obtained, Go to 4c or 4a. If no bats are detected for two consecutive nights, the vegetation can be removed on the day immediately following the survey nights using the method in 5.	An approved person at Competency Level 3.1	October 1 st to April 30 th and when conditions meet the requirements for standard ABM weather conditions (see 4b notes).
c)	Are bats observed entering the vegetation? This involves watching vegetation to identify bats returning to or exiting roosts. It should only be used in combination with previous ABM monitoring (4b) (see notes 4c for method). At	If yes (bats are seen at either watch), it is a confirmed roost. Removal of a roost should be avoided to minimise effects	An approved person at Competency Level 3.2 ¹⁵ .	Between October 1 st and April 30 th only AND when weather parameters meet

13 Le Roux et al (2013) found that in and around Hamilton "The longest consecutive monitoring period without bat detections at each site was three nights during winter." Le Roux et al 2013. New Zealand Journal of Zoology (2013): Spatial and temporal variation in long-tailed bat echolocation activity in a New Zealand city, New Zealand Journal of Zoology, DOI: 10.1080/03014223.2013.827125.

8

¹⁴ Subsequent nights may be those immediately following bat detection or later dates.

¹⁵ If more than one person is required for a roost watch at a tree, a minimum of one approved person at Competency Level 3.2 must be present on site for the duration of the roost watch to supervise.

least two nights are required as it is possible for bats to enter	of vegetation removal on	the roost watch
or leave a roost without being detected, or to not leave the	bats.	requirements.
roost for a night.	Techniques used previously to ensure previously active roosts are no longer active have included the following: Watches must continue on subsequent nights until no bats are observed entering or exiting the roost for two consecutive nights (to indicate the roost is no longer active) prior to felling.	
	If no bats are observed entering or exiting for two consecutive nights, the vegetation can be removed on the day immediately following the survey nights using the method in 5.	

Notes for Step 4.

Tree climbing and inspection 4a)

Care must be taken while climbing trees to avoid disturbing, removing or destroying tree features with bat roost potential such as sections of loose bark or cavities in dead wood. Using mobile elevated platforms can be a good option. Bats are less likely to be active over colder periods, so climbing to check whether bats are present in potential roost features must take place between October 1st to April 30th when the temperature is 7°C 16 (South Is) or 10°C (North Is) or greater at official sunset on the night previous to inspection.

A tree climber may be required to check all potential bat roost features:

• Can bats be seen? An endoscopic camera should be available for this step and every possible corner of each potential roosting feature inspected, i.e., cavity/crack etc. Cracks, holes, and splits may lead to cavities or may be superficial. A cavity may be wet indicating no/low potential as a bat roost.

Page 17 of 132

9

¹⁶ O'Donnell CFJ 2000. Influence of season, habitat, temperature and invertebrate availability on nocturnal activity of the New Zealand long-tailed bat (Chalinolobus tuberculatus). New Zealand Journal of Ecology 207-221.

10

- Can bats be heard? Search of tree features should be accompanied by use of a hand-held bat detector. If bats are present and not in torpor, then detection of presence listening at 25 kHz (for social calls) and 40 kHz (for echolocation calls) may help to determine if long-tailed bats are present. Short-tailed bat social calls are often audible or detected at 25-27 kHz.
- Is guano present or urine staining?

4b) ABM survey work

Bat activity is to be recorded using ABMs. Location of ABMs must provide sufficient coverage to be able to determine if bat roosts are present in one or more of the trees¹⁷. 'Valid' survey nights must have the following features:

- Begin one hour before official sunset and end one hour after official sunrise.
- Temperature 10°C or greater for the first four hours after official sunset time for the North Island and 7°C for the South Island¹⁸.
- Precipitation < 2.5 mm in the first 2 hours after official sunset, and < 5 mm in the first 4 hours after official sunset.

Prior to the commencement of surveys, ABMs must be checked for correct operation at a site where bat activity is known to be regular, or by using the DOC – Bat Recorder Tester (Tussock Innovation Ltd) phone app made for this and available from Google Play Store. Faulty or suspect ABMs must not be deployed, and ABMs must be redeployed if faults occur.

4c) Roost watches

The following weather conditions define a valid night for roost watches:

- Temperature greater than 10°C all night between official sunset and sunrise for the North Island and 7°C for the South Island.
- Precipitation < 2.5 mm for each two-hour period between official sunset and sunrise

Roost watches should include the deployment of ABMs and analysis of data for the night of the roost watch.

Emergence watches

• Each tree must be watched initially from sunset until it becomes too dark to see by sufficient people to observe all potential exit points. This must be supported by the use of handheld detectors. The aim of emergence watches is to identify potential roost locations within the vegetation. Infra-red and thermal imaging cameras may be useful in this process.

90 Page 18 of 132

¹⁷ Department of Conservation-manufactured AR4 bat detectors are considered likely to detect long-tailed bats only over short distances i.e., up to 30-60 m distant from the detector (S. Cockburn, Department of Conservation, pers. Comm.). This is similar to detection distances of other detector types.

¹⁸ South Island temperatures are based upon O'Donnell (2000) as above. North Island temperatures are based on data collected in Kinleith plantation forest, centred around Tokoroa, Central North Island; Smith D, Borkin K. 2017. Appendix B: Influence of climate variables on long-tailed bat activity in an exotic conifer plantation forest in the central North Island. P 136-145. In: Smith, D, K Borkin, C Jones, S Lindberg, F Davies and G Eccles (2017). Effects of land transport activities on New Zealand's endemic bat populations: reviews of ecological and regulatory literature. NZ Transport Agency research report 623. 249pp.

Roost re-entry watches

The time when bats return to roosts can vary based on temperature and time of year. 19,20

- Observers must then return the next morning and watch the tree to determine whether bats return to the vegetation.
- Roost re-entry watch timing should be based on patterns of activity recorded onsite with ABMs, i.e., as a guide watches should begin two hours prior to when the last passes were recorded on the ABMs on previous nights and finish one hour after official sunrise time. Where this information is not available and at minimum, watches shall begin two hours prior to official sunrise until one hour after sunrise. Infra-red and/or thermal imaging cameras may be useful as a supplementary tool in this process.

The methods above (Climbing and inspecting; ABM use and roost watches) can be implemented as in steps 4.

If bats are sighted, or sign detected, or a roost (active/inactive) is confirmed, the approved bat ecologist, as soon as possible, shall:

- Call the tree felling supervisor to inform them which affected tree(s) cannot be felled due to detection of bat sign.
- Send an email to the site manager, and a bat ecologist representing the council and DOC detailing the results of the survey and outlining the measures for protection or relocating the roost tree.
- A record (including photos) of any vegetation containing bat roosts shall be kept detailing the date; size, location and species of tree or other vegetation; roost type, e.g., cavity, peeling bark, broken branch; detail outlining how presence of bats was confirmed; the number of bats present; and species present, if known.

Step 5. Fell the tree if no bats present	Response	Who can make this assessment?	When		
NB: Vegetation removal must take place on the day of tree inspection or the day immediately following night surveys that confirm that there are no bats present.					
a) If you have undertaken a visual inspection of the vegetation (following step 4a, then the vegetation can be removed ONLY ON THE DAY OF INSPECTION and meets the valid weather conditions (defined in notes 4c) at official sunset the day prior to inspection. If you have undertaken ABM surveys or roost watches 4b or 4c the		People who are familiar with the document shown in footnote ²¹ , and physically able to check/inspect tree for signs of bats once felled.	When the inspection		
vegetation can be removed ONLY ON THE DAY IMMEDIATELY FOLLOWING SURVEY COMPLETION (i.e., if the survey ends in morning the tree can be felled the same day only).					

¹⁹ Dekrout AS 2009. Unpublished PhD thesis. University of Auckland, New Zealand Pp 168.

Page 19 of 132

11

²⁰ Griffiths R. 2007. Activity patterns of long-tailed bats (Chalinolobus tuberculatus) in a rural landscape, South Canterbury, New Zealand. New Zealand Journal of Zoology, 34:3, 247-258, DOI: 10.1080/03014220709510083.

²¹ https://cdn.ymaws.com/www.nzva.org.nz/resource/resmgr/docs/other_resources/Bat_Care_Advice.pdf

Trees must be inspected for signs of bats once felled and before		
removing from the site, if safe to do so.		
Follow Appendix 1 if bats are detected during vegetation removal.		

Page 20 of 132

12

28

Appendix 1. If bats are detected during tree relocation or removal

NB: Vegetation removal must take place on the day of tree inspection or the day roost watches or two consecutive nights of ABM data have confirmed that there are no bats present. If practical, trees are to be inspected for signs of bats once felled and before removing from site. People inspecting trees should be familiar with the Bat Care Advice document shown in footnote²² and able to check/inspect tree for signs of bats once felled.

If during the felling of a tree bats are detected, felling of that tree must stop immediately if safe to do so, and DOC and an approved bat ecologist at Competency Level 2.1 must be consulted.

If bats do not fly away or are potentially injured/found on the ground, felling can only re-start once permission has been obtained from DOC after consultation with an approved bat ecologist at Competency Level 2.1.

If bats are detected once the tree has been felled, all further work must stop, and DOC and an approved bat ecologist at Competency Level 2.1 must be contacted. The felled tree must be thoroughly inspected by the approved bat ecologist for further bats.

If any bats are found on the ground or in the tree once felled, place the bat in a cloth bag in a dark, quiet place at ambient (or slightly warmer) temperature and take to a veterinarian for assessment as soon as possible. A maximum of two bats should be kept in one bag. After delivering the bat to the vet, contact an approved bat ecologist at Competency Level 2.1 in consultation with the vet and DOC (0800 DOC HOT, 0800 362 468).

Bats must be kept for three days under observation and must be kept out of torpor for this time. Additional detail is found at the links provided in this footnote²³. Vets must euthanise bats whose injuries are causing suffering and are not likely to heal sufficiently to allow rehabilitation and return to the wild. The approved bat ecologist at Competency Level 2.1 and vet must consult with DOC to consider appropriate rehabilitation options where suffering is minimal and chances of return to the wild are high.

Euthanised bats or any dead bats (or bat parts) found must be handed to DOC.

²² https://cdn.ymaws.com/www.nzva.org.nz/resource/resmgr/docs/other_resources/Bat_Care_Advice.pdf

²³ https://cdn.ymaws.com/www.nzva.org.nz/resource/resmgr/docs/other resources/Initial Vet Care NZ Bats.pdf





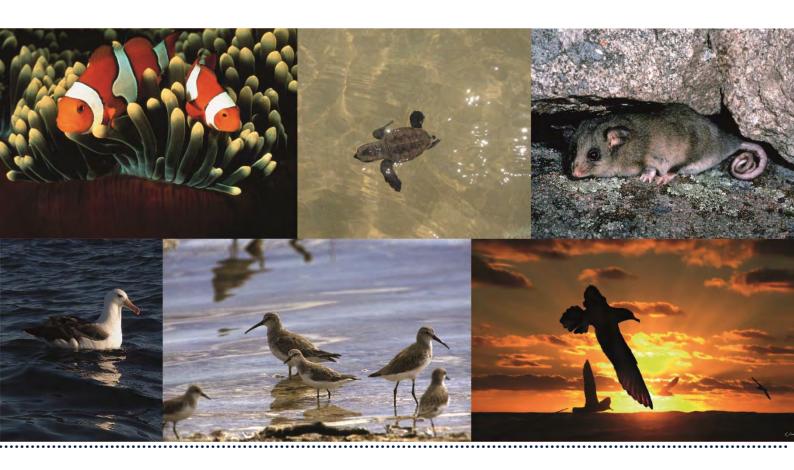
Light Pollution Guidelines

National Light Pollution Guidelines for Wildlife

Including marine turtles, seabirds and migratory shorebirds

January 2020

Version 1.0



Acknowledgments

The Department of the Environment and Energy (the Department) would like to acknowledge those who contributed to the development of these Light Pollution Guidelines.

Funding for the development of the Guidelines was provided by the North West Shelf Flatback Conservation Program in the Western Australian Department of Biodiversity, Conservation and Attractions and by the Australian Government's National Environmental Science Program (NESP) Emerging Priorities Funding.

These Guidelines are based on the draft written by Kellie Pendoley, Catherine Bell, Chris Surman and Jimmy Choi with contributions from Airam Rodriguez, Andre Chiaradia, Godfrey Bridger, Adam Carey, Adam Mitchell and Phillipa Wilson. Simon Balm, Steve Coyne, Dan Duriscoe, Peter Hick, Gillian Isoardi, Nigel Jackett, Andreas Jechow, Mike Salmon and Warren Tacey generously provided technical reviews of sections of this document.

The Department acknowledges the traditional owners of country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their elders both past and present.

© Copyright Commonwealth of Australia, 2020.



The Light Pollution Guidelines are licensed by the Commonwealth of Australia for use under a Creative Commons Attribution 4.0 International licence with the exception of the Coat of Arms of the Commonwealth of Australia, the logo of the agency responsible for publishing the report, content supplied by third parties, and any images depicting people. For licence conditions see: https://creativecommons.org/licenses/by/4.0/

This report should be attributed as 'National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds, Commonwealth of Australia 2020'.

The Commonwealth of Australia has made all reasonable efforts to identify content supplied by third parties using the following format '© Copyright, [name of third party]'.

Front cover images: Clown fish - DSEWPaC; Hawksbill Turtle hatchling – Scott Whiting; Mountain Pygmy Possum – Linda Broom; Black Browed Albatross – Alan Danks; Curlew Sandpiper – Brian Furby; Fleshfooted Shearwater - Richard Freeman.

Contents

National Light Pollution Guidelines	1
Introduction	1
How to use these Guidelines	2
Regulatory Considerations for the Management of Artificial Light around Wildlife	3
Wildlife and Artificial Light	5
When to Consider the Impact of Artificial Light on Wildlife?	8
Environmental Impact Assessment for Effects of Artificial Light on Wildlife	13
Case Studies	18
Appendix A – Best Practice Lighting Design	21
Lighting Objectives	21
Principles of Best Practice Lighting Design	22
Appendix B – What is Light and how does Wildlife Perceive it?	27
What is Light?	27
Vision in Animals	28
Factors Effecting Perception of Light	30
Measurement of Light	33
Light Emitting Diodes (LEDs)	34
Appendix C - Measuring Biologically Relevant Light	37
Radiometric vs Photometric Measurement Techniques	38
Instrumental Techniques	40
Modelling Predicted Light	49
Appendix D – Artificial Light Auditing	50
Step-by-Step Guide	50
Appendix E – Artificial Light Management Check List	52
Appendix F - Marine Turtles	55
Conservation Status	56
Distribution	56
Effects of Artificial Light on Marine Turtles	57
Environmental Impact Assessment of Artificial Light on Marine Turtles	59
Marine Turtle Light Mitigation Toolbox	64
Appendix G - Seabirds	67
Conservation Status	68
Distribution	68
Effects of Artificial Light on Seabirds	69

Environmental Impact Assessment of Artificial Light on Seabirds	72
Seabird Light Mitigation Toolbox	76
Appendix H - Migratory Shorebirds	81
Conservation Status	82
Distribution	82
Effects of Artificial Light on Migratory Shorebirds	83
Environmental Impact Assessment of Artificial Light on Migratory Shorebirds	86
Migratory Shorebird Light Mitigation Toolbox	89
Glossary	93
References	99

National Light Pollution Guidelines

Introduction

Natural darkness has a conservation value in the same way that clean water, air and soil has intrinsic value. Artificial light at night is increasing globally by about two per cent per year¹. Animals perceive light differently from humans and artificial light can disrupt critical behaviour and cause physiological changes in wildlife². For example, hatchling marine turtles may not be able to find the ocean when beaches are lit³, and fledgling seabirds may not take their first flight if their nesting habitat never becomes dark⁴. Tammar wallabies exposed to artificial light have been shown to delay reproduction⁵ and clownfish eggs incubated under constant light do not hatch⁶.

Consequently, artificial light has the potential to stall the recovery of a threatened species. For migratory species, the impact of artificial light may compromise an animal's ability to undertake long-distance migrations integral to its life cycle.

Artificial light at night provides for human safety, amenity and increased productivity. Australian legislation and standards regulate artificial light for the purpose of human safety. These Guidelines do not infringe on human safety obligations. Where there are competing objectives for lighting, creative solutions may be needed that meet both human safety requirements for artificial light and threatened and migratory species conservation.

The Guidelines outline the process to be followed where there is the potential for artificial lighting to affect wildlife. They apply to new projects, lighting upgrades (retrofitting) and where there is evidence of wildlife being affected by existing artificial light.

The technology around lighting hardware, design and control is changing rapidly and biological responses to artificial light vary by species, location and environmental conditions. It is not possible to set prescriptive limits on lighting. Instead, these Guidelines take an outcomes approach to assessing and mitigating the effect of artificial light on wildlife.



Figure 1 Pink anemone fish and marine turtle laying eggs. Photos: Nigel Marsh and Robert Thorn.

How to use these Guidelines

These Guidelines provide users with the theoretical, technical and practical information required to assess if artificial lighting is likely to affect wildlife and the management tools to minimise and mitigate that affect. These techniques can be applied regardless of scale, from small, domestic projects to large-scale industrial developments.

The aim of the Guidelines is that artificial light will be managed so wildlife is:

- 1. Not disrupted within, nor displaced from, important habitat; and
- 2. Able to undertake critical behaviours such as foraging, reproduction and dispersal.

The Guidelines recommend:

- Always using <u>Best Practice Lighting Design</u> to reduce light pollution and minimise the effect on wildlife.
- 2. Undertaking an <u>Environmental Impact Assessment</u> for effects of artificial light on listed species for which artificial light has been demonstrated to affect behaviour, survivorship or reproduction.

Technical Appendices

The Guidelines are supported by a series of technical appendices that provide additional information about <u>Best Practice Lighting Design</u>, <u>What is Light and How Wildlife Perceive it</u>, <u>Measuring Biologically Relevant Light</u>, and <u>Artificial Light Auditing</u>. There is also a <u>checklist</u> for artificial light management, and species-specific information for the management of artificial light for <u>Marine Turtles</u>, <u>Seabirds</u> and <u>Migratory Shorebirds</u>. The range of species covered in taxa-specific appendices will be broadened in the future.

Regulatory Considerations for the Management of Artificial Light around Wildlife

These Guidelines provide technical information to guide the management of artificial light for *Environment Protection and Biodiversity Conservation Act (1999)* (EPBC Act) listed threatened and migratory species, species that are part of a listed ecological community, and species protected under state or territory legislation for which artificial light has been demonstrated to affect behaviour, survivorship or reproduction.

Environment Protection and Biodiversity Conservation Act (1999)

The EPBC Act regulates any action that will have, or is likely to have, a significant impact on a Matter of National Environmental Significance (MNES), including listed threatened and migratory species. Any action likely to have a significant impact on a MNES must be referred to the Australian Government for assessment. Further, it is an offence under the EPBC Act to kill, injure, take or trade a listed threatened, migratory or marine species in a Commonwealth area. Anyone unsure of whether the EPBC Act applies, is strongly encouraged to seek further information.

State and territory legislation and policy

State and territory environmental legislation and policy frameworks may also have provisions for managing threats, such as light, to listed species. For example, artificial light is a form of pollution regulated for impacts on humans and the environment under the Australian Capital Territory *Environment Protection Act 1997*. Consideration should be given to the function of relevant state and territory environment and planning legislation and policy concerning the protection of wildlife from artificial light.

Local and regional government requirements

Advice should also be sought from local government as to whether specific requirements apply in the area of interest concerning artificial light and wildlife. For example, the Queensland Government Sea Turtle Sensitive Area Code provides for local governments to identify sea turtle sensitive areas within local government planning schemes. Development in these areas will need to avoid adverse effects to sea turtles from artificial lighting.

Australian standards

Australian standards provide agreed limits for various lighting scenarios, generally for the purposes of human safety and for the provision of amenity. For example, Australian Standard DR AS/NZS 1158.3.1:2018 *Lighting for roads and public spaces pedestrian area (Category P) lighting* provides minimum light performance and design standards for pedestrian areas.

Australian standards also provide for consideration of environmental concerns. Australian Standard *AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting* recognises the impact of artificial light on biota.

These Light Pollution Guidelines should be followed to ensure all lighting objectives are adequately addressed. This may require solutions to be developed, applied and tested to ensure lighting management meets the needs of human safety and wildlife conservation. The Case Studies illustrate examples of how a liquefied natural gas processing plant, a transport authority and a marine research vessel have addressed this challenge.

Associated guidance

These Guidelines should be read in conjunction with:

- EPBC Act 1999 Significant Impact Guidelines 1.1 Matters of National Environmental Significance
- EPBC Act 1999 Significant Impact Guidelines 1.2 Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies
- Recovery Plans and approved conservation advices for listed threatened species
- approved Wildlife Conservation Plans for listed migratory species
- state and territory environmental legislation, regulations, and policy and guidance documents
- up-to-date scientific literature
- local and Indigenous knowledge.

Wildlife and Artificial Light

Vision is a critical cue for wildlife to orient themselves in their environment, find food, avoid predation and communicate⁷. An important consideration in the management of artificial light for wildlife is an understanding of how light is perceived by animals, both in terms of what the eye sees and the animal's viewing perspective.

Animals perceive light differently from humans. Most animals are sensitive to ultra-violet (UV)/violet/blue light⁸, while some birds are sensitive to longer wavelength yellow/orange⁹ and some snakes, can detect infra-red wavelengths¹⁰ (Figure 2). Understanding the sensitivity of wildlife to different light wavelengths is critical to assessing the potential effects of artificial light on wildlife.

The way light is described and measured has traditionally focused on human vision. To manage light appropriately for wildlife, it is critical to understand how light is defined, described and measured and to consider light from the wildlife's perspective.

For a detailed explanation of these issues see What is Light and how do Wildlife Perceive it? The Glossary provides a summary of terms used to describe light and light measurements and notes the appropriate terms for discussing the effects of light on wildlife.

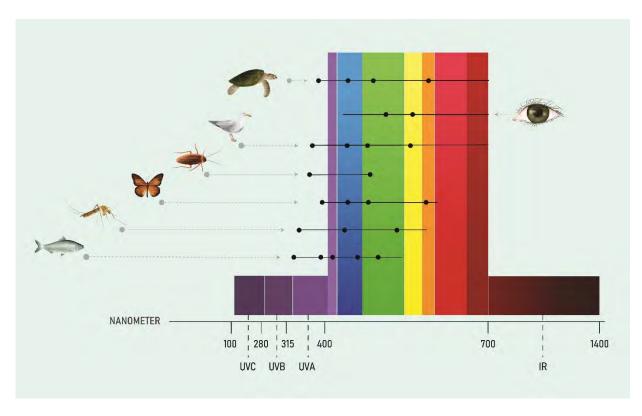


Figure 2 Ability to perceive different wavelengths of light in humans and wildlife is shown by horizontal lines. Black dots represent reported peak sensitivities. Figure adapted from Campos (2017)⁸.

How light affects wildlife

Artificial light is known to adversely affect many species^{2,11} and ecological communities^{12,13}. It can change behaviour and/or physiology, reducing survivorship or reproductive output. It can also have the indirect effect of changing the availability of habitat or food resources. It can attract predators and invasive pests, both of which may pose a threat to listed species.

Behavioural changes in wildlife have been well described for some species. Adult marine turtles may avoid nesting on beaches that are brightly lit^{14,15}, and adult and hatchling turtles can be disoriented and unable to find the ocean in the presence of direct light or sky glow^{3,15,16}. Similarly, lights can disorient flying birds, particularly during migration, and cause them to divert from efficient migratory routes or collide with infrastructure¹⁷. Birds may starve when artificial lighting disrupts foraging, and fledgling seabirds may not be able to take their first flight if their nesting habitat never becomes dark⁴. Migratory shorebirds may use less preferable roosting sites to avoid lights and may be exposed to increased predation where lighting makes them visible at night⁴.

Physiological changes have been described in the Tammar Wallaby when exposed to artificial light, resulting in delayed reproduction⁵, and clownfish eggs incubated under constant light do not hatch⁶. The stress hormone corticosterone in free living song birds has been shown to increase when exposed to white light compared with green or red light and those with high stress hormone levels had fewer offspring¹⁸. Plant physiology can also be affected by artificial light with changes to growth, timing of flowering and resource allocation. This can then have flow-on affects for pollinators and herbivores¹³.

The indirect effects of artificial light can also be detrimental to threatened species. The Mountain Pygmy Possum, for example, feeds primarily on the Bogong Moth, a long distance nocturnal migrator that is attracted to light¹⁹. Recent declines in moth populations, in part due to artificial light, have reduced the food supply for the possum²⁰. Changes in food availability due to artificial light affect other animals, such as bats²¹, and cause changes in fish assemblages²². Lighting may also attract invasive pests such as cane toads²³, or predators, increasing pressure on listed species²⁴.

The way in which light affects a listed species must be considered when developing management strategies as this will vary on a case by case basis.

These Guidelines provide information on the management of artificial light for <u>Marine Turtles</u>, <u>Seabirds</u> and <u>Migratory Shorebirds</u> in the technical appendices. Consideration should be given to the direct and indirect effect of artificial light on all listed species for which artificial light has been demonstrated to negatively affect behaviour, survivorship or reproduction.

Light Emitting Diodes (LEDs)

During the life of these Guidelines, it is anticipated that light technology may change dramatically. At the time of writing, LEDs were rapidly becoming the most common light type used globally. This is primarily because they are more energy efficient than earlier light sources. LEDs and smart control technologies (such as motion sensors and timers) provide the ability to control and manage the physical parameters of lighting, making them an integral tool in managing the effects of artificial light on wildlife.

Whilst LEDs are part of the solution, consideration should be given to some of the characteristics of LEDs that may influence the effect of artificial light on wildlife. White LEDs generally contain short wavelength blue light. Short wavelength light scatters more readily than long wavelength light, contributing more to sky glow. Also, most wildlife is sensitive to blue light (Figure 2). More detailed consideration of LEDs, their benefits and challenges for use around wildlife are provided in the Technical Appendix What is Light and how does Wildlife Perceive it?

When to Consider the Impact of Artificial Light on Wildlife?

Is Artificial Light Visible Outside?

Any action or activity that includes externally visible artificial lighting should consider the potential effects on wildlife (refer Figure 3 below). These Guidelines should be applied at all stages of management, from the development of planning schemes to the design, approval and execution of individual developments or activities, through to retrofitting of light fixtures and management of existing light pollution. Best Practice Lighting Design is recommended as a minimum whenever artificial lighting is externally visible.

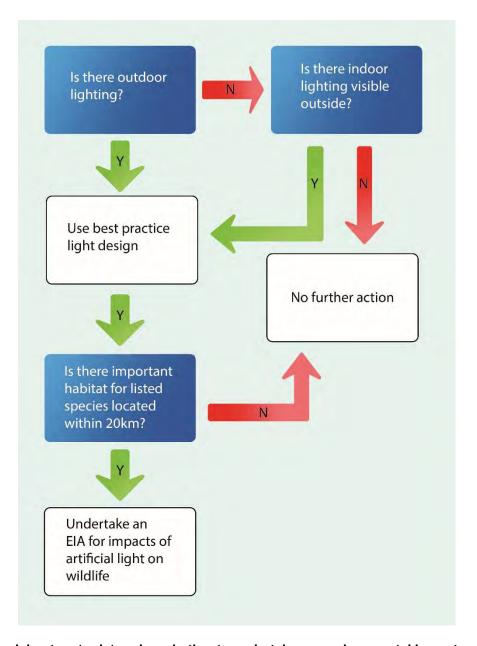


Figure 3 Decision tree to determine whether to undertake an environmental impact assessment for the effects of artificial light on wildlife.

Best practice lighting design

Natural darkness has a conservation value and should be protected through good quality lighting design and management for the benefit of all living things. To that end, all infrastructure that has outdoor artificial lighting or internal lighting that is externally visible should incorporate best practice lighting design.

Incorporating best practice lighting design into all infrastructure will not only have benefits for wildlife, but will also save energy and provide an economic benefit for light owners and managers.

Best practice lighting design incorporates the following design principles.

- 1. Start with natural darkness and only add light for specific purposes.
- 2. Use adaptive light controls to manage light timing, intensity and colour.
- 3. Light only the object or area intended keep lights close to the ground, directed and shielded to avoid light spill.
- 4. Use the lowest intensity lighting appropriate for the task.
- 5. Use non-reflective, dark-coloured surfaces.
- 6. Use lights with reduced or filtered blue, violet and ultra-violet wavelengths.

Figure 4 provides an illustration of best practice light design principles. For a detailed explanation see Technical Appendix Best Practice Lighting Design.

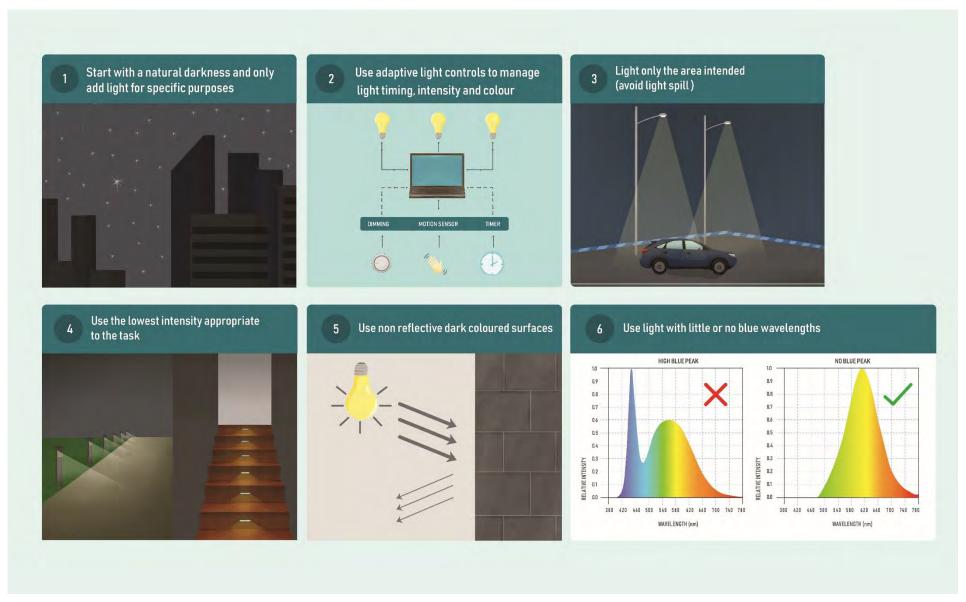


Figure 4 Principles for best practice lighting design.

Is there Important Habitat for Listed Species Located within 20km?

Important habitats are those areas necessary for an ecologically significant proportion of a listed species to undertake important activities such as foraging, breeding, roosting or dispersal. This might include areas that are of critical importance for a particular life stage, are at the limit of a species range or habitat, or where the species is declining. They may also be a habitat where the presence of light pollution may cause a significant decline in a listed threatened or migratory species.

Important habitat will vary depending on the species. For some species, areas of importance have been designated through recovery plans, conservation advice, and under planning regulations (for example Queensland Sea Turtle Sensitive Areas). Important habitat would include those areas that are consistent with 'habitat critical to the survival' of a threatened species and 'important habitat' for listed migratory species as described in the EPBC Act Significant Impact Guidelines²⁵. Important habitat may include areas designated as Biologically Important Areas (BIAs), or in the case of migratory shorebirds, Internationally Important or Nationally Important Habitat. Consideration should be given to the ecological characteristics of Ramsar sites and the biological and ecological values of National and World Heritage Areas.

Species specific descriptions of important habitat can be found in Technical Appendices relating to <u>Marine Turtles</u>, <u>Seabirds</u> and <u>Migratory Shorebirds</u>. For other listed species see relevant information available in Associated guidance and Desktop Study of Wildlife.

Where there is important habitat for listed species that are known to be affected by artificial light within 20 km of a project, species specific impacts should be considered through an Environmental Impact Assessment (EIA) process.

The 20 km threshold provides a precautionary limit based on observed effects of sky glow on marine turtle hatchlings demonstrated to occur at 15-18 km^{26,27} and fledgling seabirds grounded in response to artificial light 15 km away²⁸. The effect of light glow may occur at distances greater than 20 km for some species and under certain environmental conditions. The 20 km threshold provides a nominal distance at which artificial light impacts should be considered, not necessarily the distance at which mitigation will be necessary. For example, where a mountain range is present between the light source and an important turtle nesting beach, further light mitigation is unlikely to be needed. However, where island infrastructure is directly visible on an important turtle nesting beach across 25 km of ocean in a remote location, additional light mitigation may be necessary.

Managing existing light pollution

The impact of artificial light on wildlife will often be the result of the effect of all light sources in the region combined. As the number and intensity of artificial lights in an area increases there will be a visible, cumulative increase in sky glow. Sky glow is the brightness of the night sky caused by the reflected light scattered from particles in the atmosphere. Sky glow comprises both natural and artificial sky glow. As sky glow increases so does the potential for adverse impacts on wildlife.

Generally, there is no one source of sky glow and management should be undertaken on a regional, collaborative basis. Artificial light mitigation and minimisation will need to be addressed by the community, regulators, councils and industry to prevent the escalation of, and where necessary reduce, the effects of artificial light on wildlife.

The effect of existing artificial light on wildlife is likely to be identified by protected species managers or researchers that observe changes in behaviour or population demographic parameters that can be attributed to increased artificial sky glow. Where this occurs, the population/behavioural change should be monitored, documented and, where possible, the source(s) of light identified. An <u>Artificial Light Management Plan</u> should be developed in collaboration with all light owners and managers to mitigate impacts.

Environmental Impact Assessment for Effects of Artificial Light on Wildlife

There are five steps involved in assessing the potential effects of artificial light on wildlife, and the adaptive management of artificial light requires a continuing improvement process (Figure 5). The amount of detail included in each step depends on the scale of the proposed activity and the susceptibility of wildlife to artificial light. The first three steps of the EIA process should be undertaken as early as possible in the project's life cycle and the resulting information used to inform the project design phase.

<u>Marine Turtle</u>, <u>Seabird</u> and <u>Migratory Shorebird</u> Technical Appendices give specific consideration to each of these taxa. However, the process should be adopted for other protected species affected by artificial light.

Qualified personnel

Lighting design/management and the EIA process should be undertaken by appropriately qualified personnel. Management plans should be developed and reviewed by appropriately qualified lighting practitioners in consultation with appropriately qualified wildlife biologists or ecologists.

Step 1: Describe the project lighting

Describe existing light environment. Document the number, type, layout and purpose of proposed outdoor lighting. Define <u>lighting</u> <u>objectives</u>.

Step 2: Describe wildlife

Undertake a desktop study of wildlife and where necessary conduct field surveys to describe population and behaviour. Define lighting objectives in terms of wildlife.

Step 3: Risk assessment

Using project light information, wildlife biological and ecological information, and proposed mitigation and light management, assess the risk of impact of artificial light to wildlife.

Step 4: Artificial light management plan

Document information collated through Steps 1-3. Describe lighting management and mitigation. Develop and describe compliance and auditing scope, and schedule and triggers for revisiting Step 3.

Step 5: Biological and artificial light monitoring and auditing

Monitor wildlife behaviour and audit on-site light to ensure compliance with <u>artificial</u> <u>light management plan</u>(Step 4).

Figure 5 Flow chart describing the environmental impact assessment process.

Step 1: Describe the project lighting

Describe the existing light environment and characterise the light likely to be emitted from the site. Information should be collated, including (but not limited to): the location and size of the project footprint; the number and type of lights; their height, orientation and hours of operation; site topography and proximity to wildlife and/or wildlife habitat. This information should include whether lighting will be directly visible to wildlife or contribute to sky glow; the distance over which this artificial light is likely to be perceptible; shielding or light controls used to minimise lighting; and spectral characteristics (wavelength) and intensity of lights.

Project specific lighting should be considered in the context of the existing light environment and the potential for cumulative effects of multiple light sources. The information collected should be sufficient to assess the likely effects of artificial light on wildlife given the biology and ecology of species present (Step 2).

Where there will be a need to monitor the effectiveness of artificial light mitigation and management strategies (Step 5), baseline monitoring will be necessary. Measurements of the existing light environment should recognise and account for the biologically relevant short (violet/blue) and long (orange/red) wavelengths of artificial lighting (see Measuring Biologically Relevant Light).

Lighting objectives

During the planning phase of a project the purpose of artificial lighting should be clearly articulated, and consideration should be given as to whether artificial light is required at all. Lighting objectives should be specific in terms of location and times for which artificial light is necessary, whether colour differentiation is required and whether some areas should remain dark. The objectives should include the wildlife requirements identified in Step 2 and be consistent with the aims of these Guidelines.

For more information about developing lighting objectives see **Best Practice Lighting Design**.

Step 2: Describe wildlife

Describe the biology and ecology of wildlife in the area that may be affected by artificial light (species identified during the screening process, Figure 3). The abundance, conservation status and regional significance of wildlife will be described, as will the location of important habitat. Recognise biological and ecological parameters relevant to the assessment, particularly how artificial light will be viewed by an animal. This includes an animal's physiological sensitivity to wavelength and intensity, and its visual field.

Depending on the availability of information, scale of the activity and the susceptibility of wildlife to artificial light, this step may only require a desktop analysis. Where there is a paucity of information or the potential for effects is high, field surveys may be necessary. Where there will be a need to monitor the effectiveness of lighting mitigation and management strategies (Step 5), baseline monitoring will be necessary.

Desktop study of wildlife

A review of the available government databases, scientific literature and unpublished reports should be conducted to determine whether listed or protected wildlife that are susceptible to the effects of artificial light could be present. Tools to identify species or Important Habitat that may occur within 20 km of the area of interest include (but are not limited to):

- Protected Matters Search Tool
- National Conservation Values Atlas
- State and territory protected species information
- Scientific literature
- Local and Indigenous knowledge

To assess the risks to a species, an understanding of the animal's susceptibility to the effects of light should be evaluated, as well as the potential for artificial light to affect the local population.

The species conservation status should be identified and relevant population demographic and behavioural characteristics that should be considered include population size, life stages present and normal behaviour in the absence of artificial light. This step should also identify biological and ecological characteristics of the species that will be relevant to the assessment. This may include understanding the seasonality of wildlife using the area; behaviour (i.e. reproduction, foraging, resting); migratory pathways; and life stages most susceptible to artificial light. Consideration should also be given to how artificial light may affect food sources, availability of habitat, competitors or predators.

Field surveys for wildlife

Where there are insufficient data available to understand the actual or potential importance of a population or habitat it may be necessary to conduct field surveys. The zone of influence for artificial lighting will be case and species specific. Surveys should describe habitat, species abundance and density on a local and regional scale at a biologically relevant time of year.

Baseline monitoring

Where it is considered likely that artificial lighting will impact on wildlife, it may be necessary to undertake baseline monitoring to inform mitigation and light management (Step 5).

Field survey techniques and baseline monitoring needs will be species specific and detailed parameters and approaches are described in the <u>Marine Turtles</u>, <u>Seabirds</u> and <u>Migratory</u> <u>Shorebirds</u> Technical Appendices. Guidance from species experts should be sought for other species.

Step 3: Risk assessment

Using information collated in steps one and two, the level of risk to wildlife should be assessed. Risk assessments should be undertaken on a case by case basis as they will be specific to the wildlife involved, the lighting objectives and design, and the prevailing environmental conditions. Assessments should be undertaken in accordance with the *Australian Standard Risk Management – Guidelines (AS ISO 31000:2018)* (or superseding equivalent), which provides for adaptive management and continuous improvement. The scale of the assessment is expected to be commensurate with the scale of the activity and the vulnerability of the wildlife present.

In general, the assessment should consider how important the habitat is to the species (e.g. is this the only place the animals are found), the biology and ecology of wildlife, the amount and type of artificial light at each phase of development (e.g. construction/operation) and whether the lighting scenario is likely to cause an adverse response. The assessment should take into account the artificial light impact mitigation and management that will be implemented. It should also consider factors likely to affect an animal's perception of light; the distance to the lighting source; and whether light will be directly visible or viewed as sky glow. The process should assess whether wildlife will be disrupted or displaced from important habitat, and whether wildlife will be able to undertake critical behaviours such as foraging, reproduction, and dispersal.

Where a likely risk is identified, either the project design should be modified, or further mitigation put in place to reduce the risk.

If the residual risk is likely to be significant, consideration should be given as to whether the project should be referred for assessment under the EPBC Act and/or relevant state or territory legislation.

Step 4: Artificial light management plan

The management plan will document the EIA process. The plan should include all relevant information obtained in Steps 1-3. It should describe the lighting objectives; the existing light environment; susceptible wildlife present, including relevant biological characteristics and behaviour; and proposed mitigation. The plan should clearly document the risk assessment process, including the consequences that were considered, the likelihood of occurrence and any assumptions that underpin the assessment. Where the risk assessment deems it unlikely that the proposed artificial light will effect wildlife and an artificial light management plan is not required, the information and assumptions underpinning these decisions should be documented.

Where an artificial light management plan is deemed necessary, it should document the scope of monitoring and auditing to test the efficacy of proposed mitigation and triggers to revisit the risk assessment. This should include a clear adaptive management framework to support continuous improvement in light management, including a hierarchy of contingency management options if biological and light monitoring or compliance audits indicate that mitigation is not meeting the objectives of the plan.

The detail and extent of the plan should be proportional to the scale of the development and potential impacts to wildlife.

A toolbox of species specific options are provided in the <u>Marine Turtles</u>, <u>Seabirds</u> and <u>Migratory Shorebirds</u> Technical Appendices. Guidance from species experts should be sought for other species.

Step 5: Biological and light monitoring and auditing

The success of the impact mitigation and artificial light management should be confirmed through monitoring and compliance auditing. Light audits should be regularly undertaken and biological and behavioural monitoring should be undertaken on a timescale relevant to the species present. Observations of wildlife interactions should be documented and accompanied by relevant information such as weather conditions and moon phase. Consideration should be given to monitoring control sites. Monitoring should be undertaken both before and after changes to artificial lighting are made at both the affected site and the control sites. The results of monitoring and auditing are critical to an adaptive management approach, with the results used to identify where improvements in lighting management may be necessary. Audits should be undertaken by appropriately qualified personnel.

Baseline, construction or post construction artificial light monitoring, wildlife biological monitoring and auditing are detailed in <u>Measuring Biologically Relevant Light</u>, <u>Light Auditing</u> and species specific <u>Marine Turtles</u>, <u>Seabirds</u> and <u>Migratory Shorebirds</u> Technical Appendices.

Review

Once light audits and biological monitoring have been completed, a review of whether the lighting objectives have been met should be conducted. The review should incorporate any changing circumstances and make recommendations for continual improvement. The recommendations should be incorporated through upgraded mitigations, changes to procedures and renewal of the light management plan.

Case Studies

Unlike many forms of pollution, artificial light can be removed from the environment. The following case studies show it is possible to balance the requirements of both human safety and wildlife conservation.

Gorgon Liquefied Natural Gas Plant on Barrow Island, Western Australia

The Chevron-Australia Gorgon Project is one of the world's largest natural gas projects. The liquefied natural gas (LNG) processing facility is on Barrow Island a Western Australian Class A nature reserve off the Pilbara Coast known for its diversity of fauna, including important nesting habitat for flatback turtles²⁹.

The LNG plant was built adjacent to important turtle nesting beaches. The effect of light on the turtles and emerging hatchlings was considered from early in the design phase of the project and species-specific mitigation was incorporated into project planning²⁹. Light management is implemented, monitored and audited through a light management plan and turtle population demographics and behaviour through the *Long Term Marine Turtle Management Plan*³⁰.

Lighting is required to reduce safety risks to personnel and to maintain a safe place of work under workplace health and safety requirements. The lighting objectives considered these requirements while also aiming to minimise light glow and eliminate direct light spill on nesting beaches. This includes directional or shielded lighting, the mounting of light fittings as low as practicable, louvered lighting on low level bollards, automatic timers or photovoltaic switches and black-out blinds on windows. Accommodation buildings were oriented so that a minimal number of windows faced the beaches and parking areas were located to reduce vehicle headlight spill onto the dunes.

Lighting management along the LNG jetty and causeway adopted many of the design features used for the plant and accommodation areas. LNG loading activity is supported by a fleet of tugs that were custom built to minimise external light spill. LNG vessels are requested to minimise non-essential lighting while moored at the loading jetty.

To reduce sky glow, the flare for the LNG plant was designed as a ground box flare, rather than the more conventional stack flare. A louvered shielding wall further reduced the effects of the flare.

Lighting reviews are conducted prior to the nesting season to allow time to implement corrective actions if needed. Workforce awareness is conducted at the start of each turtle breeding season to further engage the workforce in the effort to reduce light wherever possible.



Figure 6 Liquefied natural gas plant on Barrow Island. Photo: Chevron Australia.

The *Long Term Marine Turtle Management Plan*³⁰ provides for the ongoing risk assessment of the impact of artificial light on the flatback turtles nesting on beaches adjacent to the LNG plant, including mitigation measures to minimise the risk from light to turtles. The plan also provides for an ongoing turtle research and monitoring program. The <u>plan</u> is publicly available.

Phillip Island

Victoria's Phillip Island is home to one of the world's largest colonies of listed migratory Short-tailed Shearwaters (*Ardenna tenuirostris*). It supports more than six per cent of the global population of this species²⁸. Shearwaters nest in burrows and are nocturnally active at their breeding colonies. Fledglings leave their nests at night. When exposed to artificial light fledglings can be disoriented and grounded. Some fledglings may reach the ocean, but then be attracted back toward coastal lighting. Fledglings are also vulnerable to collision with infrastructure when disoriented and once grounded become vulnerable to predation or road kill⁴ (Figure 7).

Phillip Island also attracts over a million visitors a year during peak holiday seasons to visit the Little Penguin (*Eudyptula minor*) ecotourism centre, the Penguin Parade[®]. Most visitors drive from Melbourne across a bridge to access the island. The increase in road traffic at sunset during the Easter break coincides with the maiden flight of fledgling shearwaters from their burrows²⁸.

In response to the deaths of fledglings, Phillip Island Nature Parks has an annual shearwater rescue program to remove and safely release grounded birds²⁸. In collaboration with SP Ausnet and Regional Roads Victoria, road lights on the bridge to the island are turned off during the fledgling period³¹. To address human safety concerns, speed limits are reduced and warning signals put in place during fledgling season^{31,32}. The reduced road lighting and associated traffic controls and warning signals, combined with a strong rescue program, have reduced the mortality rate of shearwaters²⁸.

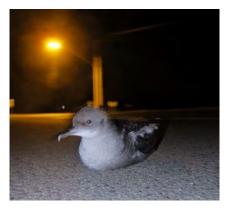


Figure 7 Short-Tailed Shearwater (*Ardenna tenuirostris*) fledgling grounded by artificial light, Phillip Island. Photo: Airam Rodriguez.

Raine Island research vessel light controls

The Queensland Marine Parks primary vessel *Reef Ranger* is a 24 m catamaran jointly funded by the Great Barrier Reef Marine Park Authority and the Queensland Parks and Wildlife Service under the Field Management Program (FMP). The *Reef Ranger* is often anchored at offshore islands that are known marine turtle nesting sites and is regularly at Raine Island, one of the world's largest green turtle nesting sites³³ and a significant seabird rookery.

Vessels often emit a lot of artificial light when at anchor and the FMP took measures to minimise direct lighting spillage from the vessel. A lights-off policy around turtle nesting beaches was implemented, where the use of outdoor vessel lights was limited, except for safety reasons.

The original fit out of the vessel did not include internal block-out blinds (Figure 8A). These were installed before the 2018-19 Queensland turtle nesting season. The blinds stop light being emitted from inside the vessel, therefore limiting light spill around the vessel (Figure 8B). This can make an important difference at remote (naturally dark) sites such as Raine Island.

Anecdotal evidence suggests hatchlings previously attracted to, and captured in, light pools around the vessel are no longer drawn to the *Reef Ranger*.

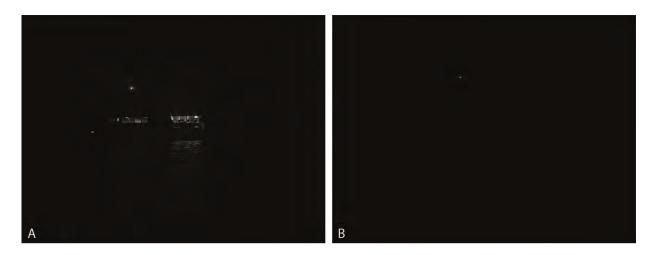


Figure 8 Vessel lighting management at Raine Island A. Vessel with decking lights, venetian blinds down and anchor light on; and B. Vessel with outside lights off, and block-out blinds installed (note the white anchor light is a maritime safety requirement).

Photo: Queensland Parks and Wildlife Service.

Appendix A – Best Practice Lighting Design

Natural darkness has conservation value in the same way as clean water, air and soil and should be protected through good quality lighting design.

Simple management principles can be used to reduce light pollution, including:

- 1. Start with natural darkness and only add light for specific purposes.
- 2. Use adaptive light controls to manage light timing, intensity and colour.
- 3. Light only the object or area intended keep lights close to the ground, directed and shielded to avoid light spill.
- 4. Use the lowest intensity lighting appropriate for the task.
- 5. Use non-reflective, dark-coloured surfaces.
- 6. Use lights with reduced or filtered blue, violet and ultra-violet wavelengths.

The application of best practice lighting design for all outdoor lighting is intended to reduce sky glow and minimise the effects of artificial light on wildlife.

Lighting Objectives

At the outset of a lighting design process, the purpose of artificial lighting should be clearly stated and consideration should be given as to whether it is required at all.

Exterior lighting for public, commercial or industrial applications is typically designed to provide a safe working environment. It may also be required to provide for human amenity or commerce. Conversely, areas of darkness, seasonal management of artificial light, or minimised sky glow may be necessary for wildlife protection, astronomy or dark sky tourism.

Lighting objectives will need to consider the regulatory requirements and Australian standards relevant to the activity, location and wildlife present.

Objectives should be described in terms of specific locations and times for which artificial light is necessary. Consideration should be given to whether colour differentiation is required and if some areas should remain dark – either to contrast with lit areas or to avoid light spill. Where relevant, wildlife requirements should form part of the lighting objectives.

A lighting installation will be deemed a success if it meets the lighting objectives (including wildlife needs) and areas of interest can be seen by humans clearly, easily, safely and without discomfort.

The following provides general principles for lighting that will benefit the environment, local wildlife and reduce energy costs.

Principles of Best Practice Lighting Design

Good lighting design incorporates the following design principles. They are applicable everywhere, especially in the vicinity of wildlife.

1. Start with natural darkness

The starting point for all lighting designs should be natural darkness (Figure 9). Artificial light should only be added for specific and defined purposes, and only in the required location and for the specified duration of human use. Designers should consider an upper limit on the amount of artificial light and only install the amount needed to meet the lighting objectives.



Figure 9 Start with natural darkness.

In a regional planning context, consideration should be given to designating 'dark places' where activities that involve outdoor artificial light are prohibited under local planning schemes.

2. Use adaptive controls

Recent advances in smart control technology provide a range of options for better controlled and targeted artificial light management (Figure 10). For example, traditional industrial lighting should remain illuminated all night because the High-Pressure Sodium, metal halide, and fluorescent lights have a long warm up and cool down period. This could jeopardise operator safety in the event of an emergency. With the introduction of smart controlled LED lights, plant lighting can be switched on and off instantly and activated only when needed, for example, when an operator is physically present within the site.

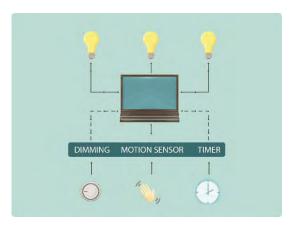


Figure 10 Use adaptive controls to manage light timing, intensity and colour.

Smart controls and LED technology allow for:

- remotely managing lights (computer controls)
- instant on and off switching of lights
- control of light colour (emerging technology)
- dimming, timers, flashing rate, motion sensors well defined directivity of light.

Adaptive controls should maximise the use of latest lighting technology to minimise unnecessary light output and energy consumption.

3. Light only the intended object or area - keep lights close to the ground, directed and shielded

Light spill is light that falls outside the area intended to be lit. Light that spills above the horizontal plane contributes directly to artificial sky glow while light that spills into adjacent areas on the ground (also known as light trespass) can be disruptive to wildlife in adjacent areas. All light fittings should be located, directed or shielded to avoid lighting anything but the target object or area (Figure 11). Existing lights can be modified by installing a shield.



Figure 11 Lights should be shielded to avoid lighting anything but the target area or object. Figure adapted from Witherington and Martin (2003)³.

Lower height lighting that is directional and shielded can be extremely effective. Light fixtures should be located as close to the ground as possible and shielded to reduce sky glow (Figure 12).

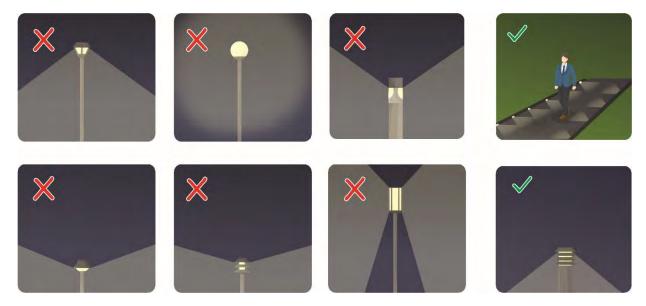


Figure 12 Walkway lighting should be mounted as low as possible and shielded. Figure adapted from Witherington and Martin (2003)³.

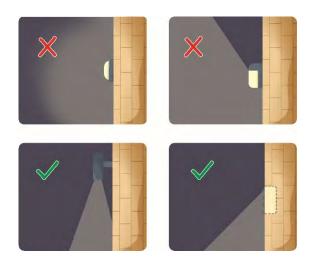


Figure 13 Lighting should be directed to ensure only the intended area is lit. Figure adapted from Witherington and Martin (2003)³.

Artificial light can be prevented from shining above the horizontal plane by ensuring the luminaire is mounted horizontally relative to the ground and not at an angle, or mounted on a building so that the structure prevents the light shining above the horizontal plane, for example recess a light into an overhanging roof eave. When determining angle of the mounting, consideration should be given to the reflective properties of the receiving environment.

If an unshielded fitting is to be used, consideration should be given to the direction of the light and the need for some form of permanent physical opaque barrier that will provide the shielding requirement. This can be a cover or part of a building (Figure 13). Care should be taken to also shield adjacent surfaces, if they are lightly coloured, to prevent excessive reflected light from adding to sky glow.

Consideration should also be given to blocking light spill from internal light sources. This should include block-out blinds or shutters for transparent portions of a building, including sky lights, and use of glass in windows and balconies with reduced visible light transmittance values.

4. Use appropriate lighting

Lighting intensity should be appropriate for the activity. Starting from a base of no lights, use only the minimum number and intensity of lights needed to provide safe and secure illumination for the area at the time required to meet the lighting objectives. The minimum amount of light needed to illuminate an object or area should be assessed during the early design stages and only that amount of light installed. For example, Figure 14 provides options from best to worst for lighting for a parking lot.

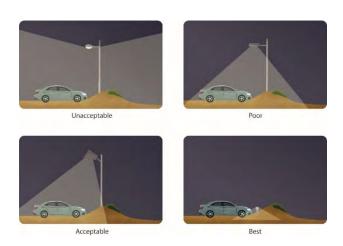


Figure 14 Lighting options for a parking area. Figure adapted from Witherington and Martin (2003)³.

Off-the-shelf lighting design models

Use of computer design engineering packages that do not include wildlife needs and only recommend a standard lighting design for general application should be avoided or modified to suit the specific project objectives, location and risk factors.

Consider the intensity of light produced rather than the energy required to make it

Improvements in technology mean that new bulb types produce significantly greater amount of light per unit of energy. For example, LED lights produce between two and five times the amount of light as incandescent bulbs. The amount of light produced (lumen), rather than the amount of energy used (watt) is the most important consideration in ensuring that an area is not over lit.

Consider re-evaluating security systems and using motion sensor lighting

Technological advances mean that techniques such as computer managed infra-red tracking of intruders in security zones is likely to result in better detection rates than a human observer monitoring an illuminated zone.

Use low glare lighting

High quality, low glare lighting should always be a strong consideration regardless of how the project is to be designed. Low glare lighting enhances visibility for the user at night, reduces eye fatigue, improves night vision and delivers light where it is needed.

5. Use non-reflective, dark coloured surfaces

Light reflected from highly polished, shiny or light-coloured surfaces such as white painted infrastructure, polished marble or white sand can contribute to sky glow. For example, alternatives to painting storage tanks with white paint to reduce internal heating should be explored during front-end engineering design. In considering surface reflectance, the need to view the surface should be taken into consideration as darker surfaces will require more light to be visible. The colour of paint or material selected should be included in the Artificial Light Management Plan.

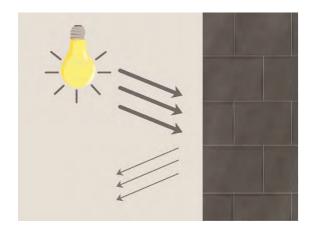


Figure 15 Use non-reflective dark coloured surfaces.

6. Use lights with reduced or filtered out blue, violet and ultraviolet wavelengths

Short wavelength light (blue) scatters more readily in the atmosphere and therefore contributes more to sky glow than longer wavelength light. Further, most wildlife are sensitive to short wavelength (blue/violet) light (for detailed discussion see What is Light and how do Wildlife Perceive it?). As a general rule, only lights with little or no short wavelength (400 – 500 nm) violet or blue light should be used to avoid unintended effects. Where wildlife are sensitive to longer wavelength light (e.g. some bird species), consideration should be given to wavelength selection on a case by case basis.

When determining the appropriate wavelength of light to be used, all lighting objectives should be taken into account. If good colour rendition is required for human use, then other mitigation measures such as tight control of light spill, use of head torches, or timers or motion sensors to control lights should be implemented.

It is not possible to tell how much blue light is emitted from an artificial light source by the colour of light it produces (see <u>Light Emitting Diodes</u>). LEDs of all colours, particularly white, can emit a high amount of blue light and the <u>Colour Correlated Temperature</u> (CCT) only provides a proxy for the blue light content of a light source. Consideration should be given to the spectral characteristics (spectral power distribution curve) of the lighting to ensure short wavelength (400 – 500 nm) light is minimised.

Appendix B – What is Light and how does Wildlife Perceive it?

A basic understanding of how light is defined, described and measured is critical to designing the best artificial light management for the protection of wildlife.

Humans and animals perceive light differently. However, defining and measuring light has traditionally focused exclusively on human vision. Commercial light monitoring equipment is calibrated to the sensitivity of the human eye and has poor sensitivity to the short wavelength light that is most visible to wildlife. Impacts of artificial light on wildlife vary by species and should be considered on a case by case basis. These issues should be considered when describing, monitoring and designing lighting near important wildlife habitat.

What is Light?

Light is a form of energy and is a subset of the electromagnetic spectrum that includes visible light, microwaves, radio waves and gamma rays (Figure 16). In humans, visible light ranges from 380 nm to 780 nm - between the violet and red regions of the electromagnetic spectrum. In animals, visible light ranges from 300 nm to greater than 700 nm, depending on the species. White light is a mixture of all wavelengths of light ranging from short wavelength blue to long wavelength red light.

The perception of different wavelengths as 'colour' is subjective and is described and characterised by how the human eye perceives light, ranging from red (700 nm), orange (630 nm), yellow (600 nm), green (550 nm), blue (470 nm), indigo (425 nm) and violet (400 nm) (Figure 16). Generally, this is not how animals see light (Figure 2).

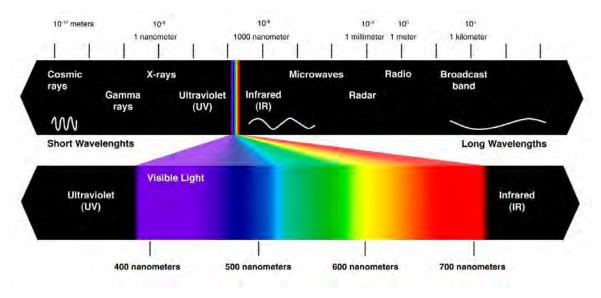


Figure 16 The electromagnetic spectrum. The 'visible light spectrum' occurs between 380-780 nm and is the part of the spectrum that the human eye can see. Credit: Mihail Pernichev³⁴.

Artificial light

Artificial light at night has many positive attributes. It can enhance human safety and provide for longer periods of work or recreation. However, it can also have a negative effect. For example, it can cause:

- physiological damage to retinal cells in human and animal eyes³⁵
- disruption of the circadian cycles in vegetation, animals and humans^{2,13,36}
- changes in animal orientation, feeding or migratory behaviour^{19,37-39}.

The biological mechanisms that cause these effects vary. It is necessary to understand some basic light theory and language in order to assess and manage the effect of light on wildlife. Some basic principles are briefly described in this section.

Vision in Animals

Vision is a critical cue for animals to orient themselves in their environment, find food, avoid predation and communicate⁷. Humans and wildlife perceive light differently. Some animals do not see long wavelength red light at all, while others see light beyond the blue-violet end of the spectrum and into the ultraviolet (Figure 17).

Both humans and animals detect light using photoreceptor cells in the eye called cones and rods. Colour differentiation occurs under bright light conditions (daylight). This is because bright light activates the cones and it is the cones that allow the eye to see colour. This is known as photopic vision.

Under low light conditions (dark adapted vision), light is detected by cells in the eye called rods. Rods only perceive light in shades of grey (no colour). This is known as scotopic vision and it is more sensitive to shorter wavelengths of light (blue/violet) than photopic vision.

The variation in the number and types of cells in the retina means animals and humans do not perceive the same range of colours. In animals, being 'sensitive' to light within a specific range of wavelengths means they can perceive light at that wavelength, and it is likely they will respond to that light source.

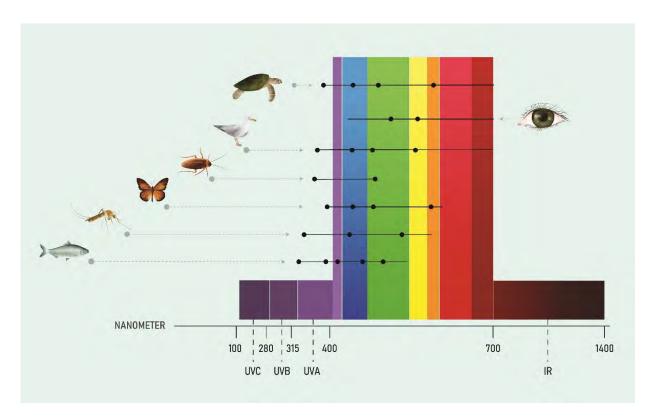


Figure 17 Ability to perceive different wavelengths of light in humans and wildlife is shown by horizontal lines. Black dots represent reported peak sensitivity. Note the common sensitivity to short wavelength light across all wildlife. Figure adapted from Campos (2017)⁸.

Sensitivity to blue light

Sensitivity to high energy, short wavelength UV/violet/blue light is common in wildlife (Figure 17). This light is strongly detected under scotopic (dark adapted) vision, particularly in nocturnal species. Short wavelength light at the blue end of the spectrum has higher energy than longer wavelength light at the red end of the spectrum. This is important to understanding the physical impact that the short wavelength, high energy UV/blue light has on damaging photoreceptor cells in the human eye⁴⁰. Although not well described in wildlife, it is not unreasonable to expect that at high intensities blue light has the potential to damage photoreceptors in wildlife.

In addition to the potential for physical damage to the eye from exposure to blue light (400 - 490 nm), there is mounting evidence that exposure to these wavelengths at night may affect human and wildlife physiological functions. This is because a third type of photoreceptor cell has recently been identified in the retina of the mammalian eye – the photosensitive retinal ganglion cells (pRGCs). The pRGCs are not involved in image-forming vision (this occurs in the rods and cones), but instead are involved in the regulation of melatonin and in synchronising circadian rhythms to the 24-hour light/dark cycle in animals⁴¹. These cells are particularly sensitive to blue light⁴². Melatonin is a hormone found in plants animals and microbes. Changes in melatonin production can affect daily behaviours such as bird waking⁴³, foraging behaviour and food intake⁴⁴ and seasonal cues such as the timing of reproduction in animals, causing off-spring to be born during non-optimal environmental conditions⁵.

Factors Effecting Perception of Light

Factors affecting how wildlife perceive light include the type of cells being employed to detect light (photopic vs scotopic vision); whether the light is viewed directly from the source or as reflected light; how the light interacts with the environment; and the distance from the light source. These influences are discussed below.

Perspective

Understanding an animal's perception of light will include consideration of the animal's visual field. For instance, when flying, birds will generally be looking down on artificial light sources, whereas turtles on a nesting beach will be looking up. Further, some birds' field of view will stretch around to almost behind their head.

Bright vs dim light

Understanding photopic and scotopic vision is important when selecting the colour (wavelength) and intensity of a light. In animals scotopic (dark adapted) vision allows for the detection of light at very low intensities (Figure 18). This dark adaption may explain why nocturnal wildlife are extremely sensitive to white and blue light even at low intensities.

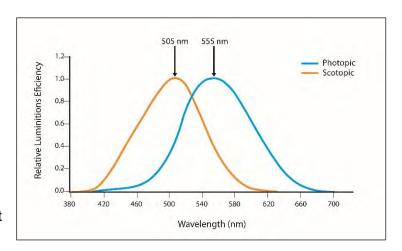


Figure 18 Scotopic and photopic luminosity functions in humans. Data source: <u>Luminosity functions</u>.

Direct vs reflected

Understanding the difference between light direct from the source (luminance) and how much incident light illuminates a surface (illuminance) is important when selecting methods for measuring and monitoring light. Equipment used to measure illuminance and luminance is not interchangeable and will lead to erroneous conclusions if used incorrectly.

Luminance describes the light that is emitted, passing through or reflected from a surface that is detected by the human eye. The total amount of light emitted from a light is called luminous flux and represents the light emitted in all directions (Figure 19). Luminance is quantified using a Spectroradiometer or luminance meter.

Illuminance measures how much of the incident light (or luminous intensity) illuminates a surface. Illuminance is quantified using an Illuminance spectrophotometer or Lux meter.

The total amount of light emitted by a bulb is measured in lumens and is different to watts, which are a measure of the amount of power consumed by the bulb. Lumens, not watts, provide information about the brightness of a bulb.

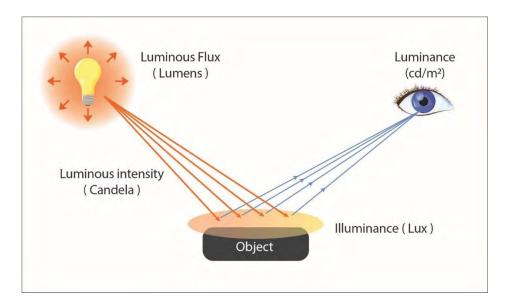


Figure 19 Luminous flux, luminance and illuminance.

Visibility of light in the environment

The physical properties of light include reflection, refraction, dispersion, diffraction and scattering. These properties are affected by the atmosphere through which light travels. Short wavelength violet and blue light scatters in the atmosphere more than longer wavelength light such as green and red, due to an effect known as Rayleigh scattering⁴⁵.

Scattering of light by dust, salt and other atmospheric aerosols increases the visibility of light as sky glow while the presence of clouds reflecting light back to earth can substantially illuminate the landscape⁴⁶. Hence the degree of overhead sky glow is a function of aerosol concentration and cloud height and thickness.

Direct light vs sky glow

Light may appear as either a direct light source from an unshielded lamp with direct line of sight to the observer, or as sky glow (Figure 20). Sky glow is the diffuse glow caused by source light that is screened from view, but through reflection and refraction the light creates a glow in the atmosphere. Sky glow is affected by cloud cover and other particles in the air. Blue light scatters more in the atmosphere compared with yellow-orange light. Clouds reflect light well adding to sky glow.



Figure 20 Sky glow created by lights shielded by a vegetation screen (circled left) and point sources of light directly visible (circled right).

Distance from light source

The physical properties of light follow the inverse square law which means that the visibility of the light, as a function of its intensity and spatial extent, decreases with distance from the source (Figure 21). This is an important factor to consider when modelling light or assessing the impact of light across different spatial scales, for example across landscape scales compared to within development footprint.

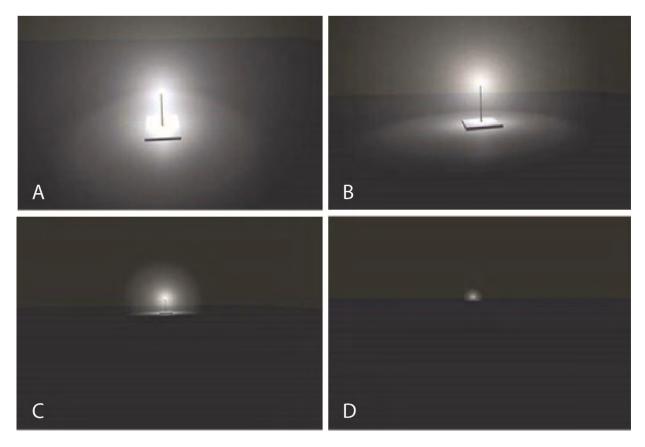


Figure 21 Modelled changes in the visibility of an unshielded 1000 W white LED viewed from A. 10 m; B. 100 m; C. 1 km and D. 3 km.

Measurement of Light

Light has traditionally been measured photometrically or using measurements that are weighted to the sensitivity of the human eye (peak 555 nm). Photometric light is represented by the area under the Commission International de l'Eclairage (CIE) curve, but this does not capture all light visible to wildlife (Figure 22).

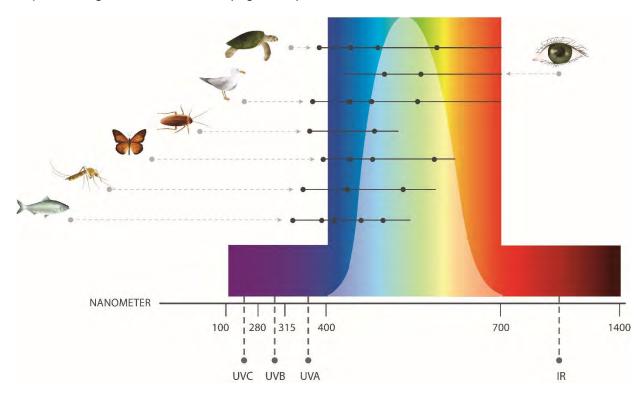


Figure 22 Photometric light represented by the area under the CIE curve (white area) compared with ability to perceive different wavelengths (black lines) and reported peak sensitivity (black dots) in humans and wildlife. Note the area under the CIE curve does not include much of the violet and ultra-violet light visible to many animals. Figure adapted from Campos (2017)⁸.

Light can also be measured radiometrically. Radiometric measurements detect and quantify all wavelengths from the ultra-violet (UV) to infrared (IR). The total energy at every wavelength is measured. This is a biologically relevant measure for understanding wildlife perception of light. Terminology, such as radiant flux, radiant intensity, irradiance or radiance all refer to the measurement of light across all wavelengths of the electromagnetic spectrum.

Understanding the difference between photometry (weighted to the sensitivity of the human eye) and radiometry (measures all wavelengths) is important when measuring light since many animals are highly sensitive to light in the blue and the red regions of the spectrum and, unlike photometry, the study of radiometry includes these wavelengths.

Photometric measures (such as, illuminance and luminance) can be used to discuss the potential impact of artificial light on wildlife, but their limitations should be acknowledged and taken into account as these measures may not correctly weight the blue and red wavelengths to which animals can be sensitive.

Spectral curve

White light is made up of wavelengths of light from across the visible spectrum. A spectral power curve (Figure 23) provides a representation of the relative presence of each wavelength emitted from a light source. A lighting design should include spectral power distribution curves for all planned lighting types as this will provide information about the relative amount of light emitted at the wavelengths to which wildlife are most susceptible.

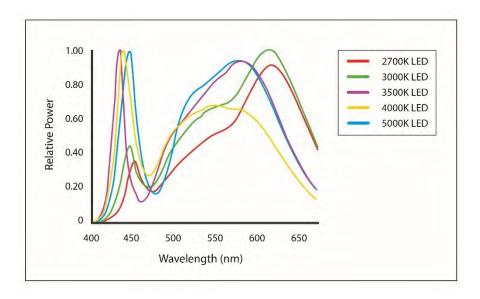


Figure 23 Spectral curves showing the blue content of white 2700-5000 K LED lights. Note the difference in relative power output in the blue (400 - 500 nm) wavelength range. Figure courtesy of lan Ashdown.

Light Emitting Diodes (LEDs)

Light emitting diodes are rapidly becoming the most common light type globally as they are more energy efficient than previous lighting technology. They can be smart controlled, are highly adaptable in terms of wavelength and intensity, and can be instantly turned on and off.

Characteristics of LED lights that are not found in older types of lamps, but which should be considered when assessing the impacts of LEDs on wildlife, include:

- With few exceptions, all LED lights contain blue wavelengths (Figure 23 and Figure 24).
- The wattage of an LED is a measure of the electrical energy needed to produce light and is not a measure of the amount or intensity of light that will be produced by the lamp.
- The output of light produced by all lamps, including LEDs, is measured in lumens (lm).
- LED lamps require less energy to produce the equivalent amount of light output. For example, 600 lm output of light requires 40 watts of energy for an incandescent light bulb and only 10 watts of energy for a LED lamp. Another was to look at this is that a 100 W incandescent bulb will produce the same amount of light as a 20 W LED. Consequently, it is important to not replace an old-style lamp with the equivalent wattage LED.

- Different LED lights with the same correlated colour temperature (CCT) can have very different blue content (Figure 24) yet can appear, to the human eye, to be a similar colour. As the colour temperature of a white LED increases so can the blue content (Figure 23). Little or none of this increase in blue wavelength light is measured by photometric equipment (i.e. lux meter, luminance, illuminance meter, Sky Quality Meter see Measuring Biologically Relevant Light).
- LED technology allows for tuneable RGB colour management. This has the potential to allow for species specific management of problematic wavelengths (e.g. blue for most wildlife, but also yellow/orange).

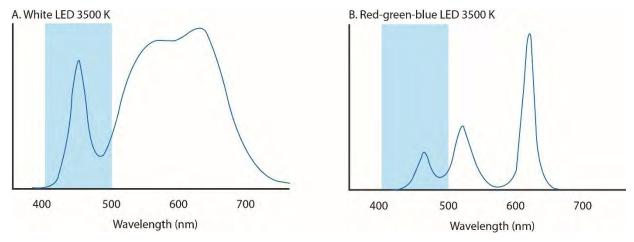


Figure 24 A comparison of the blue wavelength spectral content of two LED lights with the same CCT (3500k). The blue band shows the blue region of the visible spectrum (400–500 nm). The light in A has a much greater blue light content than B yet the two appear to the human eye as the same colour. For animals with differing sensitivities to light wavelength from humans, they may appear very different. Figure courtesy of lan Ashdown.

Correlated colour temperature (CCT)

This describes the colour appearance of a white LED. It is expressed in degrees Kelvin, using the symbol K, which is a unit of measure for absolute temperature. Practically, colour temperature is used to describe light colour and perceived "warmth"; lamps that have a warm yellowish colour have low colour temperatures between 1000K and 3000K while lamps characterised by a cool bluish colour have a colour temperature, or CCT, over 5000K (Figure 25).

Correlated colour temperature does not provide information about the blue content of a lamp. All LEDs contain blue light (Figure 23) and the blue content generally increases with increased CCT. The only way to determine whether the spectral content of a light source is appropriate for use near sensitive wildlife is to consider the spectral curve. For wildlife that are sensitive to blue light, an LED with low amounts of short wavelength light should be chosen, whereas for animals sensitive to yellow light⁹ LEDs with little or no light at peak sensitivity should be used⁴⁷.

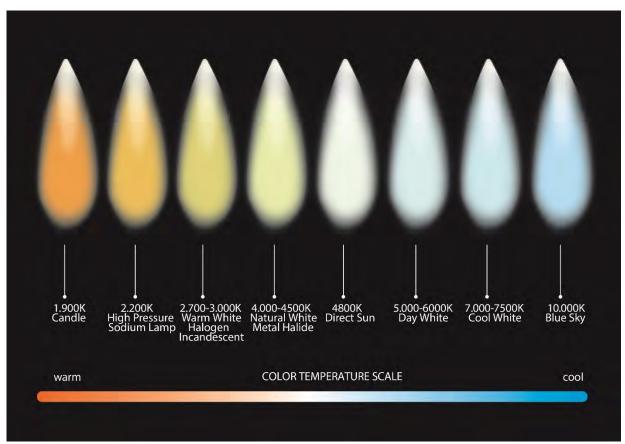


Figure 25 Correlated colour temperature (CCT) range from warm 1,000 K to cool 10,000 K.

Appendix C - Measuring Biologically Relevant Light

Animals and humans perceive light differently. Commercial light monitoring instruments currently focus on measuring the region of the spectrum most visible to humans. It is important to recognise and account for this fact when monitoring light for wildlife impact assessment purposes.

Commercial light modelling programs also focus on light most visible to humans and this should also be recognised and accounted for in the impact assessment of artificial light on wildlife.

Information critical to monitoring the effects of artificial light on wildlife include:

- Spatial extent of sky glow
- Bearings and intensity of light sources along the horizon
- Visibility of light (direct and sky glow) from wildlife habitats
- · Spectral distribution of lights sources.

Describing the Light Environment

When describing the light environment consideration should be given to how wildlife is likely to perceive artificial light. Light measurements should be obtained from within important habitat and taken from a biologically relevant perspective (i.e. close to the ground/from the sky/under water). Consideration should also be given to elevation from the horizon, the spatial extent of sky glow and the wavelength distribution (spectrum) of light present.

It is important that light measurements are taken at appropriate times. This may include biologically relevant times (e.g. when wildlife is using the area). Baseline measurements should be taken when the moon is not in the sky and when the sky is clear of clouds and in the absence of temporary lighting (e.g. road works). Conditions should be replicated as closely as possible for before and after measurements.

Measuring Light for Wildlife

Measuring light to assess its effect on wildlife is challenging and an emerging area of research and development. Most instruments used to measure sky glow are still in the research phase with only a few commercial instruments available. Further, the wide range of measurement systems and units in use globally makes it difficult to choose an appropriate measurement metric and often results cannot be compared between techniques due to variations in how the light is measured. There is currently no globally recognised standard method for monitoring light for wildlife.

Radiometric vs photometric measurement techniques

Radiometric instruments detect and quantify light equally across the spectrum (see Measurement of Light) and are the most appropriate instruments for monitoring and measuring light for wildlife management. However, while the techniques to measure radiometric light are well developed in physics, astronomy and medicine, they are less well developed in measurement of light in the environment. The instruments currently being developed are largely the result of academic and/or commercial research and development, are expensive, and require specialised technical skills for operation, data analysis, interpretation and equipment maintenance.

The majority of both commercial and research instruments quantify photometric light, which is weighted to the sensitivity of the human eye, as per the CIE luminosity function curve described in Measurement of Light. Due to many photometers being modified with filters to mimic human vision, they do not accurately represent what an animal with high sensitivity to the blue (400 - 500 nm) or the red (650 - 700 nm) regions of the spectrum will see (Figure 22). In these cases, the sensitivity to this additional light must be accounted for when reporting results.

When using photometric instruments for monitoring light this insensitivity to the short and long wavelength regions of the spectrum should be recognised and accounted for in the assessment of impact. Information on the spectral power distribution of commercial lights is readily available from manufacturers and suppliers and should be used to inform any artificial light impact assessment or monitoring program. An example of the spectral power distribution curves for various light sources is shown in Figure 26, along with an overlay of the CIE curve that represents the light that is measured by all commercial photometric instruments.

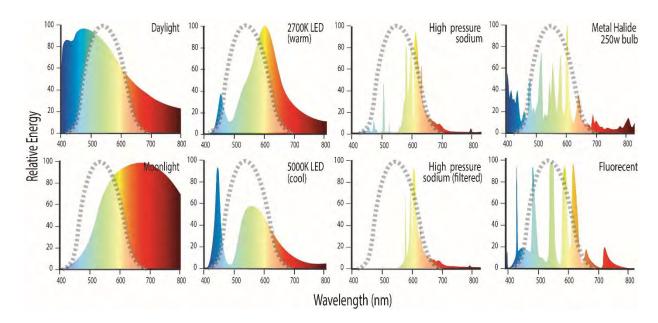


Figure 26 Photometric instruments only quantify light that is within the CIE curve (area under grey dashed line). This is shown in comparison with the spectral curves of a range of different light sources.

Recognising that light monitoring instruments for wildlife are in the developmental stage and that there is a lack of agreed methods and measurement units, monitoring programs should aim to measure relevant short and long wavelengths (if possible). The measurement methods should be clearly described including the region of the spectrum measured, and where not measures, how the short and long wavelength regions are being accounted for. Methods to do this might include a visual assessment of the colour of light in the sky from direct observation or imagery, where orange glow is typically associated with long wavelength rich lights (High Pressure Sodium, HPS, Low Pressure Sodium, LPS, PC Amber LED or Amber LED) and white glow is associated with white light sources rich in short wavelength blue light (white LEDs, halogens, fluorescents, metal halide etc.).

Alternatively photometric instruments can be used under conditions where the majority of light sources are the same, for example street lighting or industrial facilities. Monitoring results can be compared for measurements taken of the same light types (e.g. comparing two HPS sources, spatially or temporally), but in the context of wildlife monitoring cannot be used to compare light from an HPS and an LED since they have different wavelength distributions. This limitation must be taken into account when using photometric instruments to measure cumulative sky glow, which may include light from multiple sources and light types. Detailed qualitative spectral information on light types can also be collected to ground truth and confirm light types contributing to sky glow.

A light monitoring program might therefore include the collection of a range of different characteristics of light (e.g. colour, light type, areal extent, spectral power distribution, and intensity) using various instruments and techniques. These methods and techniques, including all of the limitations and assumptions, should be clearly stated and considered when interpreting results. A review of various instrumental techniques for monitoring light is provided below.

In selecting the most appropriate measuring equipment to monitor the biological impacts of light on wildlife, it is important to decide what part of the sky is being measured: horizon, zenith (overhead) or whole sky. For example, marine turtles view light on the horizon between 0° and 30° vertically and integrate across 180° horizontally⁴⁸, so it is important to include measurement of light in this part of the sky when monitoring for the effects on hatchling orientation during sea-finding. In contrast, juvenile shearwaters on their first flight view light in three dimensions (vertically, from below and above) as they ascend into the sky. Overhead sky glow (zenith) measurements are important when the observer is trying to avoid glare contamination by point sources of light low on the horizon. Quantifying the whole of sky glow is important when measuring the effects of cloud cover, which can reflect light back to illuminate an entire beach or wetland.

The effect of light on wildlife is a function of the animal's sensitivity and response to light, and the cues it uses during orientation, dispersal, foraging, migrating etc. Most wildlife appear to respond to high intensity short wavelength light, point sources of light, sky glow and directional light. Consequently, the information likely to be needed to monitor light for wildlife includes:

- The brightness of the entire sky from horizon to horizon.
- The bearing to, intensity of and spectrum of light (point sources and sky glow) on the horizon. This will dictate the direction in which wildlife can be disoriented.

- The spatial extent of glow near the horizon. A large area of glow on the horizon is likely to be more visible and disruptive to wildlife than a small area of glow.
- Presence or absence of clouds. Clouds reflect light from distant sources very well, making an inland source highly visible on the coast, for example. Sky glow is a function of cloud height, albedo and thickness.
- Qualitative information on the light visible to wildlife. An image of light pollution visible
 from wildlife habitat can show the spatial extent of light in the sky and direction
 (see Figure 20) and in some cases provide information on the light source type
 (e.g. orange sky glow will be caused by HPS lights or amber LEDs).
- Emission spectra (colour) of the light. It is particularly important to identify light in the UV-blue region of the visible spectrum (<500 nm) since this is the light commonly visible and disruptive to wildlife.

Measurement Techniques

Currently, there are no generally agreed methods for measuring biologically relevant light for wildlife or for quantifying sky glow⁴⁹. This is because most conventional methods of measuring light are photometric, quantifying only the light under the CIE curve that is most relevant to the human perception of light. Further, they do not consider the entire night sky.

There is a need to develop reasonably priced, easily accessible and deployable, repeatable methods for monitoring biologically relevant light that captures the whole visual field to which wildlife may be exposed (generally horizon to horizon)⁴⁹. These methods should be capable of quantifying all wavelengths of light equally (radiometric) including at least 380 – 780nm, or capable of being calibrated over the range of wavelengths of relevance for the species of interest. Optimal methods will have a sensitivity to detect and measure change at the low light levels represented by artificial light sky glow and must have the ability to differentiate between individual point sources of light (on a local scale) and sky glow on a landscape scale (i.e. over tens of kilometres).

It should be noted that measurements needed to assess the impact of sky glow to wildlife may need to be different from the measurements required to assess light for human safety.

Recognising that techniques to monitor biologically meaningful light are expected to continuously develop and improve, this section summarises the state of the science as of 2020 as an example of current techniques. It is anticipated novel methods will be developed with time that will meet the objectives of monitoring biologically meaningful light and where that occurs, the methods and techniques, including all of the limitations and assumptions, should be clearly stated for all monitoring programs.

Recent reviews have considered various commercial and experimental instrumental techniques used around the world for quantifying sky glow^{49,50}. The reviews assessed the benefits and limitations of the various techniques and made recommendations for measuring light pollution. Some of these instruments, their benefits and limitations are discussed below and summarised in Table 1.

Light can be measured in different ways, depending on the objective, landscape scale and point of view and include:

- remote sensing
- one dimensional (single channel) instruments
- calibrated all-sky imagery (numerical and imaging)
- spectroscopy/spectroradiometry.

Remote sensing

The upward radiance of artificial light at night can be mapped via remote sensing using satellite or aerial imagery and optical sensors. This information has been used as a socioeconomic indicator to observe human activity, and increasingly as a tool to consider the impacts of artificial light on ecosystems⁵¹. Examples are:

- The New World Atlas of Artificial Night Sky Brightness
- Light Pollution Map

<u>Benefits</u>: The images are useful as broad scale indicators of light pollution and for targeting biological and light monitoring programs. This technique may be a good starting point to identify potentially problematic areas for wildlife on a regional scale. Images collected via drones or aircraft maybe useful for consideration of artificial light impacts on bird and bat migrations.

<u>Limitations</u>: Maps derived from satellite collected information have limited value in quantifying light for wildlife. The images are a measure of light after it has passed though the atmosphere and been subject to scattering and absorption. They do not give an accurate representation of the light visible to wildlife at ground level. The annual composite images are made from images collected under different atmospheric conditions and therefore they cannot be used to confidently quantify light within or between years. The most commonly used instrument (VIIRS DNB) is not sensitive to blue light, so light in this part of the spectrum is under sampled. As satellite with more sophisticated sensors are launched it is expected the value of this technique to biological monitoring will improve.

Application to wildlife monitoring programs: Whilst remote sensing tools may provide a good starting point for identifying artificial light that is problematic for wildlife on a regional scale, they are currently not an appropriate approach for measuring light as part of a wildlife monitoring program as they do not accurately quantify light as observed from the ground, they underestimate the blue content of light, and results are not repeatable due to environmental conditions. Images collected via aircraft or drone may have application for monitoring impacts on airborne wildlife.

One dimensional (single channel) instruments

These instruments measure sky glow using a single channel detector, producing a numerical value to represent sky glow, typically at the zenith. They are generally and portable and easy to use. They measure sky glow, but cannot derive point source information unless they are close enough such that most of the light detected is emitted from those sources. Examples of single channel instruments are discussed below.

Sky Quality Meter (SQM)

This is a small handheld unit that quantifies the light in an area of sky (normally directly overhead at the zenith). Early models had a field of view of around 135° with the more recent SQM-L model having a narrower 40° diameter field of view. It measures photometric light in units of magnitudes/arcsec² at relatively low detection limits (i.e. it can measure sky glow). Instrument accuracy is reported at ±10 per cent though a calibration study on a group of SQM instruments in 2011 found errors ranging from -16 per cent to +20 per cent⁵². Long term stability of SQMs has not been established.

Reviewers suggest that the first 3-4 measurements from a handheld SQM should be discarded, then the average of four observations should be collected by rotating the SQM 20° after each observation to obtain a value from four different compass directions so that the effects of stray light can be minimised or identified⁵⁰. If the measurements vary by more than 0.2 mag/arcsec² the data should be discarded and a new location for measurements selected. Data should not be collected on moonlit nights to avoid stray light contaminating the results.

<u>Benefits</u>: The SQM is cheap, easy to use and portable. Some versions have data-logging capabilities that enable autonomous operation in the field. The sensitivity of the SQM is sufficient to detect changes in overhead night time artificial lighting under a clear sky.

<u>Limitations</u>: SQMs cannot be used to resolve individual light sources a distance, identify light direction nor can they measure light visible to many wildlife species. The precision and accuracy of the instrument can vary substantially and an intercalibration study is recommended to quantify the error of each instrument. Although the SQM is designed to have a photopic response, it is generally more sensitive to shorter wavelengths (i.e. blue) than a truly photopic response, but this will depend on the individual instrument. It is not very sensitive to longer (orange/red) wavelengths⁵⁰. The SQM should not be used to measure light within 20° of the horizon as the detector is designed to measure a homogeneous sky (such as occurs at the zenith) and does not produce valid data when point at a heterogeneous field of view as observed at the horizon.

<u>Application to wildlife monitoring programs</u>: A sky quality meter can be used to measure sky glow directly overhead (zenith) at the wildlife habitat, however, it is important to recognise its limitations (such as the absence of whole of sky information and inability to measure point sources of light on the horizon) and follow methods recommended by Hänel et al (2018)⁵⁰ to ensure repeatability.

Dark Sky Meter

This is an iPhone app that uses the phone camera to collect light and generate a sky brightness value.

Benefits: It's cheap and easy to use.

<u>Limitations</u>: The Dark Sky Meter is a photometric instrument. It's restricted to Apple iPhones. It will not work on models older than the 4S and cannot be used to resolve individual lights or identify light direction. It is relatively imprecise and inaccurate⁵⁰ and cannot reliably measure light on the horizon.

Application to wildlife monitoring programs: The Dark Sky Meter app is not an appropriate tool for monitoring light impacts on wildlife as it doesn't measure biologically relevant light. It doesn't provide whole of sky information, it isn't able to resolve individual light sources and it is relatively imprecise and inaccurate. The Dark Sky Meter should be considered more of an educational tool than a scientific instrument.

Lux Meters and Luminance Meters

Lux meters are commercially available instruments commonly used to measure individual light sources at close range (i.e. over metres rather than landscape scale). However, the inverse square law can be used to calculate the illuminance if the distance is known. Lux and luminance meters measure photometric light. Lux meters measure the light falling on a surface and luminance meters measure the light incident from a specific solid angle.

Benefits: Both can be cheap (with more expensive models available) and easy to use.

<u>Limitations</u>: Both types of devices are photometric, but measurements are weighted to human perception rather than wildlife. Depending on the sensitivity of equipment, detection limits may not be low enough to measure typical night sky brightness or illuminance and therefore cannot measure sky glow for wildlife monitoring purposes. Lux meters have no angular resolution and luminance meter are coarse so they cannot be used to measure distant light sources at the horizon precisely.

Application to wildlife monitoring programs: Commercial lux and luminance meters are not appropriate for the measurement of light in wildlife monitoring programs because they have low sensitivity and low accuracy at low light levels. Expensive tailored devices with enhanced sensitivity may exist, but are still not applicable to wildlife monitoring as they do not measure biologically relevant light and are not appropriate for use on a landscape scale.

Calibrated all-sky imagery

These instruments map and measure sky brightness by analysing photographic images of the whole sky. The images are processed to derive a luminance value for all or parts of the sky. One of the advantages of two dimensional (wide angle) imaging is that models of natural sources of light in the night sky can be subtracted from all sky imagery to detect anthropogenic sources⁵³. Some examples of devices and techniques to map and measure night sky brightness using wide-angle images are discussed below.

All-Sky Transmission Monitor (ASTMON)

This charge-coupled device (CCD) astronomical camera with fish-eye lens has been modified by the addition of a filter wheel to allow collection of data through four photometric bands in the visible spectrum. The spectral range of the instrument is dependent on the sensitivity of the detector and the filters used, but has the advantage of being accurately calibrated on stars.

<u>Benefits</u>: The ASTMON was designed for outdoor installation and the Lite version is portable with a weather-proof enclosure allowing it to remain outdoors operating robotically for weeks. It reports data in magnitudes/arcsec² for each band and has good precision and accuracy⁵⁰. Once the system is calibrated with standard stars, it can provide radiometric data for the whole night sky as well as resolve individual light sources.

<u>Limitations</u>: The ASTMON is expensive and requires specialised knowledge to operate and interpret data. The software provided is not open source and so cannot be modified to suit individual requirements. The ASTMON may no longer be commercially available. The CCD cameras used also have a limited dynamic range.

<u>Application to wildlife monitoring programs</u>: The ASTMON is appropriate for monitoring artificial light for wildlife as it provides whole night sky measurements that can be calibrated to give biologically relevant information that is accurate and repeatable.

Digital Camera Equipped with Wide Angle and Fisheye Lenses

This approach is similar to the ASTMON, except using a commercial digital camera with an RGB matrix rather than a CCD camera with filter wheel, making the system cheaper and more transportable. This system provides quantitative data on the luminance of the sky in a single image^{54,55}.

<u>Benefits</u>: The cameras are easily accessible and portable. When precision is not critical, the directional distribution of night sky brightness can be obtained. At the very least, the use of a digital camera with a fisheye lens allows for qualitative imagery data to be collected and stored for future reference and data analysis. If standard camera settings are used consistently in all surveys, it is possible to compare images to monitor spatial and temporal changes in sky brightness. This system also provides multi-colour options with red green and blue spectral bands (RGB).

<u>Limitations</u>: Cameras must be calibrated before use and this, together with the specific camera model, will dictate the precision of the measurements. Calibration for data processing requires lens vignetting (also known as flat fielding), geometric distortion, colour sensitivity of the

camera, and sensitivity function of the camera. Specialised knowledge is required to process and interpret these images. Also, like CCD cameras, the detectors in digital cameras have a limited dynamic range which can easily saturate in bright environments. In addition, fisheye systems often produce the poorest quality data at the horizon where the distortion due to the lens is the greatest.

Calibrating the camera is difficult and standard methods have not been developed. Laboratory or astronomical photometric techniques are generally used which require specialist knowledge and expertise. A precision of ~10 per cent can be achieved using this technique. Standard commercial cameras are calibrated to the human eye (e.g. photometric), however, the ability to obtain and process an image allows for qualitative assessment of light types (based on the colour of sky glow), which provides additional data for interpreting the biological relevance of the light.

Application to wildlife monitoring programs: A digital camera equipped with wide angle or fisheye lenses is appropriate for measuring light in wildlife monitoring programs as it provides horizon to horizon information with enough sensitivity and accuracy to detect significant changes in low light environments. Images allow for detection of both sky glow, light source type, and point source information. When data is manually processed biologically relevant measurements can be obtained. Because the system is fast, dynamics of sky glow and direct light can be monitored⁵⁶.

All Sky Mosaics

This technique was developed by the US National Parks Service and provides an image of the whole of the sky by mosaicking 45 individual images. The system comprises a CCD camera, a standard 50 mm lens, an astronomical photometric Bessel V filter with IR blocker and a computer controlled robotic telescope mount. Data collection is managed using a portable computer, commercial software and custom scripts.

Benefits: The angular resolution, precision and accuracy of the system is good, and it is calibrated and standardised on stars. The images produced have high resolution. The system is best suited for long term monitoring from dark sky sites. However, with the addition of a neutral density filter, the luminance or illuminance of a near-by bright light source can be measured. Also, other photometric bands can be measured with the use of additional filters.

<u>Limitations</u>: The system is expensive and requires specialised knowledge to operate the system, analyse and interpret the data. These cameras are calibrated to the human eye with the inclusion of a visible filter, however the ability to obtain and process an image allows for qualitative assessment of light types in the (based on the colour of sky glow), which provides additional data for interpreting the biological relevance of the light. Measurement procedures are time consuming and require perfect clear sky conditions and single spectral band, or repeated measurements are required.

<u>Application to wildlife monitoring programs</u>: All sky mosaics would be an appropriate tool for monitoring of artificial light for wildlife. They provide whole of sky images with high resolution and with appropriate filters can be used to measure biologically relevant wavelength regions.

Spectroscopy/spectroradiometry

Different light types produce a specific spectral signature or spectral power distribution (for example Figure 26). Using a spectrometer it is possible to separate total sky radiance into its contributing sources based on their spectral characteristics. Being able to assess the impacts of different light sources is of relevance during this time of transition in lighting technology.

Where wildlife sensitivity to particular wavelength regions of light is known, being able to capture the spectral power distributions of artificial light and then predict how the light will be perceived by wildlife will be of particular benefit in assessing the likely impacts of artificial light.

This type of approach has been utilised in astronomy for a long time, but only recently applied to measurement and characterisation of light pollution on earth. An example of a field deployable spectrometer - the Spectrometer for Aerosol Night Detection (SAND) is described below.

Spectrometer for Aerosol Night Detection (SAND)

SAND uses a CCD imaging camera as a light sensor coupled with a long slit spectrometer. The system has a spectral range from 400 – 720 nm and is fully automated. It can separate sampled sky radiance into its major contributing sources.

<u>Benefits</u>: This approach can quantify light at specific wavelengths across the spectrum (radiometric) so it can measure light visible to wildlife. It can also be used to 'fingerprint' different light types.

<u>Limitations</u>: Calibration, collection and interpretation of these data requires specialist knowledge and equipment and is expensive. SAND does not provide whole sky information.

Application to wildlife monitoring programs: The use of a portable spectrometer that can identify light types based on their spectral power distribution or measure light at specific wavelengths of interest would be a useful contribution to a wildlife monitoring program. Unfortunately, the prototype SAND instrument is no longer in operation. However, this instrument exemplifies the type of approaches that will be of benefit for measuring light for wildlife in the future.

Most appropriate instrument for measuring biologically relevant light

The most appropriate method for measuring light for wildlife will depend on the species present and the type of information required. In general, an appropriate approach will quantify light across the whole sky, across all spectral regions, differentiating point light sources from sky glow and it will be repeatable and easy to use.

At the time of writing, the digital camera and fisheye lens technique was recommended by Hänel et al (2018) and Barentine (2019) as the best compromise between cost, ease-of-use and amount of information obtained when measuring and monitoring sky glow. Hänel et al (2018) did, however, recognise the urgent need for the development of standard software for calibration and displaying results from light monitoring instruments⁵⁰. In the future, hyperspectral cameras with wide field of view might become available combining the advantages of spectroradiometry and all-sky imagery. However, such devices do not currently exist.

It should be noted that this field is in a stage of rapid development and this Technical Appendix will be updated as more information becomes available.

Table 1 Examples of instrumental light measurement techniques (modified from Hänel et al, 2018⁵⁰). Abbreviations: Num. val. = Numerical value; Spec. Knowl. = Specialist Knowledge required; Req. calibration = requires calibration.

Instrument	Measurement Units	Detect Sky Glow	Data Type	Spectrum measured	Scale	Measures biologically relevant light	Commercially Available	Data Quality	Price#
Remote sensing:									
Satellite imagery	Various	Yes*	lmages + num. val.	Single band	Landscape	No	Yes	Mod-high	Some datasets free
One dimensional:									
Sky Quality Meter (SQM)	magsqм/arcsec²	Yes	Num. val.	Single band	Overhead	No§	Yes	Mod	< \$300
Dark Sky Meter (iPhone)	~mag _{SQM} /arcsec	Yes	Num. val.	Single band	Overhead	No	Yes	Low	\$0
Luxmeter	lux	No	Num. val.	Single band	Metres	No	Yes	Low	< \$300
Two dimensional:									
ASTMON	mag _v /arcsec²	Yes	lmage + num. val.	Multi band filter wheel	Whole sky	Req. calibration	No	High	>\$15,000
DSLR + fisheye	~cd/m², ~mag _v /arcsec²	Yes	lmage + num. val	Multi band RGB	Whole sky	Req. calibration	Yes	Mod-high	>\$2,500
All sky mosaic	cd/m², mag√arcsec²	Yes	lmage + num. val	Single band	Whole sky	Req. calibration	No	High	~ \$20,000
Spectroradiometry:									
SAND¥	W/(m²nm sr)	Yes	Spectral power curve	Multi band hyperspectral	Landscape	Yes	No	Mod-high	\$7,000

[#] Price as at 2018.

^{*} Via modelling

[§] Some sensitivity to short (blue) wavelengths, but not long (orange red) wavelengths.

^{*} Spectrometer for Aerosol Night Detection (SAND).

Modelling Predicted Light

Available commercial light models

Most modelling software that is currently available is problematic as the models are weighted towards a human perception of light as represented by the CIE/photometric curve and do not account for the light to which wildlife are most sensitive. For example, most wildlife is sensitive to short wavelength violet and blue light (Figure 17), but little or none of this light is measured by commercial instruments and consequently it is not accounted for in current light models.

A second limitation of many light models for biology is the inability to accurately account for environmental factors, such as: atmospheric conditions (moisture, cloud, rain, dust); site topography (hills, sand dunes, beach orientation, vegetation, buildings); other natural sources of light (moon and stars); other artificial sources of light; the spectral output of luminaires; and the distance, elevation, and viewing angle of the observing species. Such a model would involve a level of complexity that science and technology has yet to deliver.

A final major limitation is the lack of biological data with which to confidently interpret a model outcome. Therefore, it is not possible to objectively estimate how much artificial light is going to cause an impact on a particular species, or age class, over a given distance and under variable environmental conditions.

Recognising these limitations, it can still be valuable to model light during the design phase of new lighting installations to test assumptions about the light environment. For example, models could test for the potential for light spill and line of sight visibility of a source. These assumptions should be confirmed after construction.

Development of modelling tools that can take account of broad spectral data and environmental conditions are in the early stages of development but rapidly improving⁴⁹.

Appendix D - Artificial Light Auditing

Industry best practice requires onsite inspection of a build to ensure it meets design specifications. An artificial light audit should be undertaken after construction to confirm compliance with the artificial light management plan.

An artificial light audit cannot be done by modelling of the as-built design alone and should include a site visit to:

- Confirm compliance with the artificial light management plan
- · Check as-built compliance with engineering design
- Gather details on each luminaire in place
- Conduct a visual inspection of the facility lighting from the wildlife habitat
- Review the artificial light monitoring at the project site
- Review artificial light monitoring at the wildlife habitat.

Following completion of a new project or modification/upgrade of the lighting system of an existing project, the project should be audited to confirm compliance with the artificial light management plan.

Step-by-Step Guide

The steps to carry out an artificial light audit include:

- Review of the artificial light management plan
- Review of best practice light management or approval conditions
- Review of as-built drawings for the lighting design
- Check for compliance with the approved pre-construction (front end) lighting design;
- Conduct a site inspection both during the day and at night to visually check and measure the placement, number, intensity, spectral power output, orientation, and management of each lamp and lamp type. Where possible this should be done with the lighting in operation and with all lighting extinguished.
- Measurements should be taken in a biologically meaningful way. Where there are limitations in measurements for wildlife these should be acknowledged.
- Record, collate and report on the findings and include any non-conformances. This
 should consider any differences between baseline and post construction observations.
 Where lighting outputs were modelled as part of the design phase, actual output should
 be compared with modelled scenarios.
- Make recommendations for any improvements or modifications to the lighting design that will decrease the impact on wildlife.

The audit should be conducted by an appropriately qualified environmental practitioner/technical specialist during a site visit. The audit should also include:

- A visual inspection of the facility lighting from the location of the wildlife habitat and where feasible the perspective of the wildlife (i.e. sand level for a marine turtle)
- Artificial light monitoring at the project site
- Artificial light monitoring at the wildlife habitat.

A post-construction site visit is critical to ensure no previously unidentified lighting issues are overlooked.

Appendix E – Artificial Light Management Check List

Table 2 provides a check list of issues to be considered during the environmental assessment of new infrastructure involving artificial light, or upgrades to existing artificial lighting for both proponents and assessors. Table 3 provides a check list of issues to be considered for existing infrastructure with external lighting where listed species are observed to be impacted by artificial light. Relevant sections of the Guidelines are provided for each issue.

Table 2 Checklist for new developments or lighting upgrades.

Issue to be considered	Light owner or manager	Regulator	Further information
Pre-development			
What are the regulatory requirements for artificial light for this project?	Is an environmental impact assessment required? What other requirements need to be addressed?	What information should be sought from the proponent as part of the assessment process?	Regulatory considerations for the management of artificial light
Does the lighting design follow principles of best practice?	What is the purpose of the artificial light for this project?	Does the project use the principles of best practice light design?	Best practice light design
What wildlife is likely to be affected by artificial light?	Review species information within 20 km of the proposed development.	Assess species information.	Wildlife and artificial light
What light management and impact mitigation will be implemented?	What light mitigation and management will be most effective for the affected species?	Is the proposed management and mitigation likely to reduce the effect on listed species?	Species specific technical appendices and species expert guidance
How will light be modelled?	Is light modelling appropriate? How will the model be used to inform light management for wildlife?	Are the limitations of light modelling for wildlife appropriately acknowledged?	Modelling predicted light
Have all lighting-relevant considerations been included in the light management plan?	Have all steps in the EIA process been undertaken and documented in the light management plan?	Does the light management plan comprehensively describe all steps in the EIA process?	Environmental impact assessment for effects of artificial light on wildlife Light Management Plan
How will continuous improvement be achieved?	How will light management be evaluated and adapted?	Is a continuous review and improvement process described?	Light Management Plan

Issue to be considered	Light owner or manager	Regulator	Further information	
Post development	Post development			
How will lighting be measured?	What is the most appropriate technique(s) for measuring biologically relevant light and what are the limitations?	Ensure appropriate light measurement techniques are used and limitations of the methods recognised.	Measuring biologically relevant light	
How will lighting be audited?	What is the frequency and framework for in-house light auditing?	How will the results of light audits feedback into a continuous improvement process?	Artificial light auditing	
Is artificial light affecting wildlife?	Does the biological monitoring indicate an effect of artificial light on fauna and what changes will be made to mitigate this impact?	Is there a process for addressing monitoring results that indicate there is a detectable light impact on wildlife, and is it appropriate?	Wildlife and artificial light Light Management Plan Managing existing light pollution	
What adaptive management can be introduced?	How will the results of light audits and biological monitoring be used in an adaptive management framework, and how will technological developments be incorporated into artificial light management?	What conditions can be put in place to ensure a continuous improvement approach to light management?	Light Management Plan	

Table 3 Checklist for existing infrastructure

Consideration	Light owner or manager	Regulator	Further information
Are wildlife exhibiting a change in survivorship, behaviour or reproduction that can be attributed to artificial light?	What listed species are found within 20 km of light source? Are there dead animals or are animals displaying behaviour consistent with the effects of artificial light?	Is there evidence to implicate artificial light as the cause of the change in wildlife survivorship, behaviour or reproductive output? Review existing environmental approvals.	Describe wildlife Wildlife and artificial light Regulatory considerations for the management of light Species expert advice
Is lighting in the area best practice?	Are there modifications or technological upgrades that could be made to improve artificial light management?	Are there individual light owners or managers who can be approached to modify current lighting?	Principles of best practice light management
Is the light affecting wildlife from a single source or multiple sources?	Are there multiple stakeholders that need to come together to address the cumulative light pollution?	Is there a role for government to facilitate collaboration between light owners and managers to address light pollution?	Managing existing light pollution Light Management Plan
Can appropriate monitoring be undertaken to confirm the role of artificial light in wildlife survivorship, behavioural or reproductive output changes?	How much light is emitted from my property and is it affecting wildlife?	Facilitate wildlife monitoring.	Field surveys for wildlife Measuring biologically relevant light Species expert advice
How will artificial light be audited?	What is the frequency and framework for in-house light auditing?	Can a light audit be undertaken on a regional scale?	Artificial light auditing
What adaptive light management can be introduced?	Are there improvements in lighting technology that can be incorporated into existing lighting?	What changes can be implemented in response to biological monitoring and light audits?	Specialist lighting engineer advice

Appendix F - Marine Turtles

Marine turtles nest on sandy beaches in northern Australia. There is a robust body of evidence demonstrating the effect of light on turtle behaviour and survivorship. Light is likely to affect the turtles if it can be seen from the nesting beach, nearshore or adjacent waters.

Adult females may be deterred from nesting where artificial light is visible on a nesting beach. Hatchlings may become misoriented or disoriented and be unable to find the sea or successfully disperse to the open ocean. The effect of light on turtle behaviour has been observed from lights up to 18 km away.

The physical aspects of light that have the greatest effect on turtles include intensity, colour (wavelength), and elevation above beach. Management of these aspects will help reduce the threat from artificial light.

Six species of marine turtles are found in Australia: the green (*Chelonia mydas*), loggerhead (*Caretta caretta*), hawksbill (*Eretmochelys imbricata*), olive ridley (*Lepidochelys olivacea*), flatback (*Natator depressus*) and leatherback (*Dermochelys coriacea*) turtles.

Light pollution was identified as a high-risk threat in the *Recovery Plan for Marine Turtles in Australia (2017)* because artificial light can disrupt critical behaviours such as adult nesting and hatchling orientation, sea finding and dispersal, and can reduce the reproductive viability of turtle stocks⁵⁷. A key action identified in the Recovery Plan was the development of guidelines for the management of light pollution in areas adjacent to biologically sensitive turtle habitat.



Figure 27 Loggerhead turtle. Photo: David Harasti.

Conservation Status

Marine turtles in Australia are protected under international treaties and agreements including the Convention on the Conservation of Migratory Species of Wild Animals (CMS, Bonn 1979), the Convention on International Trade in Endangered Species of Flora and Fauna (CITES, Washington 1973), and the CMS Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-east Asia (IOSEA, 2005). In Australia, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) gives effect to these international obligations.

All six species are listed under the EPBC Act as threatened, migratory and marine species. They are also protected under state and territory legislation.

The *Recovery Plan for Marine Turtles in Australia* (2017) identifies threats to marine turtles and actions required to recover these species⁵⁷. To ensure the maintenance of biodiversity, the Plan considers marine turtles on a genetic stock basis rather than the species level. The Plan found light pollution to be a high-risk threat to five of 22 genetic stocks of marine turtles. The development and implementation of best practice light management guidelines was identified as a key action for promoting the recovery of marine turtles⁵⁷.

Distribution

Turtle nesting habitats include sub-tropical and tropical mainland and offshore island beaches extending from northern New South Wales on the east coast around northern Australia to Shark Bay in Western Australia. The extent of the known nesting range for each genetic stock can be found on the Department of the Environment and Energy's <u>Species Profile and Threats Database</u> and in the <u>Recovery Plan</u>⁵⁷.

Timing of nesting and hatching

Marine turtles nesting in the far north, between the Kimberley and Cape York, typically nest year round, but have a peak during the cooler winter months, while summer nesting is favoured by turtles nesting from the Central Kimberley south in Western Australia and along the Pacific coast of Queensland and Northern New South Wales. Specific timing of nesting and hatching seasons for each stock can be found in the <u>Recovery Plan</u>⁵⁷.

Important habitat for marine turtles

The effect of artificial lights on turtles is most pronounced at nesting beaches and in the nearshore waters, which might include internesting areas, through which hatchlings travel to reach the ocean. For the purposes of these Guidelines, Important Habitat for turtles includes all areas that have been designated as **Habitat Critical to Survival of Marine Turtles** and **Biologically Important Areas (BIAs)**, or in Queensland areas identified under local planning schemes as **Sea Turtle Sensitive Areas**.

Habitat Critical to the Survival of Marine Turtles was identified for each stock as
part of the development of the <u>Recovery Plan for Marine Turtles in Australia (2017)</u>.
Nesting and internesting areas designated as Habitat Critical to the Survival of Marine
Turtles can be found in the Recovery Plan or through the Department of the
Environment and Energy's <u>National Conservation Values Atlas</u>.

- Biologically Important Areas (BIAs) are areas where listed threatened and migratory species display biologically important behaviour such as breeding, foraging, resting and migration. BIAs of highest relevance for the consideration of light impacts are nesting and internesting BIAs for each species. Marine turtle BIAs can be explored through the Department of the Environment and Energy's National Conservation Values Atlas.
 - The presence of a BIA recognises that biologically important behaviours are known to occur, but the absence of such a designation does not preclude the area from being a BIA. Where field surveys identify biologically important behaviour occurring, the habitat should be managed accordingly.
- Sea Turtle Sensitive Areas have been defined in local government planning schemes in accordance with the Queensland Government Sea Turtle Sensitive Area Code.
 These may be shown in local government biodiversity of coastal protection overlay maps in the planning scheme.

Effects of Artificial Light on Marine Turtles

The effect of artificial light on turtle behaviour has been recognised since 1911⁵⁸ and since then a substantial body of research has focused on how light affects turtles and its effect on turtle populations - for review see Witherington and Martin (2003)³; Lohmann et al (1997)⁴⁸; and Salmon (2003)⁵⁹. The global increase in light pollution from urbanisation and coastal development⁶⁰ is of particular concern for turtles in Australia since their important nesting habitat frequently overlaps with areas of large-scale urban and industrial development⁶¹, which have the potential to emit a large amount of light, including direct light, reflected light, sky glow and gas flares^{62,63}. Nesting areas on the North West Shelf of Western Australia and along the south-eastern coast of Queensland were found to be at the greatest risk from artificial light⁶¹.

Effect of artificial light on nesting turtles

Although they spend most of their lives in the ocean, females nest on sandy tropical and subtropical beaches, predominantly at night. They rely on visual cues to select nesting beaches and orient on land. Artificial night lighting on or near beaches has been shown to disrupt nesting behaviour³. Beaches with artificial light, such as urban developments, roadways, and piers typically have lower densities of nesting females than dark beaches^{59,64}.

Some light types do not appear to affect nesting densities (Low Pressure Sodium, LPS¹⁵, and filtered High Pressure Sodium, HPS), which excludes wavelengths below 540 nm)⁶⁵. On beaches exposed to light, females will nest in higher numbers in areas that are shadowed^{14,66}. Moving sources of artificial light may also deter nesting or cause disturbance to nesting females (e.g. flash photography)⁶⁷.

Effect of artificial light on hatchlings emerging from the nest

Most hatchling turtles emerge at night⁶⁸ and must rapidly reach the ocean to avoid predation⁶⁹. Hatchlings locate the ocean using a combination of topographic and brightness cues, orienting towards the lower, brighter oceanic horizon and away from elevated darkened silhouettes of dunes and/or vegetation behind the beach^{37,48,70}. They can also find the sea using secondary cues such as beach slope⁴⁸.

Sea finding behaviour may be disrupted by artificial lights, including flares⁶², which interfere with natural lighting and silhouettes^{3,26,37}. Artificial lighting may adversely affect hatchling sea finding behaviour in two ways: disorientation - where hatchlings crawl on circuitous paths; or misorientation - where they move in the wrong direction, possibly attracted to artificial lights^{3,39}. On land, movement of hatchlings in a direction other than the sea often leads to death from predation, exhaustion, dehydration, or being crushed by vehicles on roads⁶⁹.

Wavelength, intensity and direction

Brightness is recognised as an important cue for hatchlings as they attempt to orient toward the ocean. Brightness refers to the intensity and wavelength of light relative to the spectral sensitivity of the receiving eye³. Both field and laboratory-based studies indicate that hatchlings have a strong tendency to orient towards the brightest direction. The brightest direction on a naturally dark beach is typically towards the ocean where the horizon is open and unhindered by dune or vegetation shadows⁷⁰.

The attractiveness of hatchlings to light differs by species^{63,71,72}, but in general, artificial lights most disruptive to hatchlings are those rich in short wavelength blue and green light (e.g. metal halide, mercury vapour, fluorescent and LED) and lights least disruptive are those emitting long wavelength pure yellow-orange light (e.g. high or low pressure sodium vapour)^{63,73}. Loggerhead turtles are particularly attracted to light at 580 nm⁷⁴, green and flatback turtles are attracted to light <600 nm with a preference to shorter wavelength light over longer wavelength light^{63,73}, and many species are also attracted to light in the ultra violet range (<380 nm)^{72,73}.

Although longer wavelengths of light are less attractive than shorter wavelengths, they can still disrupt sea finding^{37,63,75}, and if bright enough can elicit a similar response to shorter wavelength light⁷⁶⁻⁷⁸. Hence, the disruptive effect of light on hatchlings is also strongly correlated with intensity. Red light must be almost 600 times more intense than blue light before green turtle hatchlings show an equal preference for the two colours⁷⁶. It is therefore important to consider both the wavelength and the intensity of the light.

Since the sun or moon may rise behind the dunes on some nesting beaches, hatchlings attracted to these point sources of light would fail to reach the ocean. Hatchlings orientate themselves by integrating light across a horizontally broad (180° for green, olive ridley and loggerhead turtles) and vertically narrow ("few degrees" for green and olive ridleys, and 10° - 30° for loggerheads) "cone of acceptance" or "range of vision". This integration ensures that light closest to the horizon plays the greatest role in determining orientation direction, so it is important to consider the type and direction of light that reaches the hatchling⁴⁸.

As a result of these sensitivities, hatchlings have been observed to respond to artificial light up to 18 km away during sea finding²⁶.

Shape and form

Horizon brightness and elevation are also important cues for hatchling orientation. In laboratory and field studies hatchlings move away from elevated dark horizons and towards the lowest bright horizon^{70,79}. However, in situations where both cues are present, hatchlings are more responsive to the effects of silhouettes and darkened horizon elevation than to differences in brightness. On a natural beach this behaviour would direct the hatchlings away from dunes and vegetation and towards the more open horizon over the ocean.

This hypothesis has been supported by field experiments where hatchling sea finding was significantly less ocean oriented when exposed to light at 2° elevation compared with 16° elevation, emphasising the importance of horizon elevation cues in hatchling sea-finding³⁷.

Effect of artificial light on hatchlings in nearshore waters

Artificial lights can also interfere with the in water dispersal of hatchlings⁷². Hatchlings leaving lit beaches spend longer crossing near shore waters and can be attracted back to shore^{80,81}. At sea, hatchlings have been reported swimming around lights on boats^{33,82} and in laboratory studies lights have attracted swimming hatchlings⁸³. Recent advances in acoustic telemetry technology has allowed hatchlings to be passively tracked at sea, demonstrating that hatchlings are attracted to lights at sea and spend longer in the nearshore environment when lights are present^{16,84}. This attraction can divert hatchlings from their usual dispersal pathway, causing them to linger around a light source, or become trapped in the light spill⁸⁴. Hatchlings actively swim against currents to reach light, which is likely to reduce survival either from exhaustion and/or predation. An additional problem is that light sources are associated with structures that also attract fish (such as jetties), as there will be increased predation²⁴.

Environmental Impact Assessment of Artificial Light on Marine Turtles

Infrastructure with artificial lighting that is externally visible should implement Best Practice
Lighting Design as a minimum. Where there is important habitat for turtles within 20 km of a project, an EIA should be undertaken. The following sections step through the EIA process with specific consideration for turtles.

The 20 km buffer for considering important habitat is based on sky glow approximately 15 km from the nesting beach affecting flatback hatchling behaviour²⁶ and light from an aluminium refinery disrupting turtle orientation 18 km away²⁷.

Where artificial light is likely to influence marine turtle behaviour, consideration should be given to employing mitigation measures as early as possible in a project's life cycle and used to inform the design phase.

Associated guidance

- Recovery Plan for Marine Turtles in Australia (2017)
- <u>Single Species Action Plan for the Loggerhead Turtle (Caretta caretta) in the South Pacific Ocean</u>
- Queensland Government Sea Turtle Sensitive Area Code

Qualified personnel

Lighting design/management and the EIA process should be undertaken by appropriately qualified personnel. Light management plans should be developed and reviewed by appropriately qualified lighting practitioners who should consult with an appropriately qualified marine biologist or ecologist.

People advising on the development of a lighting management plan, or the preparation of reports assessing the impact of artificial light on marine turtles should have relevant qualifications equivalent to a tertiary education in marine biology or ecology, or equivalent experience as evidenced by peer reviewed publications in the last five years on a relevant topic, or other relevant experience.

Step 1: Describe the project lighting

Information collated during this step should consider the <u>Effects of Light on Marine Turtles</u>. Turtles are susceptible to the effect of light on beaches and in the water, so the location and light source (both direct and sky glow) should be considered. Turtles are most sensitive to short wavelength (blue/green) light and high intensity light of all wavelengths. Hatchlings are most susceptible to light low on the horizon. They orient away from tall dark horizons so the presence of dunes and/or a vegetation buffer behind the beach should be considered at the design phase.

Step 2: Describe marine turtle population and behaviour

The species and the genetic stock nesting in the area of interest should be described. This should include the conservation status of the species; stock trends (where known); how widespread/localised nesting for that stock is; the abundance of turtles nesting at the location; the regional importance of this nesting beach; and the seasonality of nesting/hatching.

Relevant species and stock specific information can be found in the <u>Recovery Plan for Marine Turtles in Australia</u> (2017), <u>Protected Matters Search Tool, National Conservation Values Atlas</u> state and territory listed species information; scientific literature and local/Indigenous knowledge.

Where there is insufficient data to understand the population importance or demographics, or where it is necessary to document existing turtle behaviour, field surveys and biological monitoring may be necessary.

Biological monitoring of marine turtles

Any monitoring associated with a project should be developed, overseen and results interpreted by appropriately <u>qualified personnel</u> to ensure reliability of the data.

The objectives of turtle monitoring in an area likely to be affected by artificial light are to:

- understand the size and importance of the population;
- describe turtle behaviour before the introduction/upgrade of light; and
- assess nesting and hatchling orientation behaviour to determine the cause of any existing or future misorientation or disorientation.

The data will be used to inform the EIA and assess whether mitigation measures are successful. Suggested minimum monitoring parameters (what is measured) and techniques (how to measure them) are summarised in Table 4.

As a minimum, qualitative descriptive data on visible light types, location and directivity should also be collected at the same time as the biological data. Handheld-camera images can help describe the light. Quantitative data on existing sky glow should be collected, if possible, in a biologically meaningful way, recognising the technical difficulties in obtaining these data. See Measuring Biologically Relevant Light for a review.

Table 4 Recommended minimum biological information necessary to assess the importance of a marine turtle population and existing behaviour, noting that the risk assessment will guide the extent of monitoring (e.g. a large source of light visible over a broad spatial scale will require monitoring of multiple sites whereas a smaller localised source of light may require fewer sites to be monitored).

Target Age Class	Survey Effort	Duration	Reference
Adult Nesting	Daily track census over 1–1.5 internesting cycles at peak ⁵⁷ of the nesting season (14–21 days). If the peak nesting period for this population/at this location has not been defined, then a study should be designed in consultation with a qualified turtle biologist to determine the temporal extent of activity (i.e. systematic monthly surveys over a 12-month period).	Minimum two breeding seasons	Eckert et al (1999)85 Pendoley et al (2016)86 Queensland Marine Turtle Field Guide NWSFTCP Turtle Monitoring Field Guide Ningaloo Turtle Monitoring Field Guide SWOT Minimum Data Standards for Sea Turtle Nesting Beach Monitoring
Hatchling Orientation	Minimum of 14 days over a new moon phase about 50 days* after the peak of adult nesting. Beach: Hatchling fan monitoring. In water: Hatchling tracking	Minimum two breeding seasons	Pendoley (2005) ⁶³ Kamrowski et al (2014) ²⁶ Witherington (1997) ⁸⁷ Thums et al (2016) ¹⁶

^{*}Incubation time will be stock specific. Consult the Recovery Plan for Marine Turtles in Australia for stock specific information.

To understand existing hatchling behaviour, it will be necessary to undertake monitoring (or similar approach) to determine hatchling ability to locate the ocean and orient offshore prior to construction/lighting upgrades.

A well-designed monitoring program will capture:

- hatchling behaviour^{26,63,87} at the light exposed beach and a control/reference beach
- hatchling behaviour before project construction begins to establish a benchmark to measure against possible changes during construction and operations
- hatchling behaviour on a new moon to reduce the influence of moonlight and capture any worst case scenario effects of artificial light on hatching orientation
- hatchling behaviour on full moon nights to assess the relative contribution of the artificial light to the existing illuminated night sky.

Ideally, survey design will have been set up by a quantitative ecologist/biostatistician to ensure that the data collected provides for meaningful analysis and interpretation of findings.

Step 3: Risk assessment

The <u>Recovery Plan</u> states that management of light should ensure turtles are not displaced from habitat critical to their survival and that anthropogenic activities in important habitat are managed so that the biologically important behaviour can continue. These consequences should be considered in the risk assessment process. The aim of these Guidelines is that light is managed to ensure that at important nesting beaches females continue to nest on the beach, post nesting females return to the ocean successfully, emerging hatchlings orient in a seaward direction and dispersing hatchlings can orient successfully offshore.

Consideration should be given to the relative importance of the site for nesting. For example, if this is the only site at which a stock nests, a higher consequence rating should result from the effects of artificial light.

In considering the likely effect of light on turtles, the risk assessment should consider the existing light environment, the proposed lighting design and mitigation/management, and the behaviour of turtles at the location. Consideration should be given to how the turtles will perceive light. This should include wavelength and intensity information as well as perspective. To assess how/whether turtles are likely to see light, a site visit should be made at night and the area viewed from the beach (approximately 10 cm above the sand) as this will be the perspective of the nesting turtles and emerging hatchlings. Similarly, consideration should be given to how turtles (both adults and hatchlings) will see light when in nearshore water.

Using this perspective, the type and number of lights should be considered to assess whether turtles are likely to be able to perceive light and what the consequence of the light on their behaviour is likely to be. The risk assessment should take into account proposed mitigation and management.

Step 4: Light management plan

A light management plan for marine turtles should include all relevant project information (Step 1) and biological information (Step 2). It should outline proposed mitigation. For a range of specific mitigation measures see the Mitigation Toolbox below. The plan should also outline the type and schedule for biological and light monitoring to ensure mitigation is meeting the objectives of the plan and triggers for revisiting the risk assessment phase of the EIA. The plan should outline contingency options if biological and light monitoring or compliance audits indicate that mitigation is not meeting the objectives of the plan (e.g. light is visible on the nesting beach or changes in nesting/hatchling behaviour are observed).

Step 5: Biological and light monitoring and auditing

The success of risk mitigation and light management should be confirmed through monitoring and compliance auditing. The results should be used to inform continuous improvement.

Relevant biological monitoring is described in Step 2: Describe marine turtle population and behaviour above. Concurrent light monitoring should be undertaken and interpreted in the context of how turtles perceive light and within the limitations of monitoring techniques described in Measuring Biologically Relevant Light. Auditing as described in the light management plan should be undertaken.

Review

The EIA should incorporate a continuous improvement review process that allows for upgraded mitigations, changes to procedures and renewal of the light management plan.

Marine Turtle Light Mitigation Toolbox

Appropriate lighting design/lighting controls and light impact mitigation will be site/project and species specific. Table 5 provides a toolbox of options for use around important turtle habitat. These options would be implemented in addition to the six Best Practice Light Design principles. Not all mitigation options will be relevant for every situation. Table 6 provides a suggested list of light types appropriate for use near turtle nesting beaches and those to avoid.

Two of the most effective approaches for management of light near important nesting beaches is to ensure there is a tall dark horizon behind the beach such as dunes and/or a natural vegetation screen and to ensure there is no light on or around the water through which hatchlings disperse.

Table 5 Light management options specific to marine turtle nesting beaches.

Management Action	Detail
Implement light management actions	Peak nesting season for each stock can be found in
during the nesting and hatching season.	the Recovery Plan for Marine Turtles in Australia ⁵⁷ .
Avoid direct light shining onto a nesting beach or out into the ocean adjacent to a nesting beach.	Adult turtles nest in lower numbers at lit beaches ¹⁴ .
Maintain a dune and/or vegetation screen	Hatchlings orient towards the ocean by crawling away
between the nesting habitat and inland	from the tall, dark horizon provided by a dune line
sources of light.	and/or vegetation screen.
Maintain a dark zone between turtle	Avoid installing artificial light within 1.5 km of an
nesting beach and industrial infrastructure	industrial development ⁷⁸ .
Install light fixtures as close to the ground as practicable.	Any new lighting should be installed close to the ground and reduce the height of existing lights to the extent practicable to minimise light spill and light glow.
Use curfews to manage lighting.	Mange artificial lights using motion sensors and timers around nesting beaches after 8 pm.
Aim lights downwards and direct them away from nesting beaches.	Aim light onto the exact surface area requiring illumination. Use shielding on lights to prevent light spill into the atmosphere and outside the footprint of the target area.
Use flashing/intermittent lights instead of fixed beam.	For example, small red flashing lights can be used to identify an entrance or delineate a pathway.
Use motion sensors to turn on lights only when needed.	For example, motion sensors could be used for pedestrian areas near a nesting beach.
Prevent indoor lighting reaching beach.	Use fixed window screens or window tinting on fixed windows, skylights and balconies to contain light inside buildings.
Limit the number of beach access areas or construct beach access such that artificial light is not visible through the access point.	Beach access points often provide a break in dune or vegetation that protects the beach from artificial light. By limiting the number of access points or making the access path wind through the vegetation, screen light spill can be mitigated.
Work collectively with surrounding industry/private land holders to address the cumulative effect of artificial lights.	Problematic sky glow may not be caused by any one light owner/manager. By working with other industry/stakeholders to address light pollution, the effect of artificial light may be reduced more effectively.

Management Action	Detail
Manage artificial light at sea, including on vessels, jetties, marinas and offshore infrastructure.	Hatchlings are attracted to, and trapped by, light spill in the water.
Reduce unnecessary lighting at sea.	Extinguish vessel deck lights to minimum required for human safety and when not necessary. Restrict lighting at night to navigation lights only. Use block-out blinds on windows.
Avoid shining light directly onto longlines and/or illuminating baits in the water.	Light on the water can trap hatchlings or delay their transit through nearshore waters, consuming their energy reserves and likely exposing them to predators.
Avoid lights containing short wavelength violet/blue light.	Lights rich in blue light can include: metal halides, fluorescent, halogens, mercury vapour and most LEDs.
Avoid white LEDs.	Ask suppliers for an LED light with little or no blue in it or only use LEDs filtered to block the blue light. This can be checked by examining the spectral power curve for the luminaire.
Avoid high intensity light of any colour.	Keep light intensity as low as possible in the vicinity of nesting beaches. Hatchlings can see all wavelengths of light and will be attracted to long wavelength amber and red light as well as the highly visible white and blue light, especially if there is a large difference between the light intensity and the ambient dark beach environment.
Shield gas flares and locate inland and away from nesting beach.	Manage gas flare light emissions by: reducing gas flow rates to minimise light emissions; shielding the flame behind a containment structure; elevating glow from the shielded flare more than 30° above hatchling field of view; containing pilot flame for flare within shielding; and scheduling maintenance activity requiring flaring outside of turtle hatchling season.
Industrial/port or other facilities requiring intermittent night-time light for inspections should keep the site dark and only light specific areas when required.	Use amber/orange explosion proof LEDs with smart lighting controls and/or motions sensors. LEDs have no warmup or cool down limitations so can remain off until needed and provide instant light when required for routine nightly inspections or in the event of an emergency.
Industrial site/plant operators to use head torches.	Consider providing plant operators with white head torches (explosion proof torches are available) for situations where white light is needed to detect colour correctly or when there is an emergency evacuation.
Supplement facility perimeter security lighting with computer monitored infra-red detection systems.	Perimeter lighting can be operated if night-time illumination is necessary, but remain off at other times.
No light source should be directly visible from the beach.	Any light that is directly visible to a person on a nesting beach will be visible to a nesting turtle or hatchling and should be modified to prevent it being seen.

Management Action	Detail
Manage light from remote regional sources (up to 20km away).	Consider light sources up to 20 km away from the nesting beach, assess the relative visibility and scale of the night sky illuminated by the light e.g. is a regional city illuminating large area of the horizon and what management actions can be taken locally to reduce the effect i.e. protect or improve dune systems or plant vegetation screening in the direction of the light.

Table 6 Where all other mitigation options have been exhausted and there is a human safety need for artificial light, this table provides commercial luminaire types that are considered appropriate for use near important marine turtles nesting habitat and those to avoid.

Light type	Suitability for use near marine turtle habitat
Low Pressure Sodium Vapour	✓
High Pressure Sodium Vapour	✓
Filtered* LED	✓
Filtered* metal halide	✓
Filtered* white LED	
Amber LED	
PC Amber	✓
White LED	×
Metal halide	×
White fluorescent	×
Halogen	×
Mercury vapour	×

^{* &#}x27;Filtered' means LEDs can be used *only* if a filter is applied to remove the short wavelength (400 - 500 nm) light.

Appendix G - Seabirds

Seabirds spend most of their lives at sea, only coming ashore to nest. All species are vulnerable to the effects of lighting. Seabirds active at night while migrating, foraging or returning to colonies are most at risk.

Fledglings are more affected by artificial lighting than adults due to the synchronised mass exodus of fledglings from their nesting sites. They can be affected by lights up to 15 km away.

The physical aspects of light that have the greatest impact on seabirds include intensity and colour (wavelength). Consequently, management of these aspects of artificial light will have the most effective result.

Seabirds are birds that are adapted to life in the marine environment (Figure 28). They can be highly pelagic, coastal, or in some cases spend a part of the year away from the sea entirely. They feed from the ocean either at or near the sea surface. In general, seabirds live longer, breed later and have fewer young than other birds and invest a great deal of energy in their young. Most species nest in colonies, which can vary in size from a few dozen birds to millions. Many species undertake long annual migrations, crossing the equator or circumnavigating the Earth in some cases⁸⁸.

Artificial light can disorient seabirds and potentially cause injury and/or death through collision with infrastructure. Birds may starve as a result of disruption to foraging, hampering their ability to prepare for breeding or migration. High mortality of seabirds occurs through grounding of fledglings as a result of attraction to lights⁴ and through interaction with vessels at sea.



Figure 28 Flesh-footed Shearwater at sunset. Photo: Richard Freeman.

Conservation Status

Migratory seabird species in Australia are protected under international treaties and agreements including the *Convention on the Conservation of Migratory Species of Wild Animals* (CMS, Bonn Convention), the *Ramsar Convention on Wetlands*, the *Agreement on the Conservation of Albatrosses and Petrels* (ACAP), and through the East Asian - Australasian Flyway Partnership (the Flyway Partnership). The Australian Government has bilateral migratory bird agreements with Japan (Japan-Australia Migratory Bird Agreement, JAMBA), China (China-Australia Migratory Bird Agreement, CAMBA), and the Republic of Korea (Republic of Korea-Australia Migratory Bird Agreement, ROKAMBA). In Australia the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) gives effect to these international obligations. Many seabirds are also protected under state and territory environmental legislation.

An estimated 15.5 million pairs of seabirds, from 43 species, breed at mainland and island rookeries⁴. Of the 43 species, 35 are listed as threatened and/or migratory under the EPBC Act. Of the 35 EPBC Act listed species, 90 per cent are Procellariiformes (petrels, shearwaters, storm petrels, gadfly petrels and diving petrels) that breed in burrows, only attend breeding colonies at night⁸⁹, and are consequently most at risk from the effects of artificial light. Short-tailed Shearwaters comprise 77 per cent (11.9 million pairs) of the total breeding seabird pairs.

Distribution

Seabirds in Australia belong to both migratory and residential breeding species. Most breeding species include both temperate and tropical shearwaters and terns that undergo extensive migrations to wintering areas outside Australia's Exclusive Economic Zone (EEZ). However, there are significant numbers of residential species that remain within the EEZ throughout the year and undergo shorter migrations to non-breeding foraging grounds within the EEZ.

Timing of habitat use

Most seabird breeding occurs during the austral spring/summer (September-January), but may extend in some species to April/May. The exceptions are the austral winter breeders, a handful of species largely comprised of petrels that may commence nesting in June. Breeding occurs almost exclusively on many of the offshore continental islands that surround Australia. Seabirds spend most of their time flying, at sea, and so are usually found on breeding islands only during the breeding season, or along mainland coastal sand bars and spits or island shorelines when roosting during their non-breeding period.

Important habitat for seabirds

Seabirds may be affected by artificial light at breeding areas, while foraging and migrating. For the purposes of these Guidelines, Important Habitat for seabirds includes all areas that have been designated as Habitat Critical to the Survival of Seabirds and Biologically Important Areas (BIAs) and those areas designated as important habitat in wildlife conservation plans and in species specific conservation advice.

- The <u>National Recovery Plan for Threatened Albatrosses and Giant Petrels 2011-2016</u>* provides designated Habitat Critical to the Survival of these species. Where a recovery plan is not in force for a listed threatened species, please see relevant approved conservation advice.
- Actions in Antarctica should consider <u>Important Bird Areas in Antarctica</u>⁹⁰.
- Biologically Important Areas (BIAs) are areas where listed threatened and migratory species display biologically important behaviour, such as breeding, foraging, resting and migration. Seabird BIAs can be explored through the Department of the Environment and Energy's National Conservation Values Atlas.
 - o The presence of a BIA recognises that biologically important behaviours are known to occur, but the absence of such a designation does not preclude the area from being a BIA. Where field surveys identify biologically important behaviour occurring, the habitat should be managed accordingly.

Effects of Artificial Light on Seabirds

Seabirds have been affected by artificial light sources for centuries. Humans used fire to attract seabirds to hunt them for food⁹¹ and reports of collisions with lighthouses date back to 1880⁹². More recently artificial light associated with the rapid urbanisation of coastal areas has been linked to increased seabird mortality⁹³ and today, 56 petrel species worldwide are known to be affected by artificial lighting^{4,31}. Artificial light can disorient seabirds causing collision, entrapment, stranding, grounding, and interference with navigation (being drawn off course from usual migration route). These behavioural responses may cause injury and/or death.

All species active at night are vulnerable as artificial light can disrupt their ability to orient towards the sea. Problematic sources of artificial light include coastal residential and hotel developments, street lighting, vehicle lights, sporting facility floodlights, vessel deck and search lights, cruise ships, fishing vessels, gas flares, commercial squid vessels, security lighting, navigation aids and lighthouses^{31,93,99}. Seabirds, particularly petrel species in the Southern Ocean, can be disoriented by vessel lighting and may land on the deck, from which they are unable to take off. The effect of artificial light may be exacerbated by moon phase⁹⁶, wind direction and strength^{28,100}, precipitation, cloud cover and the proximity of nesting sites or migrating sites to artificial light sources¹⁰¹⁻¹⁰³. The degree of disruption is determined by a combination of physical, biological and environmental factors including the location, visibility, colour and intensity of the light, its proximity to other infrastructure, landscape topography, moon phase, atmospheric and weather conditions and species present.

-

^{*} This legislative instrument is in force until 2021.

Seabirds that are active at night while migrating, foraging or returning to colonies and are directly affected include petrels, shearwaters, albatross, noddies, terns and some penguin species. Less studied are the effects of light on the colony attendance of nocturnal Procellariiformes, which could lead to higher predation risks by gulls, skuas or other diurnal predators, and the effects on species that are active during the day, including extending their activities into the night as artificial light increases perceived daylight hours.

High rates of fallout, or the collision of birds with structures, has been reported in seabirds nesting adjacent to urban or developed areas^{4,104,105} and at sea where seabirds interact with offshore oil and gas platforms^{106,107}. A report on interactions with oil and gas platforms in the North Sea identified light as the likely cause of hundreds of thousands of bird deaths annually. It noted that this could be a site specific impact¹⁰⁸.

Gas flares also affect seabirds. One anecdote describes 24 burnt carcasses of seabirds (wedge-tailed shearwaters) in and around an open pit gas flare. The birds were likely to have been attracted to the light and noise of the flare and as they circled the source, became engulfed, combusting in the super-heated air above the flame (pers. obs. K Pendoley, 1992).

Mechanisms by which light affects seabirds

Most seabirds are diurnal. They rest during dark hours and have less exposure to artificial light. Among species with a nocturnal component to their life cycle, artificial light affects the adult and fledgling differently.

Adults are less affected by artificial light. Many Procellariiformes species (i.e. shearwaters, storm petrels, gadfly petrels) are vulnerable during nocturnal activities, which make up part of the annual breeding cycle. Adult Procellariiformes species are vulnerable when returning to and leaving the nesting colony. They may leave or enter to re-establish their pair bonds with breeding partners, repair nesting burrows, defend nesting sites or to forage. Adults feed their chick by regurgitating partially digested food¹⁰⁹. A recent study shows artificial light disrupts adult nest attendance and thus affects weight gain in chicks¹¹⁰.

Fledglings are more vulnerable due to the naivety of their first flight, the immature development of ganglions in the eye at fledging and the potential connection between light and food^{104,111}. Burrow-nesting seabirds are typically exposed to light streaming in from the burrow entrance during the day. The young are fed by parents who enter the burrow from the entrance creating an association between light and food in newly fledged birds³¹. Much of the literature concerning the effect of lighting upon seabirds relates to the synchronised mass exodus of fledglings from their nesting sites^{96,98,101,102,112,113}. Fledging Procellariiformes leave the nesting colony for the sea at night⁸⁹, returning to breed several years later. In Australia, the main fledgling period of shearwaters occurs in April/May¹¹⁴.

Emergence during darkness is believed to be a predator-avoidance strategy¹¹⁵ and artificial lighting may make the fledglings more vulnerable to predation¹¹³. Artificial lights are thought to override the sea-finding cues provided by the moon and star light at the horizon¹¹⁶ and fledglings can be attracted back to onshore lights after reaching the sea^{28,105}. It is possible that fledglings that survive their offshore migration cannot imprint their natal colony, preventing them from returning to nest when they mature⁹⁸. The consequences of exposure to artificial light on the viability of a breeding population of seabirds is unknown¹¹⁷.

Eye structure and sensitivities

Seabirds, like most vertebrates, have an eye that is well adapted to see colour. Typically, diurnal birds have six photoreceptor cells which are sensitive to different regions of the visible spectrum¹¹⁸. All seabirds are sensitive to the violet – blue region of the visible spectrum (380 - 440 nm)¹¹⁹. The eyes of the Black Noddy (*Anous minutus*) and Wedge-tailed Shearwaters (*Puffinus pacificus*) are characterised by a high proportion of cones sensitive to shorter wavelengths¹²⁰. This adaptation is likely due to the need to see underwater, and the optimum wavelength for vision in clear blue oceanic water is between 425 and 500 nm. There is no ecological advantage to having many long-wavelength-sensitive photoreceptors in species foraging in this habitat¹²⁰.

Many diurnal birds can see in the UV range (less than 380 nm^{121}), however, of the 300 seabird species, only 17 have UV sensitive vision¹¹⁹. In all seabirds, their photopic vision (daylight adapted) is most sensitive in the long wavelength range of the visible spectrum (590 - 740 nm, orange to red) while their scotopic (dark adapted) vision is more sensitive to short wavelengths of light (380 - 485 nm, violet to blue).

Petrel vision is most sensitive to light in the short wavelength blue (400 - 500 nm), region of the visible spectrum. Relative to diurnal seabirds, such as gulls and terns, petrels have a higher number of short wavelength sensitive cones. This is thought to be an adaptation that increases prey visibility against a blue-water foraging field favoured by petrels¹²⁰.

Little has been published on vision in penguins. Penguins are visual foragers with the success of fish capture linked directly to the amount of light present¹²². The eyes of the Humbolt Penguin (*Spheniscus humboldti*) are adapted to the aquatic environment, seeing well in the violet to blue to green region of the spectrum, but poorly in the long wavelengths (red)¹²³.

Wavelength, intensity and direction

The intensity of light may be a more important cue than colour for seabirds. Very bright light will attract them, regardless of colour⁹⁸. There are numerous, although sometimes conflicting, reports of the attractiveness of different wavelengths of artificial light to seabirds. White light has the greatest effect on seabirds as it contains all wavelengths of light^{7,96,124}. Seabirds have reportedly been attracted to the yellow/orange colour of fire⁹¹, while white Mercury Vapour and broad-spectrum LED is more attractive to Barau's Petrel (*Pterodroma baraui*) and Hutton's Shearwater (*Puffinus huttoni*) than either Low or High-Pressure Sodium Vapour lights⁹⁶. Bright white deck lights and spot lights on fishing vessels attract seabirds at night, particularly on nights with little moon light or low visibility^{95,97,104}.

A controlled field experiment on Short-tailed Shearwaters at Phillip Island tested the effect of metal halide, LED and HPS lights on fledging groundings³². The results suggested the shearwaters were more sensitive to the wider emission spectrum and higher blue content of metal halide and LED lights relative than to HPS light. The authors strongly recommended using HPS, or filtered LED and metal halide lights with purpose designed LED filtered to remove short wavelength light for use in the vicinity of shearwater colonies³².

The first studies of penguins exposed to artificial light at a naturally dark site found they preferred lit paths over dark paths to reach their nests¹²⁵. While artificial light might enhance penguin vision at night, reducing predation risk and making it easier for them to find their way, the proven attraction to light could attract them to undesirable lit areas. This study concluded

that the penguins were habituated to artificial lights and were unaffected by a 15 lux increase in artificial illumination¹²⁵. However, the authors were unable to rule out an effect of artificial light on penguin behaviour due natural differences between the sites; potential complexity of penguin response to the interaction between artificial light and moonlight; and probable habituation of penguins to artificial lights.

Environmental Impact Assessment of Artificial Light on Seabirds

As a minimum, infrastructure with artificial lighting that is externally visible should have Best Practice Lighting Design implemented. Where there is important habitat for seabirds within 20 km of a project, an EIA should be undertaken. The following sections step through the EIA process with specific consideration for seabirds.

The 20 km buffer for considering important seabird habitat is based on the observed grounding of seabirds in response to a light source at least 15 km away²⁸.

The spatial and temporal characteristics of migratory corridors are important for some seabird species. Species typically use established migratory pathways at predictable times and artificial light intersecting with an overhead migratory pathway should be assessed in the same way as ground-based populations.

Where artificial light is likely to affect seabirds, consideration should be given to mitigation measures at the earliest point in a project development and used to inform the design phase.

Associated guidance

- National Recovery Plan for Threatened Albatrosses and Giant Petrels 2011-2016[†]
- EPBC Act Policy Statement 3.21—Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species

Qualified personnel

Lighting design/management and the EIA process should be undertaken by appropriately qualified personnel. Light management plans should be developed and reviewed by appropriately qualified lighting practitioners who should consult with appropriately trained marine ornithologists and/or ecologists. People advising on the development of a lighting management plan, or the preparation of reports assessing the effect of artificial light on seabirds, should have relevant qualifications equivalent to a tertiary education in ornithology, or equivalent experience as evidenced by peer reviewed publications in the last five years on a relevant topic, or other relevant experience.

-

[†] Please note that this legislative instrument is in force until 2021.

Step 1: Describe the project lighting

The type of information collated during this step should consider the biological Impact of Light on Seabirds. Seabirds are susceptible when active at night while migrating, foraging or returning to colonies. The location and light source (both direct and sky glow) in relation to breeding and feeding areas should be considered. Seabirds are sensitive to both short wavelength (blue/violet) and long (orange/red)⁹ light with some species able to detect UV light. However, the intensity of lights may be more important than colour.

Step 2: Describe seabird population and behaviour

The species, life stage and behaviour of seabirds in the area of interest should be described. This should include the conservation status of the species; abundance of birds; how widespread/localised is the population; regional importance of the population; and seasonality of seabirds utilising the area.

Relevant seabird information can be found in the, <u>National Recovery Plan for Threatened</u>
<u>Albatrosses and Giant Petrels 2011-2016</u>; <u>Protected Matters Search Tool; National</u>
<u>Conservation Values Atlas;</u> relevant conservation advice; relevant wildlife conservation plans; state and territory listed species information; scientific literature; and local/Indigenous knowledge.

Where there are insufficient data available to understand the population importance or demographics, or where it is necessary to document existing seabird behaviour, field surveys and biological monitoring may be necessary.

Biological monitoring of seabirds

Any biological monitoring associated with a project should be developed, overseen and results interpreted by an appropriately qualified biologist or ornithologist to ensure reliability of the data.

The objectives of monitoring in an area likely to be affected by light are to:

- understand the habitat use and behaviour of the population (e.g. migrating, foraging, breeding)
- understand the size and importance of the population
- describe seabird behaviour prior to the introduction/upgrade of light.

The data will be used to inform the EIA process and assess whether mitigation measures are successful. Suggested minimum monitoring parameters (what is measured) and techniques (how to measure them) are summarised in Table 7.

Table 7 Recommended minimum biological information necessary to assess the importance of a seabird population. Note: the information in this table is not prescriptive and should be assessed on a case-by-case basis.

Target Age Class	Survey Effort	Duration	Reference
Adult Nesting	In colonial nesting burrow or surface nesting species with fixed or transient nesting sites, a single survey timed to coincide with predicted peak laying period. • A minimum of three sampling areas (transects/quadrats) appropriate for nest density to capture ~100 nests per transect. Status of nests recorded (used/unused-chick stage). Transient surface nesting species - estimate of chicks in crèches using aerial or drone footage. • A minimum of three sampling areas (transects/quadrats) appropriate for nest density to capture ~100 nests per transect. Status of nests recorded (used/unused- egg or chick).	Minimum of two breeding seasons	Henderson and Southwood (2016) ¹²⁶ Surman and Nicholson (2014) ¹²⁷ Survey Guidelines for Australia's Threatened Birds ¹²⁸
Fledging	In colonial nesting burrow or surface nesting species with fixed nesting sites, a single survey timed to coincide with predicted max fledging period.	Minimum of two breeding seasons	Henderson and Southwood (2016) ¹²⁶ Surman and Nicholson (2014) ¹²⁹

Additional seabird monitoring

- Monitor fledging behaviour before a project begins to establish a benchmark for assessing changes in fledging behaviour during construction and operations.
- Monitor fallout by assessing breeding colonies prior to fledging to assess annual breeding output/effort and measure against fallout (expecting greater fallout in years with higher reproductive output).
- Install camera traps at key locations to monitor fallout.
- Conduct nightly assessments of target lighting/areas to identify and collect grounded birds.
- Conduct observations post-dusk and pre-dawn with night vision goggles to assess activity/interactions.
- Track movement using land-based radar to determine existing flightpaths⁹⁸.

As a minimum, qualitative descriptive data on visible light types, location and directivity should also be collected at the same time as the biological data. Handheld camera images can help to describe the light. Quantitative data on existing sky glow should be collected, if possible, in a biologically meaningful way, recognising the technical difficulties in obtaining these data. See Measuring Biologically Relevant Light for a review.

Step 3: Risk assessment

The objective is that light should be managed in a way that seabirds are not disrupted within, or displaced from, important habitat, and they are able to undertake critical behaviours, such as foraging, reproduction and dispersal. These consequences should be considered in the risk assessment process. The aim of the process is to ensure that at important seabird rookeries, burrow usage remains constant, adults and fledglings are not grounded, and fledglings launch successfully from the rookery.

In considering the likely effect of light on seabirds, the assessment should consider the existing light environment, the proposed lighting design and mitigation/management, and behaviour of seabirds at the location. Consideration should be given to how the birds perceive light. This should include both wavelength and intensity information and perspective. To discern how/whether seabirds are likely to see light, a site visit should be made at night and the area viewed from the seabird rookery. Similarly, consideration should be given to how seabirds will see light when in flight.

Using this perspective, the type and number of lights should be considered/modelled to determine whether seabirds are likely to perceive light and what the consequence of the light on their behaviour is likely to be.

Step 4: Light management plan

This should include all relevant project information (Step 1) and biological information (Step 2). It should outline proposed mitigation. For a range of seabird specific mitigation measures please see the <u>Seabird Mitigation Toolbox</u> below. The plan should also outline the type and schedule for biological and light monitoring to ensure mitigation is meeting the objectives of the plan and triggers for revisiting the risk assessment phase of the EIA. The plan should outline contingency options if biological and light monitoring or compliance audits indicate that mitigation is not meeting objectives (e.g. light is visible in seabird rookeries or fallout rates increase).

Step 5: Biological and light monitoring and auditing

The success of the impact mitigation and light management should be confirmed through monitoring and compliance auditing and the results used to facilitate an adaptive management approach for continuous improvement.

Relevant biological monitoring is described in Step 2: Describe the Seabird Population above. Concurrent light monitoring should be undertaken and interpreted in the context of how seabirds perceive light and within the limitations of monitoring techniques described in Measuring Biologically Relevant Light. Auditing, as described in the light management plan, should be undertaken.

Review

The EIA should incorporate a continuous improvement review process that allows for upgraded mitigations, changes to procedures and renewal of the light management plan.

Seabird Light Mitigation Toolbox

Appropriate lighting design/lighting controls and mitigating the effect of light will be site/project and species specific. Table 8 provides a toolbox of management options relevant to seabirds. These options should be implemented in addition to the six Best Practice Light Design principles. Not all mitigation options will be practicable for every project. Table 9 provides a suggested list of light types appropriate for use near seabird rookeries and those to avoid.

A comprehensive review of the effect of land based artificial lights on seabirds and mitigation techniques found the most effective measures were:

- turning lights off during the fledgling periods
- · modification of light wavelengths
- removing external lights and closing window blinds to shield internal lights
- shielding the light source and preventing upward light spill
- reducing traffic speed limits and display of warning signs
- implementing a rescue program for grounded birds⁴.

Additional mitigation measures listed, but not assessed for effectiveness were:

- using rotating or flashing lights because research suggests that seabirds are less attracted to flashing lights than constant light
- keeping light intensity as low as possible. Most bird groundings are observed in very brightly lit areas⁴.

Table 8 Light management options for seabirds.

Management Action	Detail
Implement management actions during the breeding season.	Most seabird species nest during the Austral spring and summer. Light management should be implemented during the nesting and fledgling periods.
Maintain a dark zone between the rookery and the light sources.	Avoid installing lights or manage all outdoor lighting within three kilometres of a seabird rookery ¹⁰² . This is the median distance between nest locations and grounding locations. Avoiding the installation of lights in this zone would reduce the number of grounding birds by 50 per cent.
Turn off lights during fledgling season.	If not possible to extinguish lights, consider curfews, dimming options, or changes on light spectra (preferably towards lights with low blue emissions). Fledglings can be attracted back towards lights on land as they fly out to sea.
Use curfews to manage lighting.	Extinguish lights around the rookery during the fledgling period by 7 pm as fledglings leave their nest early in the evening.
Aim lights downwards and direct them away from nesting areas.	Aim light onto only the surface area requiring illumination. Use shielding to prevent light spill into the atmosphere and outside the footprint of the target area. This action can reduce fallout by 40 per cent ⁴ .
Use flashing/intermittent lights instead of fixed beam.	For example, small red flashing lights can be used to identify an entrance or delineate a pathway.
Use motion sensors to turn lights on only when needed.	Use motion sensors for pedestrian or street lighting within three kilometres of a seabird rookery.
Prevent indoor lighting reaching outdoor environment.	Use fixed window screens or window tinting on fixed windows and skylights to contain light inside buildings.
Manage artificial light on jetties, wharves, marinas, etc.	Fledglings and adults may be attracted to lights on marine facilities and become grounded or collide with infrastructure.
Reduce unnecessary outdoor, deck lighting on all vessels and permanent and floating oil and gas installations in known seabird foraging areas at sea.	Extinguishing outdoor/deck lights when not necessary for human safety and restrict lighting at night to navigation lights. Use block-out blinds on all portholes and windows.

Management Action	Detail
Night fishing should only occur with minimum deck lighting. Avoid shining light directly onto fishing gear in the water. Ensure lighting enables recording of any incidental catch, including by electronic monitoring systems.	Night is between nautical dusk and nautical dawn (as defined in the Nautical Almanac tables for relevant latitude, local time and date). Light on the water at night can attract seabirds to deployed fishing gear increasing the risk of seabird bycatch (i.e. killing or injuring birds). Minimum deck lighting should not breach minimum standards for safety and navigation. Record bird strike or incidental catch and report these data to regulatory authorities.
Avoid shining light directly onto longlines and/or illuminating baits in the water.	Light on the water can attract birds and facilitate the detection and consumption of baits, increasing bycatch in fisheries (i.e. killing or injuring birds). Record bird strike or incidental catch and report these data to regulatory authorities.
Vessels working in seabird foraging areas during breeding season should implement a seabird management plan to prevent seabird landings on the ship, manage birds appropriately and report the interaction.	For example, see the International Association of Antarctica Tour Operators (IAATO) Seabirds Landing on Ships information page.
Use luminaires with spectral content appropriate for the species present.	Consideration should be given to avoid specific wavelengths that are problematic for the species of interest. In general this would include avoiding lights rich in blue light, however, some birds are sensitive to yellow light and other mitigation may be required.
Avoid high intensity light of any colour.	Keep light intensity as low as possible in the vicinity of seabird rookeries and known foraging areas.
Shield gas flares and locate inland and away from seabird rookeries.	Manage gas flare light emissions by: reducing gas flow rates to minimise light emissions; shielding the flame behind a containment structure; containing the pilot flame for flare within shielding; and scheduling maintenance activity requiring flaring outside of shearwater breeding season or during the day.
Minimise flaring on offshore oil and gas production facilities.	Consider reinjecting excess gas instead of flaring, particularly on installations on migratory pathways.

Management Action	Detail
In facilities requiring intermittent night-time inspections, turn on lights only during the time operators are moving around the facility.	Use appropriate wavelength explosion proof LEDs with smart lighting controls. LEDs have no warmup or cool down limitations so can remain off until needed and provide instant light when required for routine nightly inspections or in the event of an emergency.
Ensure industrial site/plant operators use head torches.	Consider providing plant operators with white head torches (explosion proof torches are available) for situations where white light is needed to detect colour correctly or in an emergency.
Supplement facility perimeter security	Perimeter lighting can be operated when
lighting with computer monitored infrared	night-time illumination is necessary but
detection systems.	otherwise remain off.
Tourism operations around seabird colonies	Consideration should be given to educational
should manage torch usage so birds are	signage around seabird colonies where
not disturbed.	tourism visitation is generally unsupervised.
Design and implement a rescue program for grounded birds.	This will not prevent birds grounding, but it is an important management action in the absence of appropriate light design. Rescue programs have proven useful to reducing mortality of seabirds. The program should include documentation and reporting of data about the number and location of rescued
	birds to regulatory authorities.

Table 9 Where all other mitigation options have been exhausted and there is a human safety need for artificial light, this table provides commercial luminaires recommended for use near seabird habitat and those to avoid.

Light type	Suitability for use near seabird habitat
Low Pressure Sodium Vapour	~
High Pressure Sodium Vapour	\
Filtered* LED	\
Filtered* metal halide	✓
Filtered* white LED	✓
LED with appropriate spectral properties for species present	✓
White LED	×
Metal halide	×
White fluorescent	×
Halogen	×
Mercury vapour	X

^{* &#}x27;Filtered' means this type of luminaire can be used *only* if a filter is applied to remove the problematic wavelength light.

Appendix H - Migratory Shorebirds

There is evidence that night-time lighting of migratory shorebird foraging areas may benefit the birds by allowing greater visual foraging opportunities. However, where nocturnal roosts are artificially illuminated, shorebirds may be displaced, potentially reducing their local abundance if the energetic cost to travel between suitable nocturnal roosts and foraging sites is too great.

Artificial lighting could also act as an ecological trap by drawing migratory shorebirds to foraging areas with increased predation risk. Overall the effect of artificial light on migratory shorebirds remains understudied and consequently any assessment should adopt the precautionary principle and manage potential effects from light unless demonstrated otherwise.

Shorebirds, also known as waders, inhabit the shorelines of coasts and inland water bodies for most of their lives. Most are from two taxonomic families, the Sandpipers (*Scolopacidae*) and the Plovers (*Charadriidae*). They are generally distinguished by their relatively long legs, often long bills, and most importantly, their associations with wetlands at some stages of their annual cycles¹³⁰.

At least 215 shorebird species have been described¹³¹ and their characteristics include long life-spans, but low reproductive output, and they are highly migratory¹³². Many species have special bills for feeding on different prey in wetlands. Their bills contain sensory organs to detect the vibrations of prey inside the substrate. Shorebirds are often gregarious during the non-breeding season, which is perhaps a mechanism to reduce individual predation risk¹³³ and increase the chance of locating profitable feeding patches¹³². About 62 per cent of shorebird species migrate. Some are transoceanic and transcontinental long-distance migrants capable of flying up to eight days non-stop, with examples of individuals covering distances up to 11.500 km¹³⁴.



Figure 29 Curlew Sandpipers. Photo: Brian Furby.

Conservation Status

Migratory shorebird species in Australia are protected under international treaties and agreements including the *Convention on the Conservation of Migratory Species of Wild Animals* (CMS, Bonn Convention), the Ramsar Convention on Wetlands, and through the East Asian - Australasian Flyway Partnership (the Flyway Partnership). The Australian Government has bilateral migratory bird agreements with Japan (Japan-Australia Migratory Bird Agreement, CAMBA), and the Republic of Korea (Republic of Korea-Australia Migratory Bird Agreement, ROKAMBA). In Australia, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) gives effect to these international obligations. Many species are also protected under state and territory environmental legislation.

There are 37 species listed as threatened and/or migratory species under the EPBC Act and are hence Matters of National Environmental Significance (MNES) in Australia. At least 56 trans-equatorial species belonging to three families: Pratincoles (*Glareolidae*), Plovers (*Charadriidae*) and Sandpipers (*Scolopacidae*) have been recorded in Australia¹³⁵. Of these, 36 species and one non-trans-equatorial species are listed under the EPBC Act. Three species (and one subspecies) of migratory shorebird are listed as "Critically Endangered", two species as "Endangered" and one species (and one subspecies) as "Vulnerable" under the EPBC Act.

These Guidelines should be read in conjunction with EPBC Act <u>Policy Statement 3.21 Industry</u> guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species¹³⁶.

Distribution

Migratory shorebirds are found in all states and territories, and are found in Australia throughout the year. Peak abundance occurs between August and April, however, sexually immature birds defer their northward migration for several years and can be found in Australia during the Austral winter months.

They are predominantly associated with wetland habitats including estuaries and intertidal wetlands, coastal beaches, saltmarsh, mangrove fringes, wet grasslands, and ephemeral freshwater and salt lakes in inland Australia. Shorebirds are also opportunists and exploit artificial habitats such as pastures, tilled land, sewage treatment plants, irrigation canals, sports fields and golf courses. Of 397 internationally recognised sites considered important for migratory shorebirds along the East Asian–Australasian Flyway, 118 are found in Australia¹³⁷.

Important habitat for migratory shorebirds

For the purposes of these Guidelines, Important Habitat for migratory shorebirds includes all areas that are recognised, or eligible for recognition as nationally or internationally important habitat. These habitats are defined in *EPBC Act Policy Statement 3.21 Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species*¹³⁶ and the *Wildlife Conservation Plan for Migratory Shorebirds (2015)*¹³⁸.

- **Internationally important** habitat are those wetlands that support one per cent of the individuals in a population of one species or subspecies; or a total abundance of at least 20 000 waterbirds.
- Nationally important habitat are those wetlands that support 0.1 per cent of the flyway population of a single species; 2000 migratory shorebirds; or 15 migratory shorebird species.

Effects of Artificial Light on Migratory Shorebirds

Artificial light can disorient flying birds, affect stopover selection, and cause their death through collision with infrastructure¹³⁹. Birds may starve as a result of disruption to foraging, hampering their ability to prepare for breeding or migration. However, artificial light may help some species, particularly nocturnally foraging shorebirds as they may have greater access to food^{140,141}.

Annual cycle and habitat use in migratory shorebirds

Migratory shorebird species listed on the EPBC Act breed in the northern hemisphere, except the Double-banded Plover (*Charadrius bicinctus*), which breeds in New Zealand. Many of the northern hemisphere breeders nest in the arctic or sub-arctic tundra during the boreal summer (May – July) and spend the non-breeding season (August – April) in Australia or New Zealand. They usually spend five to six months on the non-breeding grounds, where they complete their basic (non-breeding plumage) moult, and later commence a pre-alternate (breeding plumage) moult prior to their northward migration. While undergoing their pre-alternate moult, shorebirds also consume an increased amount of prey to increase their fat storages, permitting them to travel greater distances between refuelling sites. Shorebirds refuel in East Asia during their northward migration, but during southward migration, some individuals travel across the Pacific, briefly stopping on islands to refuel. Shorebirds migrating across the Pacific typically have non-breeding grounds in Eastern Australia and New Zealand. Shorebirds returning to non-breeding grounds in Western and Northern Australia, once again pass through East Asia on their southward journey.

A common feature for many birds is their reliance on inland or coastal wetland habitats at some stages in their annual life-histories. In many migratory shorebirds, despite the vast distances they cover every year, they spend most of their time on coastal wetlands except for the two months of nesting when they use the tundra or taiga habitats. However, productive coastal wetland is localised, which means large proportions, or even entire populations, gather at a single site during stopover or non-breeding season. The Great Knot and Greater Sand Plover, is an example, with 40 per cent and 57 per cent respectively of their entire flyway population spends their non-breeding season at Eighty-Mile Beach in Western Australia¹³⁷. Wetlands commonly used include coastal mudflats and sandflats, sandy beaches, saltmarsh and mangrove fringes, ephemeral freshwater wetlands and damp grasslands.

The coastal intertidal wetlands favoured by many migratory shorebirds are a dynamic ecosystem strongly influenced by the tidal cycle. This is part of the critical transition zones between land, freshwater habitats, and the sea. Throughout the East Asian-Australasian Flyway, intertidal wetlands have been susceptible to heavy modification for the development of farmlands, aquaculture, salt mining, ports and industry.

Daily activity pattern and habitat use of migratory shorebirds

The daily activity pattern of shorebirds at coastal wetlands is not only determined by daylight, but also tidal cycle¹³¹. They feed on the exposed tidal wetland during low tide and roost during high tide as their feeding areas are inundated. The birds feed during both the day and night, especially in the lead-up to migration^{142,143}.

Roost site selection can vary between day and night. Shorebirds often use diurnal roosts nearest to the intertidal feeding area and may travel further to use safer nocturnal roosts – but at greater energetic cost^{144,145}. Roosting habitat can also vary between day and night. For example, the Dunlin (*Calidris alpina*), in California, had a greater use of pasture at night (which tended to be less affected by artificial light and disturbances) and relied less on their diurnal roosts of islands and artificial structures such as riprap and water pipes¹⁴⁶.

Foraging behaviours differ between day and night, and between seasons^{143,147}. Shorebirds typically show a preference for daytime foraging, which occurs over a greater area, and at a faster rate, than nocturnal foraging¹⁴³. Increased prey availability, avoidance of daytime predation and disturbance are some reasons for nocturnal foraging¹⁴⁷. Two basic types of foraging strategies have been described: visual and tactile (touch-based) foraging, with some species switching between these strategies. Tactile feeders such as sandpipers can use sensory organs in their bills to detect prey inside the substrate in the dark and can switch to visual foraging strategy during moonlit nights to take advantage of the moonlight¹⁴⁷. Visual feeders such as plovers, have high densities of photo receptors, especially the dark adapted rods, which allow foraging under low light conditions^{147,148}. Plovers have been shown to employ a visual foraging strategy during both the day and night, whereas sandpipers can shift from visual foraging during the day, to tactile foraging at night, likely due to less efficient night vision¹⁴³.

Vision in migratory shorebirds

There is a dearth of literature on light perception in migratory shorebirds with most studies confined to the role of vision in foraging and nothing on the physiology of shorebirds' eyes or their response to different wavelengths of light.

Birds in general are known to be attracted to, and disoriented by, artificial lights. This could be a result of being blinded by the intensity of light that bleaches visual pigments and therefore failing to see visual details¹⁴⁹ or interference with the magnetic compass used by the birds during migration¹⁵⁰. An attraction to conventional artificial night lightings may lead to other adverse consequences such as reducing fuel stores, delaying migration, increasing the chance of collision and thereby, injury and death¹⁵¹.

Gulls and terns (*Anous minutus, Anous tenuirostris* and *Gygis alba*) share visual pigments that give them vision in the short wavelength ultraviolet region of the spectrum in addition to the violet (blue) region of the spectrum. However, this sensitivity to very short wavelength light is rare in seabirds, which are characterised by photopic vision (daylight adapted) sensitivity in the mid to long wavelength range of the visible spectrum (590 – 740 nm, orange to red) while their

scotopic (low light, dark adapted) vision is more sensitive to short wavelengths of light (380 - 485 nm, violet – blue)¹¹⁹.

Biological impacts on migratory shorebirds

The exponential increase in the use of artificial light over the past decade means ecological light pollution has become a global issue⁶⁰. Although the extent to which intertidal ecosystems are being affected is unclear¹⁵², several studies have assessed both the positive and negative aspects of light pollution on migratory shorebirds.

Artificial lighting has been shown to influence the nocturnal foraging behaviour in shorebirds^{141,153}. Santos et al (2010) demonstrated three species of plover (Common Ringed Plover *Charadrius hiaticula*, Kentish Plover *Charadrius alexandrina* and Grey Plover *Pluvialis squatarola*) and two species of sandpiper (Dunlin *Calidris alpina* and Common Redshank *Tringa totantus*) improved foraging success by exploiting sites where streetlights provided extra illumination¹⁵³.

Similarly, Dwyer et al (2013) showed artificial light generated from a large industrial site significantly altered the foraging strategy of Common Redshanks within an estuary. The greater nocturnal illumination of the estuary from the industrial site allowed the birds to forage for extended periods using a visual foraging strategy, which was deemed a more effective foraging behaviour when compared to tactile foraging¹⁴¹.

Although shorebirds may be attracted to foraging areas with greater nocturnal illumination, artificial light near nocturnal roosting sites may displace the birds. Rogers et al (2006) studied the nocturnal roosting habits of shorebirds in north-western Australia, and suggested nocturnal roost sites with low exposure to artificial lighting (e.g. streetlights and traffic) were selected, and where the risk of predation was perceived to be low¹⁴⁰. The study also found nocturnal roosts spatially differed from diurnal roosts and required increased energetic cost to access as the distance between nocturnal roosts and foraging areas was greater than the distance between diurnal roost sites and the same foraging areas¹⁴⁵. The overall density of shorebirds in suitable foraging areas is expected to decline with increased distance to the nearest roost, due to the greater energetic cost travelling between areas^{144,145}. The artificial illumination (or lack thereof) of nocturnal roost sites is therefore likely to significantly influence the abundance of shorebirds in nearby foraging areas.

Intermittent or flashing lights could flush out the shorebirds and force them to leave the area, especially if the light is persistent (Choi pers. obs. 2018, Straw pers. comm. 2018).

Artificial light can affect birds in flight. Not only can bright light attract airborne migrants¹⁵⁴, but artificial light can also affect stop-over selection in long distance migrators which can impact on successful migration and decrease fitness¹³⁹. Similarly, Roncini et al (2015) reported on interactions between offshore oil and gas platforms and birds in the North Sea and found these were likely to include migratory shorebirds. The review estimated that hundreds of thousands of birds were killed each year in these interactions and light was the likely cause. The review recognised the gaps in monitoring and concluded that impacts are likely to be region, species and platform specific¹⁰⁸.

Environmental Impact Assessment of Artificial Light on Migratory Shorebirds

As a minimum, <u>Best Practice Lighting Design</u> should be implemented on infrastructure with externally visible artificial lighting. Where there is important habitat for migratory shorebirds within 20 km of a project, consideration should be given as to whether that light is likely to have an effect on those birds. The following sections step through the framework for managing artificial light, with specific consideration for migratory shorebirds. The 20 km buffer is based on a precautionary approach that sky glow can cause a change in behaviour in other species up to 15 km away²⁸.

Where artificial light is likely to affect migratory shorebirds, consideration should be given to mitigation measures at the earliest point in a project and used to inform the design phase.

It is important to recognise the spatial and temporal characteristics of migratory corridors for some migratory shorebird species. Species typically use established migratory pathways at predictable times and artificial light intersecting with an overhead migratory pathway should be assessed in the same way as for ground-based populations.

Associated guidance

- Wildlife Conservation Plan for Migratory Shorebirds (2015)
- Approved conservation advice

Qualified personnel

Lighting design/management and the EIA process should be undertaken by appropriately qualified personnel. Plans should be developed and reviewed by appropriately qualified lighting practitioners who should consult with an appropriately trained marine ornithologist or ecologist. People advising on the development of a lighting management plan, or the preparation of reports assessing the effect of artificial light on migratory shorebirds, should have relevant qualifications equivalent to a tertiary education in ornithology, or equivalent experience as evidenced by peer reviewed publications in the last five years on a relevant topic, or other relevant experience.

Step 1: Describe the project lighting

The information collated during this step should consider the biological impact of light on migratory shorebirds. They can be affected by light when foraging or migrating at night. Artificial light at night may also affect their selection of roost site. The location and light source (both direct and sky glow) in relation to feeding and resting areas should be considered, depending on whether the birds are active or resting at night. Shorebirds are sensitive to short wavelength (blue/violet) light with some species able to detect UV light. However, the intensity of lights may be more important than colour.

Step 2: Describe the migratory shorebird population and behaviour

The species, and behaviour of shorebirds in the area of interest should be described. This should include the conservation status of the species; abundance of birds; how widespread/localised is the population; the migratory corridor location and timing or usage; the regional importance of the population; the number of birds in the area in different seasons; and their night-time behaviour (resting or foraging).

Relevant shorebird information can be found in the *EPBC Act Policy Statement 3.21 Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species*¹³⁶, *Wildlife Conservation Plan for Migratory Shorebirds (2015)*¹³⁸, the Protected Matters Search Tool, the National Conservation Values Atlas, state and territory listed species information, scientific literature, and local/Indigenous knowledge.

Where there is insufficient data to understand the population importance or demographics, or where it is necessary to document existing shorebird behaviour, field surveys and biological monitoring may be necessary.

Biological monitoring of migratory shorebirds

Monitoring associated with a project should be developed, overseen and results interpreted by appropriately <u>qualified biologists</u> to ensure reliability of the data.

The objective is to collect data on the abundance of birds and their normal behaviour. Please see <u>Survey guidelines for Australia's threatened birds</u>¹²⁸.

The data will be used to inform the EIA and assess whether mitigation measures are successful. Suggested minimum monitoring parameters (what is measured) and techniques (how to measure them) are summarised in Table 10.

Table 10 Recommended minimum biological information necessary to assess the importance of a migratory shorebird population. Note: the information in this table is not prescriptive and should be assessed on a case-by-case basis.

Target Age Class	Survey Effort	Duration	Reference
Adult	Four surveys of roosting birds (one in December, two in January and one in February), with an additional three to four surveys within the same neap-spring tide cycle is recommended.	Two hours before and after predicted high tide.	Industry quidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species ¹³⁶
Immature	One to two surveys on roosting birds between mid-May and mid-July.	Two hours before and after predicted high tide.	

Monitoring migratory shorebird populations

- Monitor the population (during different seasons) to establish a benchmark for assessing abundance before, during and after construction, and during operations to detect projectrelated change.
- Quantify the diurnal and nocturnal habitat use and movement in relation to tidal cycle (both high and low tides during the neap and spring tide cycles) in the area under baseline conditions to compare with light-affected conditions during construction and operations.
- Measure nocturnal light levels at foraging sites and nocturnal roost sites before and after the construction period of a project.
- Monitor nocturnal roost sites using acoustic recording devices and/or infrared cameras
 to determine nocturnal roost site use following the introduction of artificial light.

As a minimum, qualitative descriptive data on visible light types, location and directivity should also be collected at the same time as the biological data. Handheld camera images can help to describe the light. Quantitative data on existing sky glow should be collected, if possible, in a biologically meaningful way, recognising the technical difficulties in obtaining these data. See Measuring Biologically Relevant Light for a review.

Step 3: Risk assessment

The objective of these Guidelines is that light should be managed so that shorebirds are not disrupted within or displaced from important habitat and are able to undertake critical behaviours such as foraging, roosting and dispersal. These consequences should be considered in the risk assessment process. At important shorebird habitats, roosting and foraging numbers should remain constant and foraging birds should not be startled or at increased risk from predators as a result of increased illumination.

The assessment should consider the existing light environment, the proposed lighting design and mitigation/management, the behaviour of shorebirds at the location, and how the birds perceive light. This should include wavelength and intensity information and perspective. To understand how/whether shorebirds are likely to see light, a site visit should be made at night and the area viewed from the intertidal flats and roosting areas. Similarly, consideration should be given to how shorebirds will see light when in flight and along flyways during migration periods.

The type and number of artificial lights should then be considered to assess whether the birds are likely to perceive the light, and the possible consequences of light on their behaviour.

Step 4: Light management plan

This plan should include all relevant project information (Step 1) and biological information (Step 2). It should outline proposed mitigation. For a range of shorebird specific mitigation measures see the Migratory Shorebird Light Mitigation Toolbox below. The plan should also outline the type and schedule for biological and light monitoring to ensure mitigation is meeting the objectives of the plan and triggers for revisiting the risk assessment phase of the EIA. The plan should outline contingency options if biological and light monitoring or compliance audits indicate that mitigation is not meeting the objectives of the plan (e.g. light is visible on intertidal flats, shorebirds cease using resting areas, or birds are grounding or colliding with fixed or floating infrastructure, or migrating birds cease using a migratory corridor).

Step 5: Biological and light monitoring and auditing

The success of the plan should be confirmed through monitoring and compliance auditing. The results should be used to facilitate an adaptive management approach for continuous improvement.

Biological monitoring is described in <u>Step 2: Describe the Migratory Shorebird Population</u>. Concurrent light monitoring should be undertaken and interpreted in the context of how the birds perceive light and within the limitations of monitoring techniques described in <u>Measuring Biologically Relevant Light</u>. <u>Auditing</u>, as described in the plan, should be undertaken.

Review

The EIA should incorporate a continuous improvement review process that allows for upgraded mitigations, changes to procedures and renewal of the light management plan.

Migratory Shorebird Light Mitigation Toolbox

All projects should incorporate the <u>Best Practice Light Design Principles</u>. Appropriate lighting controls and light impact mitigation will be site/project and species specific. Table 11 provides a toolbox of options that would be implemented in addition to the six Best Practice Light Design principles. Not all mitigation options will be relevant for all situations. Table 12 provides a suggested list of light types appropriate for use near rookeries or roosting sites and those to avoid.

Table 11 Light management actions specific to migratory shorebirds.

Management Action	Detail
Implement actions when birds are likely to be present. This includes peak migration periods (flyway locations).	Birds are found in Australia year-round. Major movements along coastlines take place between March and April, and August and November. Between August and April, shorebird abundance peaks. Smaller numbers are found from April to August.
No light source should be directly visible from foraging or nocturnal roost habitats, or from migratory pathways.	Any light that is directly visible to a person standing in foraging or nocturnal roost habitats will potentially be visible to a shorebird and should be modified to prevent it being seen. Similarly, lights should be shielded such that they are not visible from the sky.
Do not install fixed light sources in nocturnal foraging or roost areas.	Installing light sources (e.g. light poles) within shorebird habitat may permanently reduce the available area for foraging or roosting and provide vantage points for predators (e.g. raptors) during the day.

Management Action	Detail
Prevent mobile light sources shining into nocturnal foraging and roost habitat.	The light from mobile sources such as mobile lighting towers, head torches or vehicle headlights should be prevented from aiming into nocturnal foraging or roost areas, as this can cause immediate disturbance.
Maintain a natural barrier (e.g. dune and/or vegetation screen) between nocturnal foraging and roost areas, and sources of artificial light.	Reducing the exposure of shorebirds to artificial light will reduce the risk of predation and disturbance.
Maintain a dark zone between nocturnal foraging and roost habitats and sources of artificial lights.	Creating a dark zone between artificial lights and shorebird habitat will reduce disturbances to shorebirds.
Use curfews to manage lighting near nocturnal foraging and roosting areas in coastal habitats. For example, manage artificial lights using motion sensors and timers from 7pm until dawn.	Curfews should also consider the tidal cycle if the artificial lighting is located coastally, e.g. extinguish lighting from two hours before high tide, until two hours after high tide, while shorebirds are potentially roosting.
Use of flashing/intermittent lights instead of fixed beam.	For example, small red flashing lights can be used to identify an entrance or delineate a pathway. The timing of when lights flash must follow a predictable, well-spaced pattern.
Use motion sensors to turn lights on only when needed.	For example, installing motion-activated pedestrian lighting within 500 m of nocturnal foraging or roost areas may reduce the amount of time the habitat is exposed to artificial light.
Manage artificial light on jetties and marinas.	Shorebirds will often roost on breakwaters and jetties, so allowing dark areas in such places may provide a safe area for shorebirds to roost.
Reduce deck lighting to minimum required for human safety on vessels moored near nocturnal foraging and roost areas, and those operating offshore.	Extinguish deck lights when not necessary and restrict lighting at night to navigation lights only. Offshore vessels should direct light inwards, particularly during the migration periods when shorebirds are potentially overhead. Record bird strike or incidental capture and report these interactions to regulatory authorities.

Management Action	Detail
Minimise night-time flaring on offshore oil and gas production facilities.	Consider reinjecting excess gas instead of flaring. Schedule maintenance flaring during daylight hours.
	Record bird strike or incidental capture and report these interactions to regulatory authorities.
Use luminaires with spectral content appropriate for the species present.	Consideration should be given to avoid specific wavelengths that are problematic for the species of interest. In general this would include avoiding lights rich in blue light, however, some birds are sensitive to yellow light and other mitigation may be required.
Avoid high intensity light of any colour.	Keeping light intensity as low as possible in the vicinity of nocturnal foraging and roost areas will minimise impact.
Prevent indoor lighting reaching migratory shorebird habitat.	Use fixed window screens or window tinting on fixed windows and skylights to contain light inside buildings.
In facilities requiring intermittent night inspections, turn lights on only during the time operators are moving around the facility.	Use appropriate wavelength, explosion proof LEDs with smart lighting controls and/or motions sensors. LEDs have no warmup or cool down limitations so can remain off until needed and provide instant light when required for routine nightly inspections or in the event of an emergency.
Industrial site/plant operators to use personal head torches.	Consider providing plant operators with white head torches (explosion proof torches are available) for situations where white light is needed to detect colour correctly, or in the event of an emergency. Operators should avoid shining light across nocturnal foraging or roost areas as this can cause disturbance.
Supplement facility perimeter security lighting with computer monitored infrared detection systems.	Perimeter lighting can be operated when night- time illumination is necessary but remain off at other times.

Table 12 Where all other mitigation options have been exhausted and there is a human safety need for artificial light, the following table provides commercial luminaires recommended for use near migratory shorebird habitat and those to avoid.

Light type	Suitability for use near migratory shorebird habitat
Low Pressure Sodium Vapour	
High Pressure Sodium Vapour	~
Filtered* LED	✓
Filtered* metal halide	✓
Filtered* white LED	✓
LED with appropriate spectral properties for species present	✓
White LED	×
Metal halide	×
White fluorescent	×
Halogen	×
Mercury vapour	×

^{* &#}x27;Filtered' means this type of luminaire can be used *only* if a filter is applied to remove the problematic wavelength light.

Glossary

ACAP is the Agreement on the Conservation of Albatrosses and Petrels.

ALAN is Artificial Light At Night and refers to artificial light outside that is visible at night.

Artificial light is composed of visible light as well as some ultraviolet (UV) and infrared (IR) radiation that is derived from an anthropogenic source.

Artificial sky glow is the part of the sky glow that is attributable to human-made sources of light (see also **sky glow**).

Baffle is an opaque or translucent element to shield a light source from direct view, or to prevent light reflecting from a surface like a wall.

Biologically Important Area (BIA) is a spatially defined area where aggregations of individuals of a species are known to display biologically important behaviour, such as breeding, feeding, resting or migration.

Biologically relevant is an approach, interpretation or outcome that considers either the species to which it refers, or factors in biological considerations in its approach.

Brightness is the strength of the visual sensation on the naked eye when lit surfaces are viewed.

Bulb is the source of electric light and is a component of a luminaire.

CAMBA is the *China-Australia Migratory Bird Agreement*.

Candela (cd) (photometric term) is a photometric unit of illumination that measures the amount of light emitted in the range of a (three-dimensional) angular span. Luminance is typically measured in candela per square meter (cd/m2).

Charge Coupled Device (CCD) is the sensor technology used in digital cameras. It converts captured light into digital data (images) which can be processed to produce quantifiable data.

CIE is the Commission Internationale de l'Eclairage (International Light Commission), which sets most international lighting standards.

CMS is the *Convention on the Conservation of Migratory Species of Wild Animals* or the Bonn Convention.

Colour temperature is the perceived colour of a light source ranging from cool (blue) to warm (yellow), measured in Kelvin (K). A low correlated colour temperature such as 2500K will have a warm appearance while 6500K will appear cold.

Correlated Colour Temperature (CCT) is a simplified way to characterize the spectral properties of a light source and is correlated to the response of the human eye. Colour temperature is expressed in Kelvin (K).

Cumulative light refers to increased sky brightness due to light emissions contributions from multiple light producers. Measured as **sky glow**.

Disorientation refers to any species moving in a confused manner e.g. a turtle hatchling circling and unable to find the ocean.

EEZ is the Australian Exclusive Economic Zone.

EIA is an environmental impact assessment process.

Electromagnetic radiation is a kind of radiation including visible light, radio waves, gamma rays, and X-rays, in which electric and magnetic fields vary simultaneously.

EPBC Act is the Commonwealth Environment Protection and Biodiversity Act 1999.

Fallout refers to birds that collide with structures when disoriented.

Footcandle (fc or ftc) (photometric term) is a unit of light intensity used in America, it is based on the brightness of one candle at a distance of one foot. Measured in lumens per square foot, one ftc is equal to approximately 10.7639 lux. This is not an appropriate measure for understanding how animals perceive light.

FMP refers to the Field Management Program.

Genetic stock is a discrete grouping of a species by genetic relatedness. Management of the species may be undertaken on a genetic stock basis because each genetic stock represents a unique evolutionary history, which if lost cannot be replaced.

Grounding refers to events where birds fail to take their first flight from the nest or collide with a structure (adults and juveniles) and are unable to launch back into the air.

Habitat critical to the survival of the species is an area defined in a Recovery Plan for a listed threatened species that provides for the recovery of the species.

Horizontal plane, in relation to the light fitting, means the horizontal plane passing through the centre of the light source (for example the bulb) of the light fitting.

HPS is a high-pressure sodium lamp that produces a characteristic wavelength near 589 nm.

IAATO is the International Association of Antarctica Tour Operators.

Illuminance is a **photometric** measure of the total luminous flux incident on a surface, per unit area. It is a measure of how much the incident light illuminates the surface, wavelength-weighted to correlate with human brightness perception. Illuminance is measured in **lux** (lx) or equivalently in **lumens** per square metre (lm/m²).

Important habitats are those areas that are necessary for an ecologically significant proportion of a listed species to undertake important activities such as foraging, breeding, roosting or dispersal. Important habitats will be species specific and will depend on their listing status. It will include areas that have been designated as **Habitat Critical to Survival** of a threatened species.

Incandescent bulb is a bulb that provides light by a filament heated to a high temperature by electric current.

Intensity is the amount of energy or light in a given direction.

Internationally important refers to wetland habitat for migratory shorebirds that support one per cent of the individuals in a population of one species or subspecies; or a total abundance of at least 20 000 waterbirds.

IR is infrared radiation and represents a band of the electromagnetic spectrum with wavelength from 700 nm to 1 mm.

Irradiance (**radiometric term**) is a measurement of radiant flux at or on a known surface area, W/m². This measure is appropriate for understanding animal perception of light.

IUCN is the International Union for the Conservation of Nature.

JAMBA is the *Japan-Australia Migratory Bird Agreement*.

Kelvin (K) is the absolute unit for temperature and is equal in magnitude to one degree Celsius. Kelvin is typically used to describe **Correlated Colour Temperature (CCT)**.

Lamp is a generic term for a source of optical radiation (light), often called a "bulb" or "tube". Examples include incandescent, fluorescent, high-intensity discharge (HID) lamps, and low-pressure sodium (LPS) lamps, as well as light-emitting diode (LED) modules and arrays.

LED is a light-emitting diode, or a semiconductor light source that emits light when current flows through it.

Light fitting (luminaire) is the complete lighting unit. It includes the bulb, reflector (mirror) or refractor (lens), the ballast, housing and the attached parts.

Light is the radiant energy that is visible to humans and animals. Light stimulates receptors in the visual system and those signals are interpreted by the brain making things visible.

Light pollution is the brightening of the night sky caused by artificial light.

Light spill is the light that falls outside the boundaries of the object or area intended to be lit. Spill light serves no purpose and if directed above the horizontal plane, contributes directly to **artificial sky glow**. Also called spill light, obtrusive light or light trespass.

Lighting controls are devices used for either turning lights on and off, or for dimming.

Listed species are those species listed under the **EPBC Act**, or under relevant state or territory environment/conservation legislation. Species may be listed as threatened, migratory or part of a listed threatened ecological community.

LNG is liquefied natural gas.

LPS is a low pressure sodium lamp that produces a characteristic wavelength near 589 nm.

Luminaire refers to the complete lighting unit (fixture or light fitting), consisting of a lamp, or lamps and ballast(s) (when applicable), together with the parts designed to distribute the light (reflector, lens, diffuser), to position and protect the lamps, and to connect the lamps to the power supply.

Luminous flux is the total light emitted by a bulb in all directions which is measured in lumen.

Lumen (Im) (photometric term) is the unit of **luminous flux**, a measure of the total quantity of visible light emitted by a source per unit of time. This is a **photometric** unit, weighted to the

sensitivity of the human eye. If a light source emits one **candela** of luminous intensity uniformly across a solid angle of one steradian, the total **luminous flux** emitted into that angle is one lumen.

Luminance (cd/m²) is a **photometric** measure of the luminous intensity per unit area of light travelling in a given direction, wavelength-weighted to correlate with human brightness perception. Luminance is measured in candela per square metre (cd/m²). Luminance and **illuminance** ("**Lux**") are related, in the sense that luminance is a measure of light emitted from a surface (either because of reflection or because it's a light-emitting surface), and illuminance is a measure for light hitting a surface.

Lux (Ix) is a **photometric** measure of illumination of a surface. The difference between lux and **candela** is that lux measures the illumination of a surface, instead of that of an angle. This is not an appropriate measure for understanding how animals perceive light.

Magnitudes per square arc second (magnitudes/arcsec²) (radiometric term) is a term used in astronomy to measure sky brightness within an area of the sky that has an angular area of one second by one second. The term magnitudes per square arc second means that the brightness in magnitudes is spread out over a square arcsecond of the sky. Each magnitude lower (numerically) means just over 2.5 times more light is coming from a given patch of sky. A change of 5 magnitudes/arcsec² means the sky is 100x brighter.

Misorientation occurs when a species moves in the wrong direction, e.g. when a turtle hatchling moves toward a light and away from the ocean.

MNES are Matters of National Environmental Significance as defined by the **EPBC Act** and include listed threatened and listed migratory species.

Mounting height is the height of the fitting or bulb above the ground.

Nationally important habitat are those wetlands that support 0.1 per cent of the flyway population of a single species of migratory shorebird; or 2 000 migratory shorebirds; or 15 migratory shorebird species.

Natural sky glow is that part of the **sky glow** that is attributable to radiation from celestial sources and luminescent processes in the Earth's upper atmosphere.

Outdoor lighting is the night-time illumination of an area by any form of outside light fitting (luminaire).

Outside light fitting means a light fitting (luminaire) that is attached or fixed outside or on the exterior of a building or structure, whether temporary or permanent.

Photocells are sensors that turn lights on and off in response to natural light levels. Some advanced mode can slowly dim or increase the lighting (see also **smart controls**).

Photometric terms refer to measurements of light that are weighted to the sensitivity of the human eye. They are not include the shortest or the longest wavelengths of the visible spectrum and so are not appropriate for understanding the full extent of how animals perceive light.

Photometry is a subset of radiometry that is the measurement of light as it is weighted to the sensitivity of the human eye.

Point source is light from an unshielded lamp (i.e. directly visible).

Radiance (radiometric term) is a measure of radiant intensity emitted from a unit area of a source, measured in W/m².

Radiant flux/power (radiometric term) is expressed in watts (W). It is the total optical power of a light source. It is the radiant energy emitted, reflected, transmitted or received, per unit time. Sometimes called radiant power, and it can also be defined as the rate of flow of radiant energy.

Radiant intensity (**radiometric term**) is the amount of flux emitted through a known solid angle, W/steradian, and has a directional quantity.

Radiometric terms refer to light measured across the entire visible spectrum (not weighted to the human eye). These are appropriate for understanding how animals perceive light.

Radiometry is the measurement of all wavelengths across the entire visible spectrum (not weighted to the human eye).

Reflected light is light that bounces off a surface. Light coloured surfaces reflect more light than darker coloured surfaces.

ROKAMBA is the *Republic of Korea-Australia Migratory Bird Agreement*.

Sensitive receptor is any living organism that has increased sensitivity or exposure to environmental contaminants that may have adverse effects.

Shielded light fitting is a physical barrier used to limit or modify the light paths from a luminaire.

Sky glow is the brightness of the night sky caused by the cumulative impact of reflected radiation (usually visible light), scattered from the constituents of the atmosphere in the direction of observation. Sky glow comprises two separate components: natural sky glow and artificial sky glow (see also **natural sky glow** and **artificial sky glow**).

Smart controls are devices to vary the intensity or duration of operation of lighting, such as motion sensors, timers and dimmers used in concert with outdoor lighting equipment.

Spectral power curve provides a representation of the relative presence of each wavelength emitted from a light source.

Task lighting is used to provide direct light for specific activities without illuminating the entire area or object.

Upward Light Ratio (ULR) is the proportion of the light (flux) emitted from a **luminaire** or installation that is emitted at and above the horizontal, excluding reflected light when the luminaire is mounted in its parallel position. ULR is the upward flux/total flux from the luminaire.

UV is ultraviolet light and represents a band of the electromagnetic spectrum with wavelength from 10 nm to 400 nm.

Visible light transmittance is the proportion of light transmitted by window glass which is recorded as either TVw (visible transmittance of the window) and is reported as a

dimensionless value between 0 and 1, or 0 and 100%. A low TVw (e.g. < 30%) indicates little light is transmitted through the glass while higher TVw values are associated with increasing light transmittance. While the VLT/Tvw rating varies between 0 and 1, most double glazed windows rate between 0.3 and 0.7, which means that between 30% and 70% of the available light passes through the window.

W/m² is a measure of radiance, the radiant intensity emitted from a unit area of a source (see **radiance**). This is an appropriate measure for understanding how animals perceive light.

Wattage is the amount of electricity needed to light a bulb. Generally, the higher the wattage, the more **lumens** are produced. Higher wattage and more lumens give a brighter light.

Wavelength as light travels through space it turns a wave with evenly spaces peaks and troughs. The distance between the peaks (or the troughs) is called the wavelength of the light. Ultraviolet and blue light are examples of short wavelength light while red and infrared light is long wavelength light. The energy of light is linked to the wavelength; short wavelength light has much higher energy than long wavelength light.

Zenith is an imaginary point directly above a location, on the imaginary celestial sphere.

References

- Kyba CCM, Kuester T, Sánchez de Miguel A, Baugh K, Jechow A, Hölker F, Bennie J, Elvidge CD, Gaston KJ & Guanter L (2017) Artificially lit surface of Earth at night increasing in radiance and extent. Science Advances 3:e1701528.
- 2. Russart KLG & Nelson RJ (2018) Artificial light at night alters behavior in laboratory and wild animals. *JEZ-A Ecological and Intergrative Physiology* 329(8-9):401-408.
- 3. Witherington B & Martin RE (2003) *Understanding, Assessing, and Resolving Light-Pollution Problems on Sea Turtle Nesting Beaches* Florida Fish and Wildlife Conservation Commission FMRI Technical Report TR-2: Jensen Beach, Florida. 84p.
- 4. Rodríguez A, Holmes ND, Ryan PG, Wilson K-J, Faulquier L, Murillo Y, Raine AF, Penniman J, Neves V, Rodríguez B, Negro JJ, Chiaradia A, Dann P, Anderson T, Metzger B, Shirai M, Deppe L, Wheeler J, Hodum P, Gouveia C, Carmo V, Carreira GP, Delgado-Alburqueque L, Guerra-Correa C, Couzi F-X, Travers M & Le Corre M (2017) A global review of seabird mortality caused by land-based artificial lights. *Conservation Biology* 31:986-1001.
- 5. Robert KA, Lesku JA, Partecke J & Chambers B (2015) Artificial light at night desynchronizes strictly seasonal reproduction in a wild mammal. *Proceedings of the Royal Society B* 282:20151745.
- 6. Fobert EK, Burke da Silva K & Swearer SE (2019) Artificial light at night causes reproductive failure in clownfish. *Biology Letters* 15:e20190272.
- 7. Rich C & Longcore T, eds. (2006) *Ecological consequences of artificial night lighting*. Island Press: Washington DC. 480p.
- 8. Campos SMC (2017) The impact of artificial lighting on nature. In *6th SENAC MEETING of Integrated Knowledge Senac Sorocaba*.
- 9. Reed JR (1986) *Seabird vision: Spectral sensitivity and light-attraction behavior* University of Wisconsin: Madison, Wisconsin. 190p.
- 10. Newman EA & Hartline PH (1981) Integration of visual and infrared information to biomodal neurons in the rattlesnake optic tectum. *Science* 213(4509):789-91.
- 11. Gaston KJ, Visser ME & Holker F (2018) The biological impacts of artificial light at night: the research challenge. *Philosophical Transactions of the Royal Society B* 370:e20140133.
- 12. Sanders D & Gaston KJ (2018) How ecological communities respond to artificial light at night. *Journal of Experimental Zoology* 329(8-9):394-400.
- 13. Bennie J, Davies TW, Cruse D & Gaston J (2016) Ecological effects of artificial light at night on wild plants. *Journal of Ecology* 104(3):611-620.
- 14. Price JT, Drye B, Domangue RJ & Paladino FV (2018) Exploring the role of artificial light in Loggerhead turtle (*Caretta caretta*) nest-site selection and hatchling disorientation. *Herpetological Conservation and Biology* 13(2):415-422.
- 15. Witherington BE (1992) Behavioural response of nesting sea turtles to artificial lighting. *Herpetologica* 48:31-39.
- 16. Thums M, Whiting SD, Reisser JW, Pendoley KL, Pattiaratchi CB, Proietti M, Hetzel Y, Fisher R & Meekan M (2016) Artificial light on water attracts turtle hatchlings during their near shore transit. *Royal Society Open Science* 3:e160142.
- 17. Cabrera-Cruz SA, Smolinsky JA & Buler JJ (2018) Light pollution is greatest within migration passage areas for nocturnally-migrating birds around the world. *Nature Scientific Reports* 8:e3261.

- 18. Ouyang JQ, de Jong M, Hau M, Visser ME, van Grusven RHA & Spoelstra K (2015) Stressful colours: Corticosterone concentrations in a free-living songbird vary with the spectral composition of experimental illumination. *Biology Letters* 11:20150517.
- 19. Warrant EJ, Frost B, Green K, Mouritsen H, Dreyer D, Adden A, Brauburger K & Heinze S (2016) The Australian Bogong moth *Agrotis infusa*: A long-distance nocturnal navigator. *Frontiers in Behavioural Neuroscience* doi: 10.3389/fnbeh.2016.00077.
- 20. Commonwealth of Australia (2016) *National Recovery Plan for the Mountain Pygmy-possum Burramys parvus* Prepared by the Victorian Department of Environment, Land, Water and Planning: Canberra, Australia. 43p.
- 21. Haddock JK, Threlfall CG, Law B & Hochuli DF (2019) Responses of insectivorous bats and nocturnal insects to local changes in street light technology. *Austral Ecology* 44(6):doi.org/10.1111?aec.12772.
- 22. Bolton D, Mayer-Pinto M, Clark GF, Dafforn KA, Brassil WA, Becker A & Johnston EL (2017) Coastal urban lighting has ecological consequences for multiple trophic levels under the sea. *Science of the Total Environment* 576:1-9.
- 23. Gonza'lez-Bernal E, Brown G & Shine R (2014) Invasive cane toads: Social facilitation depends upon an individual's personality. *PLoS ONE* 9(7):e102880.
- 24. Wilson P, Thums M, Pattiaratchi CB, Whiting S, Pendoley K, Ferreira L & Meekan M (2019) High predation of marine turtle hatchlings near a coastal jetty. *Biological Conservation* 236(2019):571-579.
- 25. Commonwealth of Australia (2013) *Matters of National Environmental Significance Significant Impact Guidelines 1.1 Environmental Protection and Biodiversity Conservation Act 1999*: Canberra, Australia. 39p.
- 26. Kamrowski RL, CJ L, Pendoley K & Hamann M (2014) Influence of industrial light pollution on the sea-finding behaviour of flatback turtle hatchlings. *Wildlife Research* 41:421-434.
- 27. Hodge W, Limpus CJ & Smissen P (2007) Queensland turtle conservation project: Hummock Hill Island Nesting Turtle Study December 2006 Conservation Technical and Data Report Environmental Protection Agency, Queensland. p:1-10.
- 28. Rodríguez A, Burgan G, Dann P, Jessop R, Negro JJ & Chiaradia A (2014) Fatal attraction of short-tailed shearwaters to artificial lights. *PLoS ONE* 9(10):e110114.
- 29. Moro D, van de Merwe J, Thomas M, Smith A & Lagdon R (2018) Integrating resource development with island conservation: Barrow Island as a model for conservation and development. In: *Australian Island Arks: Conservation, Management and Opportunities*, Moro D, Ball D & Bryant S, Editors. CSIRO Publishing: Melbourne, p:131-146.
- 30. Chevron Australia (2018) Gorgon Gas Development and Jansz Feed Gas Pipeline Long-term Marine Turtle Management Plan. 83p.
- 31. Rodriguez A, Moffet J, Revoltos A, Wasiak P, McIntosh RR, Sutherland DR, Renwick L, Dann P & Chiaradia A (2017) Light pollution and seabird fledglings: Targeting efforts in rescue programs. *Journal of Wildlife Management* 81:734-741.
- 32. Rodríguez A, Dann P & Chiaradia A (2017) Reducing light-induced mortality of seabirds: High pressure sodium lights decrease the fatal attraction of shearwaters. *Journal for Nature Conservation* 39:68-72.
- 33. Limpus CJ, Miller JD, Parmenter CJ & Limpus DJ (2003) The green turtle, *Chelonia mydas*, population of Raine Island and the Northern Great Barrier Reef: 1843-2001. *Memoirs of the Queensland Museum* 49:349-440.
- 34. Irsitech (2018) https://iristech.co/how-iris-reduces-blue-light/visible-spectrum. 2018 [cited Accessed 1stOctober 2018.

- 35. Algvere PV, Marshall J & Seregard S (2006) Age-related maculopathy and the impact of blue light hazard. *Acta Ophthalmologica Scandinavica* 84(1):4-15.
- 36. West KE, Jablonski MR, Warfield B, Cecil KS, James M, Ayers MA, Maida J, Bowen C, Sliney DH, Rollag MD & Hanifin JP (2010) Blue light from light-emitting diodes elicits a dose-dependent suppression of melatonin in humans. *Journal of applied physiology* 110(3):619-626.
- 37. Pendoley K & Kamrowski RL (2015) Influence of horizon elevation on the sea-finding behaviour of hatchling flatback turtles exposed to artificial light glow. *Marine Ecology Progress Series* 529:279-288.
- 38. Bird BL, Branch LC & Miller DL (2004) Effects of coastal lighting on foraging behaviour on beach mice. *Conservation Biology* 18:1435-1439.
- 39. Salmon M (2006) Protecting sea turtles from artificial night lighting at Florida's oceanic beaches. In: *Ecological Consequences of Artificial Night Lighting*, Rich C & Longcore T, Editors. Island Press: Washinton DC p:141-168.
- 40. Tosini G, Ferguson I & Tsubota K (2016) Effects of blue light on the circadian system and eye physiology. *Molecular Vision* 22:61-72.
- 41. Ecker JL, Dumitrescu ON, Wong KY, Alam NM, Chen S, LeGates T, Renna JM, Prusky GT, Berson DM & Hattar S (2010) Melanopsin-expressing retinal ganglion-cell photoreceptors: Cellular diversity and role in pattern vision. *Neuron* 67(1):49-60.
- 42. Berson DM (2007) Phototransduction in ganglion-cell photoreceptors. *Pflügers Archiv* 454(5):849-855.
- 43. de Jong M, Ouyang JQ, Da Silva A, van Grunsven RHA, Kempenaers B, Visser ME & Spoelstra K (2015) Effects of nocturnal illumination on life-history decisions and fitness in two wild songbird species. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences* 370:20140128–20140128.
- 44. Angers K, Haddad N, Selmaoui B & Thibault L (2003) Effect of melatonin on total food intake and macronutrient choice in rats. *Physiology & Behavior* 80:9-18.
- 45. Benenson W, Harris JW, Stöcker H & Lutz H, eds. (2006) *Handbook of Physics*. Springer Science & Business Media.
- 46. Kyba CCM, Ruhtz T, Fishcher J & Holker F (2011) Cloud coverage acts as an amplifier for ecological light pollution in urban ecosystems. *PLoS ONE* 6(e17307).
- 47. Longcore T, Rodríguez A, Witherington B, Penniman JF, Herf L & Herf M (2018) Rapid assessment of lamp spectrum to quantify ecological effects of light at night. *Journal of Experimental Zoology Part A Ecological and Integrative Physiology* 2018:1-11.
- 48. Lohmann KJ, Witherington B, Lohmann CMF & Salmon M (1997) Orientation, navigation, and natal beach homing in sea turtles. In: *The Biology of Sea Turtles. Volume I*, Lutz PL & Musick JA, Editors. CRC Press: Washington D.C. p:107-135.
- 49. Barentine JC (2019) Methods for assessment and monitoring of light pollution around ecologically sensitive sites. *Journal of Imaging* 5(54):e5050054.
- 50. Hänel A, Posch T, Ribas SJ, Aubé M, Duriscoe D, Jechow A, Kollath Z, Lolkema D, Moore C, Schmidt N, Spoelstra H, Wuchterl G & Kyba CCM (2018) Measuring night sky brightness: Methods and challenges. *Journal of Quantitative Spectroscopy and Radiative Transfer* doi: 10.1016/j.jqsrt.2017.09.008
- 51. Levin N, Kyba CCM, Zhang Q, Sánchez de Miguel A, Román MO, Li X, Portnov BA, Moltman AL, Jechow A, Miller SD, Wang Z, Shrestha RM & Elvidge CD (2020) Remote sensing of night lights: A review and an outlook for the future. *Remote Sensing of the Environment* 237:111443.

- 52. den Outer P, Lolkema D, Haaima M, Hoff RVD, Spoelstra H & Schmidt W (2011) Intercomparisons of nine sky brightness detectors. *Sensors* 11(10):9603.
- 53. Duriscoe DM (2013) Measuring anthropogenic skyglow using a natural sky brightness model. *Publications of the astronomical society of the Pacific* 125:1370-1382.
- 54. Jechow A, Kyba CCM & Hölker F (2019) Beyond all-sky: Assessing ecological light pollution using multi-spectral full-sphere fisheye lens imaging *Journal of Imaging* 5(46):doi:10.3390/jimaging5040046.
- 55. Kolláth Z (2010) Measuring and modelling light pollution at the Zselic Starry Sky Park. Journal of Physics: Conference Series 2018 (5th Workshop of Young Researchers in Astronomy & Astrophysics) e012001.
- 56. Jechow A, Ribas SJ, Domingo RC, Hölker F, Kolláth Z & Kyba CC (2018) Tracking the dynamics of skyglow with differential photometry using a digital camera with fisheye lens. *Journal of Quantitative Spectroscopy and Radiative Transfer* 209:212-223.
- 57. Commonwealth of Australia (2017) *The Recovery Plan for Marine Turtles in Australia* Department of the Environment and Energy: Canberra, Australia. 146p.
- 58. Hooker D (1911) Certain reactions to color in the young loggerhead turtle. *Papers from the Tortugas Laboratory Carnegie Institute* 13:71-76.
- 59. Salmon M (2003) Artificial night lighting and sea turtles. *Biologist* 50:163-168.
- 60. Falchi F, Cinzano P, Duriscoe D, Kyba CCM, Elvidge CD, Baugh K, Portnov BA, Rybnikova NA & Furgoni R (2016) The new world atlas of artificial night sky brightness. *Science Advances* 2(6):e1600377.
- 61. Kamrowski RL, Limpus CJ, Moloney J & Hamann M (2012) Coastal light pollution and marine turtles: Assessing the magnitude of the problem. *Endangered Species Research* 19:85-98.
- 62. Pendoley K (2000) The influence of gas flares on the orientation of Green Turtle hatchlings at Thevenard Island, Western Australia in Pilcher NJ & Ismail G, Editors, Second ASEAN Symposium and Workshop on Sea Turtle biology and Conservation ASEAN Academic Press. Kota Kinabalu, Borneo. p:130-142.
- 63. Pendoley KL (2005) Sea Turtles and the Environmental Management of Industrial Activities in North Western Australia Murdoch University. 330p.
- 64. Hu Z, Hu H & Huang Y (2018) Association between nighttime artificial light pollution and sea turtle nest density along Florida coast: A geospatial study using VIIRS remote sensing data. *Environmental Pollution* 239:30-42.
- 65. Pennell JP (2000) The Effect of Filtered Roadway Lighting on Nesting by Loggerehad Sea Turtles (Caretta caretta) and Green Turtle (Chelonia mydas) Hatchlings Florida Atlantic University: Boca Raton.
- 66. Salmon M, Reiners R, Lavin C & Wyneken J (1995) Behavior of loggerhead sea turtles on an urban beach. I. Correlates of nest placement. *Journal of Herpetology* 29(4):560-567.
- 67. Campbell C (1994) The effects of flash photography on nesting behavior of green turtles (*Chelonia mydas*) at Tortuguero, Costa Rica. In *Proceeding of the fourteenth annual symposium on sea turtle biology and conservation*. 1994. NOAA Technical Memorandum NMFS-SEFSC.
- 68. Mrosovsky N (1968) Nocturnal emergence of hatchling sea turtles: Control by thermal inhibition of activity. *Nature* 220:1338-1339.
- 69. Erb V & Wyneken J (2019) Nest-to-Surf Mortality of Loggerhead Sea Turtle (*Caretta caretta*) Hatchlings on Florida's East Coast. *Frontiers in Marine Science* 6(271):doi: 10.3389/fmars.2019.00271.

- 70. Limpus CJ & Kamrowski RL (2013) Ocean-finding in marine turtles: The importance of low horizon elevation as an orientation cue. *Behaviour* 150:863-893.
- 71. Horch KW, Gocke JP, Salmon M & Forward RB (2008) Visual spectral sensitivity of hatchling loggerhead (*Caretta caretta* L.) and leatherback (*Dermochelys coriacea* L.) sea turtles, as determined by single-flash electroretinography. *Marine and Freshwater Behaviour and Physiology* 41(2):107-119.
- 72. Witherington BE & Bjorndal KA (1991) Influences of artificial lighting on the seaward orientation of hatchling loggerhead turtles *Caretta caretta*. *Biological Conservation* 55(2):139-149.
- 73. Fritches KA (2012) Australian loggerhead sea turtle hatchlings do not avoid yellow. *Marine and Freshwater Behaviour and Physiology* 45(2):79-89.
- 74. Levenson DH, Eckert SA, Crognale MA, Deegan II JF & Jacobs GH (2004) Photopic spectral sensitivity of green and loggerhead sea turtles. *Copeia* 2004(2):908-914.
- 75. Robertson K, Booth DT & Limpus CJ (2016) An assessment of 'turtle-friendly' lights on the sea-finding behaviour of loggerhead turtle hatchlings (*Caretta caretta*). *Wildlife Research* 43:27-37.
- 76. Mrosovsky N (1972) The water finding ability of sea turtles. *Brain Behaviour and Evolution* 5:202-225.
- 77. Mrosovsky N & Shettleworth SJ (1968) Wavelength preferences and brightness cues in the water finding behaviour of sea turtles. *Behaviour* 32:211-257.
- 78. Pendoley K & Kamrowski RL (2015) Sea-finding in marine turtle hatchlings: What is an appropriate exclusion zone to limit disruptive impacts of industrial light at night? *Journal for Nature Conservation* 30:1-11.
- 79. Salmon M, Wyneken J, Fritz E & Lucas M (1992) Sea finding by hatchling sea turtles: Role of brightness, silhouette and beach slope as orientation cues. *Behaviour* 122:56-77.
- 80. Harewood A & Horrocks J (2008) Impacts of coastal development on hawksbill hatchling survival and swimming success during the initial offshore migration. *Biological Conservation* 141:394-401.
- 81. Truscott Z, Booth DT & Limpus CJ (2017) The effect of on-shore light pollution on seaturtle hatchlings commencing their off-shore swim. *Wildlife Research* 3(5):127-134.
- 82. White D & Gill J (2007) A "lost years" flatback turtle *Natator depressus* (Garman, 1858) found. *Northern Territory Naturalist* 19:51-53.
- 83. Salmon M & Wyneken J (1990) Do swimming loggerhead turtles (*Caretta caretta* L.) use light cues for offshore orientation? *Marine Behavioural Physiology* 17:233-246.
- 84. Wilson P, Thums M, Pattiaratchi CB, Meekan M, Pendoley K, Fisher R & Whiting S (2018) Artificial light disrupts the nearshore dispersal of neonate flatback turtles *Natator depressus. Marine Ecology Progress Series* 600:179-192.
- 85. Eckert KL, Bjorndal KA, Abreu-Grobois FA & Donnelly M, eds. (1999) *Research and Management Techniques for the Conservation of Sea Turtles*. IUCN/SSC Marine Turtle Specialist Group Publication No. 4. Washington, DC. 235.
- 86. Pendoley KL, Whittock PA, Vitenbergs A & Bell CD (2016) Twenty years of turtle tracks: marine turtle nesting activity at remote locations in the Pilbara, Western Australia. *Australian Journal of Zoology* 64:217-226.
- 87. Witherington B (1997) The problem of photopollution for sea turtles and other nocturnal animals. In: *Behavioral Approaches to Conservation in the Wild*, Clemmons JR & Buchholz R, Editors. Cambridge University Press: Cambridge. p:303-328.

- 88. Ross GJB, Burbidge AA, Canty P, Dann P, Fuller PJ, Kerry KR, Norman FI, Menkhorst PW, Shaughnessy G, Shaughnessy PD & Smith GC (1996) Status of Australia's Seabirds. In: *State of the Environment Report*. CSIRO Sustainable Ecosystems: Perth, p:167-182.
- 89. Warham J (1990) *The Behaviour, Population Biology and Physiology of the Petrels*. London: Academic Press. 440p.
- 90. Harris CM, Lorenz K, Fishpool LDC, Lascelles B, Cooper J, Croxall JP, Emmerson LM, Fraser WR, Fijn R, Jouventin P, LaRue MA, Le Maho Y, Lynch HJ, Naveen R, Patterson-Fraser DL, Peter H-U, Poncet S, Phillips RA, Southwell CJ, van Franeker JA, Weimerskirch H, Wienecke B & Woehler EJ (2015) *Important Bird Areas in Antarctica 2015 Summary*. Cambridge: BirdLife International and Environmental Research & Assessment Ltd. p:45.
- 91. Murphy RC (1936) Oceanic birds of South America. New York: Macmillan.
- 92. Allen JA (1880) Destruction of birds by light-houses. *Bulletin of the Nuttall Ornithological Club* 5:131-138.
- 93. Gineste B, Souquet M, Couzi F-X, Giloux Y, Philippe J-S, Hoarau C, Tourmetz J, Potin G & Le Corre M (2016) Tropical shearwater population stability at Reunion Island, despite light pollution. *Journal of Ornithology* 158:385-394.
- 94. Ainley DG, Podolsky R, Nur N, Deforest L & Spencer GA (2001) Status and population trends of the Newell's shearwater on Kauai: A model for threatened petrels on urbanized tropical oceanic islands. *Studies in Avian Biology* 22:108-123.
- 95. Black A (2005) Light induced seabird mortality on vessels operating in the Southern Ocean: Incidents and mitigation measures. *Antarctic Science* 17:67-68.
- 96. Deppe L, Rowley O, Rowe LK, Shi N, McArthur N, Gooday O & Goldstien SJ (2017) Investigation of fallout events in Hutton's shearwaters (*Puffinus huttoni*) associated with artificial lighting. *Notornis* 64(4):181-191.
- 97. Merkel FR & Johansen KL (2011) Light-induced bird strikes on vessels in Southwest Greenland. *Marine Pollution Bulletin* 62:2330-2336.
- 98. Raine H, Borg JJ, Raine A, Bariner S & Cardona MB (2007) *Light Pollution and Its Effect on Yelkouan Shearwaters in Malta; Causes and Solutions* BirdLife Malta: Malta: Life Project Yelkouan Shearwater. p:1-54.
- 99. Rodríguez A, Rodríguez B & Lucas MP (2012) Trends in numbers of petrels attracted to artificial lights suggest population declines in Tenerife, Canary Islands. *Ibis* 154:167-172.
- 100. Syposz M, Goncalves F, Carty M, Hoppitt W & Manco F (2018) Factors influencing Manx Shearwater grounding on the west coast of Scotland. *Ibis* 160:846-854.
- 101. Rodriguez A, García D, Rodríguez B, Cardona EP, L. & Pons P (2015) Artificial lights and seabirds: Is light pollution a threat for the threatened Balearic petrels? *Journal of Ornithology* 156:893-902.
- 102. Rodríguez A, Rodríguez B & Negro JJ (2015) GPS tracking for mapping seabird mortality induced by light pollution. *Scientific Reports* 5:10670.
- 103. Troy J, Holmes N, Veech J & Green M (2013) Using observed seabird fallout records to infer patterns of attraction to artificial light. *Endangered Species Research* 22:225-234.
- 104. Montevecchi WA (2006) Influences of Artificial Light on Marine Birds. In: *Ecological consequences of artificial night lighting*, Rich C & Longcore T, Editors. Island Press: Washington D.C. 480p.

- 105. Podolsky R, Ainley D, Spencer G, Deforest L & Nur N (1998) Mortality of Newell's shearwaters caused by collisions with urban structures on Kauai. *Colonial Waterbirds* 21:20-34.
- 106. Bourne WRP (1979) Birds and gas flares. Marine Pollution Bulletin 10:124-125.
- 107. Burke CM, Davoren GK, Montevecchi WA & Wiese FK (2005) Seasonal and spatial trends of marine birds along offshore support vessel transects and at oil platforms on the Grand Banks. In: Offshore oil and gas environmental effects monitoring: approaches and technologies, Armsworthy SL, Cranford PJ & Lee K, Editors. Battelle Press: Columbus, Ohio. p:587–614
- 108. Ronconi RA, Allard KA & Taylor PD (2015) Bird interactions with offshore oil and gas platforms: Review of impacts and monitoring techniques. *Journal of Environmental Management* 147:34-45.
- 109. Imber MJ (1975) Behaviour of petrels in relation to the moon and artificial lights. *Notornis* 22:302-306.
- 110. Cianchetti-Benedetti M, Becciu P, Massa B & Dell'Omo G (2018) Conflicts between touristic recreational activities and breeding shearwaters: short-term effect of artificial light and sound on chick weight. *European Journal of Wildlife Research* 64:19.
- 111. Mitkus M, Nevitt GA, Danielsen J & Kelber A (2016) Vision on the high seas: spatial resolution and optical sensitivity in two procellariform seabirds with different foraging strategies. *Journal of Experimental Biology* 219:3329-3338.
- 112. Le Corre M, Ollivier A, Ribes S & Jouventin P (2002) Light-induced mortality of petrels: a 4-year study from Réunion Island (Indian Ocean). *Biological Conservation* 105:93-102.
- 113. Reed JR, Sincock JL & Hailman JP (1985) Light attraction in endangered procellariform birds: Reduction by shielding upward radiation. *Auk* 102:377-383.
- 114. Serventy DL, Serventy VN & Warham J (1971) *The Handbook of Australian Sea-birds*. Sydney. 255p.
- 115. Watanuki Y (1986) Moonlight avoidance behavior in leach's storm-petrels as a defense against slaty-backed gulls. *The Auk* 103(1):14-22.
- 116. Telfer TC, Sincock JL, Byrd GV & Reed JR (1987) Attraction of Hawaiian seabirds to lights: Conservation efforts and effects of moon phase. *Wildlife Society Bulletin* 15:406-413.
- 117. Griesemer AM & Holmes ND (2011) Newell's shearwater population modeling for Habitat Conservation Plan and Recovery Planning Technical Report No. 176. The Hawai`i-Pacific Islands Cooperative Ecosystem Studies Unit & Pacific Cooperative Studies Unit University of Hawai`i: Honolulu, Hawai`i. 68.
- 118. Vorobyev M (2003) Coloured oil droplets enhance colour discrimination. *Proceedings Biological Sciences* 270:1255–1261.
- 119. Capuska GEM, Huynen L, Lambert D & Raubenheimer D (2011) UVS is rare in seabirds. *Vision research* 51(12):1333-1337.
- 120. Hart NS (2001) The visual ecology of avian photoreceptors. *Progress in Retinal and Eye Research* 20:675-703.
- 121. Bowmaker JK, Heath LA, Wilkie SE & Hunt DM (1997) Visual pigments and oil droplets from six classes of photoreceptor in the retinas of birds. *Vision Research* 37:2183-2194.
- 122. Cannell BL & Cullen JM (1998) The foraging behaviour of little penguins *Eudyptula minor* at different light levels. *Ibis* 140(3):467-471.

- 123. Bowmaker JK & Martin GR (1985) Visual pigments and oil droplets in the penguin, *Spheniscus humboldti. Journal of Comparative Physiology A* 156(1):71-77.
- 124. Wiltschko W & Wiltschko R (1999) The effect of yellow and blue light on magnetic compass orientation in European robins, *Erithacus rubecula. Journal of Comparative Physiology A* 184:295-299.
- 125. Rodríguez A, Holmberg R, Dann P & Chiaradia A (2018) Penguin colony attendance under artificial lights for ecotourism. *JEZ-A Ecological and Intergrative Physiology* 329(8-9):457-464.
- 126. Henderson PA & Southwood TRE (2016) *Ecological Methods 4th Edition*. Wiley-Blackwell. 656p.
- 127. Surman CA & Nicholson LW (2014) The Integrated Shearwater Monitoring Project (ISMP): Annual Report for the 2013/14 Season. Unpublished report prepared for Apache Energy Ltd. Halfmoon Biosciences. 47p.
- 128. Commonwealth of Australia (2010) Survey guidelines for Australia's threatened birds Guidelines for detecting birds listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999 Australian Government: Canberra, Australia. 278p.
- 129. Surman CA & Nicholson LW (2014) *Monitoring of annual variation in seabird breeding colonies throughout the Lowendal Group of islands: 2014 Annual Report. Lowendal Island Seabird Monitoring Program (LISMP)*. Unpublished report prepared for Apache Energy Ltd. by Halfmoon Biosciences. 59p.
- 130. van de Kam J, Ens B, Piersma T & Zwarts L (2004) *Shorebirds: An illustrated behavioural ecology*. KNNV Publishers: Utrecht, the Netherlands. p. 368.
- 131. Colwell MA (2010) *Shorebird ecology, conservation, and management*. Berkeley, California: University of California Press. 344p.
- 132. Piersma T & Baker AJ (2000) Life history characteristics and the conservation of migratory shorebirds. In: *Behaviour and conservation*, Gosling LM & Sutherland WJ, Editors. Cambridge University Press: Cambridge, United Kingdom. p:105-124.
- 133. Cresswell W (1994) Flocking is an effective anti-predation strategy in redshanks, *Tringa tetanus. Animal Behaviour* 47(2):433-442.
- 134. Battley PF, Warnock N, Tibbitts TL, Gill RE, Piersma T, Hassell CJ, Douglas DC, Mulcahy DM, Gartrell BD, Schuckard R, Melville DS & Riegen AC (2012) Contrasting extreme long-distance migration patterns in bar-tailed godwits *Limosa Iapponica*. *Journal of Avain Biology* 43(1):21-32.
- 135. Menkhorst P, Rogers D, Clarke R, Davies J, Marsack P & K. F (2017) *The Australian bird guide*. Clayton South, Victoria: CSIRO Publishing. 576p.
- 136. Commonwealth of Australia (2017) EPBC Act Policy Statement 3.21—Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species Australian Government: Canberra, Australia. 24p.
- 137. Bamford M, Watkins D, Bancroft W, Tischler G & J. W (2008) *Migratory Shorebirds of the East Asian-Australasian Flyway; Population Estimates and Internationally Important Sites: Wetlands International Oceania*: Canberra, Australia. 249p.
- 138. Commonwealth of Australia (2015) *Wildlife Conservation Plan for Migratory Shorebirds*. Australian Government: Canberra, Australia. 32p.
- 139. McLaren JD, Buler JJ, Schreckengost T, Smolinsky JA, Boone M, van Loon E, Dawson DK & Walters EL (2018) Artificial light at night confounds broad-scale habitat use by migrating birds. *Ecology Letters* 21(3):356-364.

- 140. Rogers DI, Battley PF, Piersma T, Van Gils JA & Rogers KG (2006) High-tide habitat choice: Insights from modelling roost selection by shorebirds around a tropical bay. *Animal Behaviour* 72(3):563-575.
- 141. Dwyer RG, Bearhop S, Campbell HA & Bryant DM (2013) Shedding light on light: benefits of anthropogenic illumination to a nocturnally foraging shorebird. *Journal of Animal Ecology* 82:478-485.
- 142. Santiago-Quesada F, Estrella SM, Sanchez-Guzman JM & Masero JA (2014) Why water birds forage at night: A test using black-tailed godwits *Limosa limosa* during migratory periods. *Journal of Avian Biology* 45(4):406-409.
- 143. Lourenço PM, Silva A, Santos CD, Miranda AC, Granadeiro JP & Palmeirim JM (2008) The energetic importance of night foraging for waders wintering in a temperate estuary. *Acta Oecologica* 34:122-139.
- 144. Dias MP, Granadeiro JP, Lecoq M, Santos CD & Palmeirim JM (2006) Distance to high-tide roosts constrains the use of foraging areas by dunlins: Implications for the management of estuarine wetlands. *Biological Conservation* 131:446-452.
- 145. Rogers DI, Piersma T & Hassell CJ (2006) Roost availability may constrain shorebird distribution: Exploring the energetic costs of roosting and disturbance around a tropical bay. *Biological Conservation* 133(2):225-235.
- 146. Conklin JR & Colwell MA (2007) Diurnal and nocturnal roost site fidelity of Dunlin (*Calidris alpina pacifica*) at Humboldt Bay, California. *The Auk* 124(2):677-689.
- 147. McNeil R, Drapeau P & Pierotti R (1993) Nocturnality in Colonial Waterbirds: Occurrence, Special Adaptations, and Suspected Benefits. In: *Current Ornithology*, Power DM, Editor. Springer US: Boston, MA. p:187-246.
- 148. Rojas LM, McNeil R, Cabana T & Lachapelle P (1999) Diurnal and nocturnal visual capabilities in shorebirds as a function of their feeding strategies. *Brain Behavior and Evolution* 53(1):29-43.
- 149. Verheijen FJ (1985) Photopollution artificial light optic spatial control systems fail to cope with incidents, causations, remidies. *Experimental Biology* 44(1):1-18.
- 150. Poot H, Ens B, Vries H, Donners MAH, Wernand MR & Marquenie JM (2008) Green light for nocturnally migrating birds. *Ecology and Society* 13(2):47.
- 151. Gauthreaux SA & Belser CG (2006) Effects of artificial night lighting on migrating birds. In: *Ecological Consequences of Artificial Night Lighting*, Rich C & Longcore T, Editors. Island Press: Washington, D.C., USA. p:67-93.
- 152. Depledge MH, Godard-Codding CAJ & Bowen RE (2010) Light pollution in the sea. *Marine Pollution Bulletin* 60(9):1383-1385.
- 153. Santos CD, Miranda AC, Granadeiro JP, Lourenço PM, Saraiva S & Palmeirim JM (2010) Effects of artificial illumination on the nocturnal foraging of waders. *Acta Oecologica* 36:166-172.
- 154. Longcore T, Rich C, Mineau P, MacDonald B, Bert DG, Sullivan LM, Mutrie E, Gauthreaux SA, Avery ML, Crawford RL, Manville AM, Travis ER & Drake D (2013) Avian mortality at communication towers in the United States and Canada: Which species, how many, and where? *Biological Conservation* 158:410-419.



Form 5

Submission on notified proposal for policy statement or plan, change or variation, Resource Management Act 1991

To: Auckland Council

Name of submitter: Te Tāhuhu o te Mātauranga | Ministry of Education ('the

Ministry')

Address for service: Eden 5, Level 3/12-18

Normanby Road Mount Eden Auckland 1011

Attention: Vicky Hu

Phone: 09 301 3772

Email: <u>vicky.hu@beca.com</u> AND <u>moe.submissions@beca.com</u>

This is a submission from the Ministry of Education on the Proposed Plan Change 93 – Warkworth South.

The Ministry is the Government's lead advisor on the New Zealand education system, shaping direction for education agencies and providers and contributing to the Government's goals for education. The Ministry assesses population changes, school roll fluctuations and other trends and challenges impacting on education provision at all levels of the education network to identify changing needs within the network so the Ministry can respond effectively.

The Ministry has responsibility for all education property owned by the Crown. This involves managing the existing property portfolio, reviewing plan changes, upgrading and improving the portfolio, purchasing and constructing new property to meet increased demand, identifying and disposing of surplus State school sector property and managing teacher and caretaker housing.

The Ministry is therefore a considerable stakeholder in terms of activities that may impact on existing and future educational facilities and assets in the Auckland region.

The Ministry's submission is:

The Proposed Plan Change 93 (PPC) is seeking to rezone approximately 159 hectares of land on either side of the current State Highway 1, south of Warkworth, from Future Urban and Rural – Rural Production Zone to a combination of:

- Residential Terrace Housing and Apartment Building Zone;
- Residential Single House Zone;
- Residential Mixed Housing Urban Zone;

- Residential Large Lot Zone;
- Business Local Centre Zone;
- Rural Mixed Rural Zone; and
- Open Space Conservation Zone.

The PPC also seeks to apply two new Precincts ('Waimanawa' and 'Morrison Heritage Orchard') across the plan change area. The proposed plan change will provide development capacity of approximately 1600 additional residential lots and apartment units, supported by a local centre. It is noted that the rezoning of some of this land was anticipated as much of it is Future Urban zoned (sequencing plans for Warkworth South is scheduled to be released in 2028 – 2032 according to the Future Urban Land Supply Strategy¹, and 2045+ according to the recently adopted Future Development Strategy²). Notwithstanding this, the PPC would enable significant development capacity of approximately 1,600 additional residential units, thereby potentially increasing the demand on the local school network in Warkworth.

The Ministry acknowledges that the PPC will contribute to providing additional housing within the wider Auckland Region. This may, however, require additional capacity in the local school network to cater for this growth as the area develops and potentially drives the need for a new school in the community in the future.

The Ministry understands that the Council must meet the requirements under the National Policy Statement on Urban Development 2020 (NPS-UD) to provide development capacity for housing and business. The Ministry wishes to highlight that Policy 10 of the NPS-UD states that local authorities should engage with providers of development infrastructure and additional infrastructure (of which schools are a part) to achieve integrated land use and infrastructure planning. In addition to this, subpart 3.5 of the NPS-UD states that local authorities must be satisfied that the additional infrastructure to service the development capacity is likely to be available.

The Ministry therefore has an interest in:

- making sure the Precinct provisions specifically acknowledge and provide for educational facilities.
 This is critical given schools are an essential piece of social and community infrastructure.
- how safe walking and cycling infrastructure around educational facilities will be provided.

The Ministry's position on the Plan Change:

The Ministry supports the following objectives and policies in the PPC that enable the development of educational facilities:

Objective 8: Subdivision and development is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future **education infrastructure**) and services required to provide for development within the precinct and future community requirements.

Policy 12: Require subdivision and development to provide stormwater, wastewater, potable water, electricity, communication services and **educational infrastructure** in a coordinated manner.

The Ministry notes that the growth enabled by this plan change and other Future Urban zoned areas results in the requirement for a new primary school to serve the future growth in this area. The Ministry therefore

temahau.govt.nz

Page 2 of 4

¹ Future Urban Land Supply Strategy, 2017

² Future Development Stratey, 2023

supports the enabling objective and policy wording in the precinct provisions for the Ministry to establish a future school to support the community in this area.

The Ministry requests that the wording of the objectives and policies is amended to 'educational facilities' instead of 'educational infrastructure', to be consistent with the wording and definition within the National Planning Standards. This will enable more consistent interpretation and application of the objectives and policies in the proposed precinct plan.

It is noted that educational facilities 'within the existing former Ransom Vineyard Building' site has been specifically identified as a permitted activity in the Mixed Housing Urban Zone within the proposed precinct plan. The Ministry has not yet selected a preferred site for the development of a school in the area, however the Ransom Vineyard Building has been confirmed to be not fit for purpose for a future educational facility. The Ministry is neutral if another educational provider wishes to establish a school within the building.

The Ministry also generally supports the objectives and policies in the plan change that seek to provide safe access to, from and within the precinct for all modes, including walking and cycling. This includes a local road network that provides walking and cycling connections internally and to the wider Warkworth urban area. These provisions will also enable access to and from the two schools nearby to the plan change area: Mahurangi College and Warkworth School.

The Ministry acknowledges engagement efforts undertaken by the Applicant to date. The Ministry has identified that there is an operational need for a school to be established in the area to support communities, and discussions with landowners on potentially suitable sites for a future school have been advanced. This progress and need for a school in the area has been communicated with the Applicant.

Moving forward, the Ministry requests regular ongoing engagement with the Applicant and Auckland Council to keep up to date with the housing typologies being proposed, staging and timing of this development so that the integration of a school within the proposed development area can be planned for accordingly. The key Ministry contact email is Resource.Management@education.govt.nz.

Decision sought:

Overall, the Ministry supports the PPC if the following relief can be accepted.

The relief sought is shown in red underscore for additions and red strikethrough for deletions.

- Objectives:
 - (10) Subdivision and development is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure educational facilities) and services required to provide for development within the precinct and future community requirements.
- Policies:
 - (12) Require subdivision and development to provide stormwater, wastewater, potable water, electricity, communication services and educational infrastructure educational facilities in a coordinated manner.

The Ministry wishes to be heard in support of its submission.

29.1

20.2

77

Vicky Hu

Planner – Beca Ltd

(Consultant to the Ministry of Education)

Date: 23 November 2023

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - GW Boyes

Date: Thursday, 23 November 2023 3:15:29 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: GW Boyes

Organisation name:

Agent's full name:

Email address: gcwboyes@xtra.co.nz

Contact phone number:

Postal address: PO Box 140 Leigh 0947

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

The changes to the Auckland Unitary Plan proposed by KA Waimanawa LTD Partnership & Stepping Towards Far Ltd in relation to 160 hectares south of Warkworth.

Property address:

Map or maps:

Other provisions:

The proposed housing is too dense and not enough infrastructure. A school shouldn't be a "possibility". it should be required as all area schools are overcrowded already. Where's the water going to come from?

Do you support or oppose the provisions you have specified? I or we oppose the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

Too much congestion without enough infrastructure is already happening in the area. No one except developers and Auckland want so much growth.

I or we seek the following decision by council: Decline the plan change

Submission date: 23 November 2023

Attend a hearing

30.1

Do you wish to be heard in support of your submission? No

Declaration

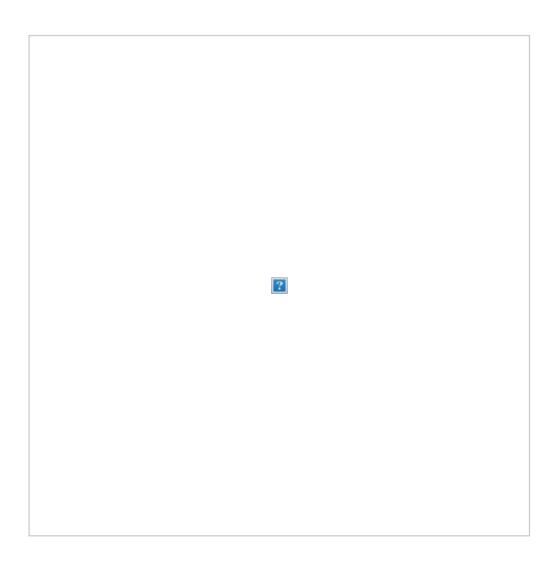
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

Yes

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.



Level 5, AON Centre Customs Street West Private Bag 106602 Auckland 1143 New Zealand T 64 9 969 9800 F 64 9 969 9813 www.nzta.govt.nz

FORM 5

Submission on a notified proposal for Plan Change 93 - Warkworth South under Clause 6 of Schedule 1 Resource Management Act 1991

23 November 2023

Auckland Council Plans and Places Private Bag 92300 Auckland 1142

Email: unitaryplan@aucklandcouncil.govt.nz

Name of submitter: The New Zealand Transport Agency

This is a submission on Private Plan Change 93 - Warkworth South (**Plan Change**) to the Auckland Unitary Plan (Operative in Part).

The New Zealand Transport Agency (Waka Kotahi) could not gain an advantage in trade competition through this submission.

Waka Kotahi role and responsibilities

Waka Kotahi is a Crown Entity established by Section 93 of the Land Transport Management Act 2003 (LTMA). Waka Kotahi's objective is to undertake its functions in a way that contributes to an effective, efficient, and safe land transport system in the public interest. Waka Kotahi's roles and responsibilities include:

- Managing the State Highway system, including planning, funding, designing, supervising, constructing, maintaining and operating the system;
- Managing funding of the land transport system, including auditing the performance of organisations receiving land transport funding;
- Managing regulatory requirements for transport on land and incidents involving transport on land; and
- Issuing guidelines for and monitoring the development of regional land transport plans.

The Plan Change relates to land which is close to both the existing State Highway 1 (which is in the process of being revoked) and Ara Tūhono – Pūhoi to Warkworth. Waka Kotahi interest in the Plan Change stems from its role as:

 A transport investor to maximise effective, efficient and strategic returns for New Zealand;

- A planner of the land transport network to integrate one effective and resilient network for customers;
- Provider of access to and use of the land transport system to shape smart efficient, safe and responsible transport choices; and
- The manager of the State Highway system and its responsibility to deliver efficient, safe and responsible highway solutions for customers.

Government Policy Statement on Land Transport.

Waka Kotahi also has a role in giving effect to the Government Policy Statement on Land Transport (GPS). The GPS is required under the LTMA and outlines the Government's strategy to guide land transport investment over the next 10 years. The four strategic priorities of the GPS 2021 are safety, better travel options, climate change and improving freight connections. A key theme of the GPS is integrating land use, transport planning and delivery. Land use planning has a significant impact on transport policy, infrastructure and services provision, and vice versa. Once development has happened, it has a long-term impact on transport. Changes in land use can affect the demand for travel, creating both pressures and opportunities for investment in transport infrastructure and services, or for demand management. Likewise, changes in transport can affect land use.

Waka Kotahi gives effect to the GPS through a number of strategic plans including:

- Arataki our ten-year view of the step changes and actions needed to deliver on the government's current priorities and long-term outcomes for the land transport system;
- Toitu Te Taiao Our sustainability action plan. This notes two big challenges around reducing greenhouse gases and improving public health;
- Keeping Cities Moving our national mode shift plan based around shaping urban form, making shared and active modes more attractive and influencing travel demand and transport choices.

Decision sought

Waka Kotahi is neutral with regard to the proposed Plan Change but seeks further information and/or amendments to ensure that all relevant matters are considered and effects of the development are managed.

Decisions that Waka Kotahi seeks on the Plan Change are set out in its submissions contained in Table 1. Waka Kotahi also seeks any consequential changes to the Plan Change required to give effect to the relief described in Table 1.

Hearings

Waka Kotahi wishes to be heard in support of its submission. If others make a similar submission, Waka Kotahi will consider presenting a joint case with them at a hearing.

Signature of person authorised to sign on behalf of Submitter:

Evan Keating

Com 1

Principal Planner, Waka Kotahi

Address for Service of person making submission:

NZ Transport Agency

Contact Person: Evan Keating Email: evan.keating@nzta.govt.nz

613

Table 1: NZ Transport Agency Submission on Auckland Unitary Plan (OIP) Plan Change 93 – Warkworth South

Sub #	Provision Number	Reason for Submission	Relief Sought
1	Whole of plan change	Since the Plan change was lodged, Auckland Council has adopted its Future Development Strategy (FDS). Under Clause 3.17(1)(a) of the National Policy Statement on Urban Development, local authority decision makers must have regard to a relevant FDS when changing planning documents.	Provide an assessment of the proposal relative to the Future Development Strategy
		Waka Kota participated in the preparation of the FDS and supports the outcomes it seeks to achieve. Based on the information in the notified documents, it appears that while the bulk infrastructure identified in the FDS may be provided by this development, the timing of the release of this land is much earlier than identified in the FDS. Waka Kotahi seeks certainty that all required infrastructure will be in place and to understand if there would be any adverse effects due to this land being brought forward for development.	
2	Whole of plan change	The planning assessment submitted with the proposal does not address the Emissions Reduction Plan (ERP) which is a requirement for assessment under section 74(2)(d) of the RMA.	Provide an assessment of the proposal relative to the Emissions Reduction Plan
3	Transport mitigation	It is noted that the ITA provides an assessment of the mitigation required and these mitigations are included in the precinct provisions. However, it appears that not all of the mitigation has been identified and/or some mitigation is ambiguous. Examples of this include the walking and cycling connection on SH1 which only extends to McKinney Road where there is no footpath to connect to and the uncertainty around what form of intersection upgrade may be required for Valerie Close or when it would be needed.	Update the ITA and planning provisions to include all required upgrades, including walking and cycling connections to existing paths in the urban area and clarify the extent of intersection upgrades required, including at Valerie Close.
4	Pedestrian crossings of SH1	The ITA assesses the need for upgrades of SH1 and walking and cycling connections along it but does not assess the need for crossings of it. Although the detail of such crossings may not be required for a plan change, an assessment of the overall level of crossings and indicative locations for them should be provided. The results of which may need to be included within the precinct provisions either as triggers related to development and/or identified on the precinct plans. This issue is particularly	Provide an assessment of the number and location of pedestrian crossings of SH1 required to service this development and update the precinct provisions to reflect the outcomes of this assessment.

31.1

31.2

31.3

		relevant as the re-alignment of the Wider Warkworth Link Road has removed a controlled intersection on SH1.	
5	New planning provisions to address road noise	Waka Kotahi seeks to ensure that new noise sensitive activities that choose to locate close to established noise generating activities such as roads are designed to ensure the health of the future residents and to avoid future reverse sensitivity issues. Although SH1 will be revoked prior to the development of the land, Waka Kotahi has an interest in ensuring that such effects are considered in all plan changes. Such provisions have been incorporated in numerous precincts in the AUP(OIP) through recent plan changes and should be incorporated in this one also. Waka Kotahi staff have experience in drafting provisions for this matter across number district plans and are available to assist in this regard.	Amend the precinct provisions to include objectives, policies and rules to manage effects of road traffic noise on future sensitive receivers in the plan change area.



Watercare Services Limited

73 Remuera Road, Remuera, Auckland 1050, New Zealand Private Bag 92521, Victoria Street West, Auckland 1142, New Zealand

> Telephone +64 9 442 2222 www.watercare.co.nz

Auckland Council
Unitary Plan Private Bag 92300
Auckland 1142

Attn.: Planning Technician

unitaryplan@aucklandcouncil.govt.nz

TO: Auckland Council

SUBMISSION ON: Plan Change 93 (Private): Warkworth South

FROM: Watercare Services Limited

ADDRESS FOR SERVICE: planchanges@water.co.nz

DATE: 23 November 2023

Watercare could not gain an advantage in trade competition through this submission.

1. WATERCARE'S PURPOSE AND MISSION

- 1.1. Watercare Services Limited ("Watercare") is New Zealand's largest provider of water and wastewater services. Watercare is a council-controlled organisation under the Local Government Act 2002 and is wholly owned by the Auckland Council ("Council").
- 1.2. As Auckland's water and wastewater services provider, Watercare has a significant role in helping Auckland Council achieve its vision for the Auckland region. Watercare's mission is to provide reliable, safe, and efficient water and wastewater services to Auckland's communities.
- 1.3. Watercare provides integrated water and wastewater services to approximately 1.7 million people in Auckland. Watercare collects, treats, and distributes drinking water from 12 dams, 26 bores and springs, and two river sources. On average, 400 million litres of water is treated each day at 16 water treatment plants and distributed via 89 reservoirs and 94 pump stations to 470,000 households, hospitals, schools, commercial and industrial properties.
- 1.4. Watercare's water distribution network includes more than 9,400 km of pipes. The wastewater network collects, treats, and disposes of wastewater at 18 treatment plants and includes 8,300 km of sewers.
- 1.5. Watercare is required to manage its operations efficiently with a view to keeping overall costs of water supply and wastewater services to its customers (collectively) at minimum levels, consistent with the

effective conduct of its undertakings and the maintenance of the long-term integrity of its assets. Watercare must also give effect to relevant aspects of the Council's Long Term Plan, and act consistently with other plans and strategies of the Council, including the Auckland Unitary Plan (Operative in Part) and the Auckland Future Urban Land Supply Strategy 2017¹.

2. SUBMISSION

General

- 2.1. This is a submission on a change proposed by KA Waimanawa Limited Partnership and Stepping Towards Far Limited ("Applicant") to the Auckland Unitary Plan (Operative in Part) that was publicly notified on 26 October 2023 ("Plan Change").
- 2.2. The Applicant proposes to rezone approximately 159ha of Future Urban, Open Space Conservation and Rural Rural Production zoned land to a mix of residential, business, open space, and rural zones on either side of the old State Highway One, south of Warkworth. The request also seeks to introduce two new precincts "Waimanawa" and "Morrison Heritage Orchard". The proposal also includes the introduction of the SMAF1 Overlay and an amendment to the Rural Urban Boundary to the south of Warkworth.
- 2.3. Watercare neither supports nor opposes the Plan Change. The purpose of this submission is to highlight and address a number of technical feasibility issues of the proposed water and wastewater servicing to ensure that the effects on Watercare's existing and planned water and wastewater network are appropriately considered and managed in accordance with the Resource Management Act 1991.
- 2.4. In making its submission, Watercare has considered the relevant provisions of the Auckland Plan 2050, Te Tahua Pūtea Tau 2021-2031 / The 10-year Budget 2021-2031, the Auckland Future Urban Land Supply Strategy 2017, the Water Supply and Wastewater Network Bylaw 2015, the Water and Wastewater Code of Practice for Land Development and Subdivision and the Watercare Asset Management Plan 2021 2041. It has also considered the relevant RMA documents including the Auckland Unitary Plan (Operative in Part) and the National Policy Statement on Urban Development 2020 which (among other matters) requires local authorities to ensure that at any one time there is sufficient housing and business development capacity which:
 - a) in the short term, is feasible, zoned and has adequate existing development infrastructure (including water and wastewater);
 - b) in the medium term, is feasible, zoned and either:
 - i. serviced with development infrastructure, or
 - the funding for the development infrastructure required to service that development capacity must be identified in a Long Term Plan required under s93 of the Local Government Act 2002; and
 - c) in the long term, is feasible, identified in relevant plans and strategies by the local authority for future urban use or urban intensification, and the development infrastructure required to service

-

¹ Local Government (Auckland Council) Act 2009, s58.

it is identified in the relevant authority's infrastructure strategy required under the Local Government Act 2002².

2.5. Watercare has also considered the Auckland Future Development Strategy 2023-2053 which was adopted by Auckland Council on 2 November 2023 and will replace the Future Urban Land Supply Strategy once published.

Specific parts of the Plan Change

- 2.6. The specific parts of the Plan Change that this submission relates to are:
 - a) the effects of the Plan Change on Watercare's existing and planned water and wastewater network; and
 - b) the proposed Precinct provisions for water supply and wastewater.

Sequencing and density of growth in Warkworth's Future Urban Areas

- 2.7. The Auckland Future Urban Land Supply Strategy 2017 (FULSS) informs Watercare's asset planning and infrastructure funding priorities and sequencing.
- 2.8. The FULSS categorises and sequences the Warkworth Future Urban Areas as:
 - a) Warkworth North (development ready from 2022),
 - b) Warkworth South (development ready from 2028-2032), and
 - c) Warkworth North East (development ready from 2033-2037).
- 2.9. The FULSS provides anticipated dwelling capacities as:
 - a) Warkworth North 2,300 dwellings
 - b) Warkworth South 3,700 dwellings, and
 - c) Warkworth North East 1,600 dwellings.
- 2.10. The Warkworth Structure Plan 2019 sets out a pattern of land use and the supporting infrastructure network for the Future Urban zoned land around Warkworth. The Warkworth Structure Plan projects the total Warkworth population to grow to 25,000-30,000 over a 30 year period, with the Future Urban Areas anticipated to contribute approximately 7,500 additional dwellings equivalent to 20,000 people.
- 2.11. Watercare's understanding of the proposed development of the live zoned portion of the Warkworth North Future Urban Area is that approximately 5,400 development unit equivalents (DUEs)³ are proposed over ~200ha. This is more than double the 2,300 dwellings anticipated by the FULLS for the total Warkworth North Future Urban Area, and almost three quarters of the total 7,500 dwellings anticipated by the FULLS for the total Future Urban Area of Warkworth.

-

² National Policy Statement on Urban Development 2020, subpart 1, 3.2 to 3.4.

³ A Development Unit Equivalent (DUE) is the unit of demand used to calculate IGCs. For water supply, one DUE is 220 kilolitres of water use per year. For wastewater, one DUE is 209 kilolitres of wastewater discharge per year.

- 2.12. For the purpose of water and wastewater planning, this anticipated 5,400 DUEs is equivalent to a population of 16,200. This represents a substantial portion of the 20,000 people proposed to be accommodated in the entire of the Warkworth Future Urban Areas⁴.
- 2.13. If this density of development in the Warkworth North Future Urban Area is realised, existing and planned bulk infrastructure capacity will be taken up earlier than anticipated.
- 2.14. The Auckland Future Development Strategy 2023-2053 (FDS) has been adopted and will replace the FULSS imminently. The FDS revises the categorisation, timing, and sequencing of the Warkworth Future Urban Areas.
- 2.15. The FDS states that bulk infrastructure delivery for the Warkworth Future Urban Areas is not planned to support development until the following timeframes:
 - a) Warkworth North (remainder) 2035+
 - b) Warkworth West (remainder) 2040+
 - c) Warkworth North-East 2045+
 - d) Warkworth South-central -2040+
 - e) Warkworth South-east 2045+
 - f) Warkworth South-west 2045+
- 2.16. Watercare notes that the FDS has delayed timing of development in Warkworth South to 2040+ 2045+.
- 2.17. Watercare's bulk infrastructure capacity is currently planned to enable development of the Warkworth Future Urban Area in accordance with the FULSS sequencing. Watercare's bulk infrastructure planning will need to be reviewed to align with the FDS sequencing and new Long Term Plan 2024-2034.
- 2.18. In order to provide for the out of sequence development proposed by the Plan Change, Watercare's water and wastewater asset management planning would require considerable review and rescheduling, which may compromise Watercare's ability to give effect to Auckland Council's Long Term Plan and be consistent with the FDS, statutory requirements under the Local Government (Auckland Council) Act 2009.

Wastewater servicing

Wastewater treatment plant

2.19. The existing Warkworth Wastewater Treatment Plant at Alnwick Street, Warkworth has reached capacity and therefore cannot accept any new connections. This existing treatment plant and associated discharge consent are being replaced with a new discharge consent and new wastewater treatment plant at Snell's Beach.

⁴ As anticipated by the 2019 Warkworth Structure Plan.

- 2.20. The new discharge consent was granted for servicing the combined Warkworth, Snells Beach and Algies Bay communities in April 2017. The discharge consent provides sufficient capacity for a population of approximately 30,000. The associated Warkworth Wastewater Scheme includes:
 - New Warkworth Street Pump Station located at Lucy Moore Memorial Park,
 - New transfer pipeline between Warkworth and Snells Beach,
 - New Snells Beach Wastewater Treatment Plant with a capacity for a population of 18,000, expandable to 30,000 (future project), and
 - New outfall from the Snells Beach Wastewater Treatment Plant to the Hauraki Gulf.
- 2.21. The Warkworth Wastewater Scheme is currently anticipated to be operational by late 2025.
- 2.22. Development from the Plan Change area cannot connect to the public wastewater network until the Warkworth Wastewater Scheme is operational.
- 2.23. If the anticipated density of development in the Warkworth North Future Urban live zoned areas is realised in the short to medium term, the additional population from the Plan Change area will not be able to be accommodated in the first phase of the Warkworth Wastewater Scheme which is designed to provide for a population of 18,000 people.
- 2.24. If the combined Warkworth, Snells Beach and Algies Bay population connected to the Snells Beach Wastewater Treatment Plant reaches 18,000 prior to the future Wastewater Treatment Plant expansion being completed (the expansion project is not programmed in the current Watercare Asset Management Plan), development from the Plan Change area will be significantly delayed.

Wastewater networks

- 2.25. There is currently no existing public wastewater infrastructure servicing the Plan Change area. The Applicant is required to fund and construct all the wastewater infrastructure necessary to connect the Plan Change area to the new Warkworth Street Wastewater Pump Station located at Lucy Moore Memorial Park.
- 2.26. The Applicant's proposed bulk wastewater network servicing has been discussed with Watercare and has been accepted as a viable alternative to the Warkworth Wastewater Servicing Conceptual Design prepared in 2018⁵.
- 2.27. All bulk and local network pipelines collecting and conveying wastewater from the Plan Change area must be sized to meet the proposed development yield. All new pipelines shall consider the upstream and downstream development potential, including the wider Warkworth South Future Urban area, when being designed and constructed.
- 2.28. The Plan Change states that a small portion of the Plan Change area will be serviced via the existing pressure sewer system (PSS) in Mason Heights. This proposal will need to be assessed by Watercare at the resource consent stage.

⁵ Warkworth Wastewater Servicing – Conceptual Design, prepared for Watercare by Beca 6 Nov 2018.

2.29. All wastewater infrastructure, including local reticulation and pump station design, will be required to comply with Watercare's Code of Practice for Land Development and Subdivision. The Applicant will need to work with Watercare in advance of lodging resource consents for subdivision to confirm the requirement for any local and bulk wastewater infrastructure upgrades. Final design of the proposed wastewater network can be confirmed at resource consent stage.

Water supply servicing

Water treatment plant

- 2.30. The new Warkworth Wells Water Treatment Plant and associated groundwater abstraction bores has been operational since 2019.
- 2.31. The groundwater take consent granted in 2012 provides for a three-step staged allocation, with increased amounts being taken from the groundwater bore over the consent period as follows:
 - a) from the date of commencement of the consent until 31 December 2025: a maximum annual abstraction volume of 750,000m3 with a maximum daily volume of 3,025m3;
 - b) from 1 January 2026 until 31 December 2035: a maximum annual abstraction volume of 915,000m3 with a maximum daily volume of 4,250m3; and
 - c) from 1 January 2036 until 30 June 2044: a maximum annual abstraction volume of 1,200,000m3 with a maximum daily volume of 4,320m3.
- 2.32. The consented upper volume annual limit of 1,200,000m3 caters for a population of approximately $11,000^6 15,000^7$.
- 2.33. Staged upgrades to increase the treatment capacity of the water treatment plant are planned in line with the stepped consent, with feasibility for the first upgrade, to increase the maximum annual abstraction volume to 915,000m³, planned to start in 2026. This first upgrade will cater for a total population of approximately 8,410⁶ 11,395⁷.
- 2.34. A future water source will need to be found to provide water beyond the current abstraction consent limit to provide for the long-term projected growth of Warkworth. Planning for the future water source (Warkworth Water Supply Capacity Upgrade) is currently scheduled in Watercare's Asset Management Plan for the decade 2043-2053.
- 2.35. The Warkworth Water Treatment Plant 2021 Water Supply Demand Management Plan (Water Demand Plan)⁸ sets out historical demand and estimates future demand. Average daily demand between 2018-2021 was 1664m³, supplying a population of 5,586 (based on the 2018 census), equating to 298 L/p/d⁹ consumption.
- 2.36. The Water Demand Plan estimates that the annual demand will reach 911,000 m3 per annum by 2026 assuming a 50% increase on the average historic daily demand, based on a 50% increase in

-

⁶ As calculated using the historic daily demand of 298L/p/day

⁷ As calculated using the Water and Wastewater Code of Practice for Land Development and Subdivision Chapter 6: Water. Section 6.3.5.6 Minimum water demand shall be based on daily consumption of 220L/p/day.

⁸ Warkworth Water Treatment Plant 2021 (2020) Water Supply Demand Management Plan Review, Final – November 2021.

⁹ Litres per person per day

- population to 8,379. As of November 2023, Watercare's population model indicates the current Warkworth population has already reached 7,635.
- 2.37. The projected 2026 requirement is ahead of the demand plan timeline listed in the water take consent. Condition 60 of the consent allows Watercare to review the stepped take limits in a Water Allocation Progress Report. If the rate of growth continues ahead of the stepped limits in the consent, Watercare may need to fast-track this report, which is otherwise due in January 2025.
- 2.38. The water treatment plant has provision for future capacity extensions to cater for the projected long term growth subject to the confirmation of a supplementary water source.
- 2.39. If the anticipated density of development in the Warkworth North Future Urban live zoned areas is realised in the short to medium term, the additional population from the Plan Change area will not be able to be accommodated in the existing water take consent and associated water treatment plant upgrades.
- 2.40. If the Warkworth population connected to the water treatment plant results in water demand that meets the upper limit of the existing resource consent (~11,000-15,000 population) prior to the future water source being consented and associated water treatment plant upgrades are complete, development from the Plan Change area will be significantly delayed.

Water supply networks

2.41. The 2019 Warkworth Water Supply Concept Reticulation Report¹⁰ (Water Supply Report) proposes a concept water supply solution to meet the growth of Warkworth as outlined in the Warkworth Structure Plan. The Water Supply Report divides the Warkworth area into six pressure zones. The Plan Change area is located within the Southern Pressure Zone and is proposed to be supplied from the future Southern Reservoir, which is supplied via booster pump from the future Western Reservoir. The Western reservoir is proposed to be supplied directly from the water treatment plant. Figure 1 below shows the proposed water supply network.

-

¹⁰ Prepared for Watercare by Beca, 4 July 2019

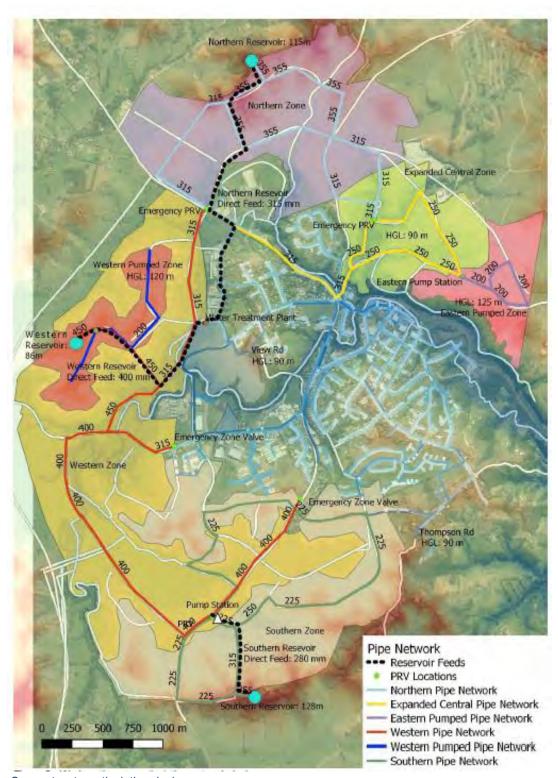


Figure 1 - Concept water reticulation design

- 2.42. In order to supply the Plan Change area, according to the Water Supply Report, the following physical works will need to be completed:
 - The Warkworth water treatment plant is upgraded to supply the Western Reservoir
 - The connection from the water treatment plant to the Western Reservoir

- The Western Reservoir
- The connection between the Western Reservoir and the Southern Reservoir
- The boost pump station to supply the Southern Reservoir from the Western Reservoir
- The Southern Reservoir
- 2.43. This water supply solution is currently programmed in Watercare's Asset Management Plan for 2031.
- 2.44. The Plan Change proposes to construct the Southern Reservoir and the associated boost pump station in alignment with the Water Supply Report, but instead of feeding water from the Western Reservoir, the proposal is to feed the Southern Reservoir from the existing water supply network utilising both View Road and Thompson Road reservoirs via extensions to the current water mains in State Highway 1 and McKinney Road.
- 2.45. The Plan Change proposes that the bulk supply main will be upgraded to 450mm OD south of McKinney Road and extended to the Plan Change area via SH1 to connect to the proposed Southern Reservoir located within the south east of the Plan Change area. The water supply main will be progressively extended west as development takes place along the Wider Western Link Road corridor.
- 2.46. If the Applicant can demonstrate that this alternative is viable for feeding the Southern Reservoir, then this will be considered by Watercare. The proviso is that the Applicant will be required to fund all necessary upgrades of the existing system as well as all and any new infrastructure required. Any alternative shall not detrimentally impact the proposed or future servicing strategy or network plan for the wider area.
- 2.47. Bulk and local network pipelines providing water to the Plan Change area must be sized to meet the proposed development yield. All new pipelines shall consider the upstream and downstream development potential when being designed and constructed.
- 2.48. All water infrastructure will be required to comply with Watercare's Code of Practice for Land Development and Subdivision. The Applicant will need to work with Watercare in advance of lodging resource consents for subdivision to confirm the requirement for any local and bulk water supply infrastructure upgrades. Final design of the proposed water supply network can be confirmed at resource consent stage.

Funding

Bulk infrastructure

- 2.49. The bulk water and wastewater infrastructure required to service the Plan Change area needs to be confirmed by Watercare.
- 2.50. The Applicant is required to fund all of the bulk potable water and wastewater infrastructure required to service the Plan Change area.
- 2.51. If upgrades to Water Treatment Plants and/or Wastewater Treatment Plants, including obtaining of new resource consents, are required to be brought forward to service the Plan Change area full cost for bringing forward these upgrades shall be funded by the Applicant.

- 2.52. Watercare agrees that there are significant opportunistic works for upgrading and/or upsizing of bulk infrastructure required to service the wider Warkworth South Future Urban catchment areas.
- 2.53. An infrastructure funding agreement between the Applicant and Watercare setting out the cost share for these opportunistic works has yet to be formalised and may prove unworkable given the significant misalignment in the timing between the Plan Change and Watercare's planned works referred to above.
- 2.54. Watercare will work with the Applicant to consider such an agreement.
- 2.55. Therefore. Watercare recommends that:

Wastewater:

- The Applicant shall give consideration to all the land within the wider Warkworth South future urban area that may naturally drain, or most logically pump to, the proposed pumping stations.
- The Applicant shall provide sufficient appropriately located land to be vested to Watercare to ensure that each proposed pumping station can be fully upgraded to provide sufficient capacity for all of the wider Warkworth South future urban area that may drain, or be pumped to, the proposed pumping stations.
- The Applicant shall consider future proofing of infrastructure if providing this infrastructure at a
 later date causes unreasonable disruption to the wider Warkworth area. For example, by laying
 sufficient rising mains from the pumping stations to cater for future flows and by installing pumping
 station infrastructure sized for the ultimate flows (does not include mechanical and electrical
 equipment).
- The applicant engages with Watercare to consider the timing and funding of the upgrades needed at the new Snells Beach Wastewater Treatment Plant to service this Plan Change area

Water:

- The Applicant shall give consideration to the entire area that the future proposed Southern Reservoir is likely to service.
- The Applicant shall ensure that sufficient appropriately located land is provided for vesting to Watercare to fully upgrade the Southern Reservoir for servicing the wider Warkworth South future urban area.
- The Applicant shall ensure that the water supply pipe from the existing Watercare water supply network to the Southern Reservoir, as well as any necessary booster pumping station, is sized to cater for the wider Warkworth South future urban area.
- The Applicant shall consider future proofing of infrastructure if providing this infrastructure at a later date causes unreasonable disruption to the wider Warkworth area. For example, by laying sufficient water supply mains to the Southern Reservoir to cater for future demand and by installing reservoir infrastructure sized for the ultimate demand.
- The applicant engages with Watercare to consider the timing and funding of the upgrades needed at the Warkworth Water Treatment Plant to service this Plan Change area and additional Water supply and abstraction consents.

Local infrastructure

- 2.56. Funding of the local water supply and wastewater infrastructure necessary to service the Plan Change area is at the cost of the Applicant.
- 2.57. As per Watercare's Code of Practice for Land Development and Subdivision, the local networks must be sized to accommodate the future development potential at the developers cost.

Precinct Provisions

- 2.58. Watercare strongly supports precinct provisions that require subdivision and development to be coordinated with the provision of adequate water supply and wastewater infrastructure.
- 2.59. Watercare supports an activity status of non complying for any subdivision or development that precedes the provision of adequate water supply and wastewater infrastructure.
- 2.60. Watercare supports Standard 1XXX.6 Wastewater and Potable Water Connections clauses (1) and (2) which require all lots except for those in Residential Large Lot and Open Space Conservation zones to be connected to a reticulated wastewater network and potable water network.
- 2.61. Watercare supports Standard 1XXX.6 Wastewater and Potable Water Connections clause (3) which requires development to be connected to a functioning water and wastewater network prior to the issue of a s224(c) certificate, subject to the following amendment to ensure that the network also has the capacity to serve the proposed development.
 - Ixxx.6.9 Wastewater and Potable Water Connections
 - (3) Prior to the issue of s224(c), the development shall be connected to a functioning water and wastewater network with sufficient capacity to service the proposed development.
- 2.62. To ensure that the precinct description is consistent with the requirements of Standard 1XXX.6 Wastewater and Potable Water Connections and the amendments proposed by Watercare, Watercare seeks the following amendments to the precinct description.

....

The development controls for the precinct recognise that development of residential lots can occur concurrently with the provision of infrastructure but prior to the issuing of s224(c) certification for subdivision. However, the development controls do require that development is connected to a functioning water and wastewater network with sufficient capacity to service the proposed development prior to the issuing of s224(c) certification for subdivision.

2.63. To ensure there is strong and directive policy support for the non-complying activity classification for development and subdivisions that do not comply with Standard 1XXX.6 Wastewater and Potable Water Connections, Watercare seeks the inclusion of the following new policy.

IXXX.3 Policies

(XX) Avoid subdivision and development progressing ahead of the provision of a functioning water and wastewater network with sufficient capacity to service the proposed development.

22.2

32.3

32.4

32.5

32.6

32.1

3. DECISION SOUGHT

- 3.1. Watercare seeks a decision that ensures that the water and wastewater capacity and servicing requirements of the Plan Change will be adequately met, such that the water and wastewater related effects are appropriately managed.
- 3.2. Watercare seeks the inclusion of the proposed amendments to the precinct provisions as set out in section 2 above or similar provisions that will achieve the same outcomes.

4. HEARING

4.1. Watercare wishes to be heard in support of its submission

23 November 2023

Mark Iszard

Mark Iszard Head of Major Developments Watercare Services Limited

Address for Service:
Mark Iszard
Head of Major Developments
Watercare Services Limited
Private Bag 92521
Victoria Street West
Auckland 1142

Phone: +64 21 913 296

Email: Planchanges@water.co.nz

Page 12 of 12

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: <u>Unitary Plan</u>

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Caroline Barrett

Date: Thursday, 23 November 2023 8:45:41 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Caroline Barrett

Organisation name:

Agent's full name:

Email address: carolinebarrett1@mac.com

Contact phone number: 021 917 745

Postal address: 39 Beach Street Sandspit Warkworth Auckland 0982

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Total Plan Change 93 (Private)

Property address:

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we oppose the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

- 1. The Plan Change is premature.
- 2. Growth strategy does not allow for growth until 2028-2032 (or 2040+ if proposed Future Development Strategy is approved by Auckland Council).
- 3. Infrastructure of major arterial roads, sewerage, etc, should be in place first before any development takes place.
- 4. Terraced Housing in Warkworth South is not appropriate.
- 5. Terraced Housing usually requires a small town centre which may not be financially viable. The existing commercial centre of Warkworth should be the only centre for the Warkworth area.

33.1

6. The area of the proposed Plan Change is more suited to Large Lot Zoning and Single Family Dwelling Zoning.

I or we seek the following decision by council: Decline the plan change

Submission date: 23 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? Yes

Would you consider presenting a joint case at a hearing if others have made a similar submission? Yes

I accept by taking part in this public submission process that my submission (including personal

Declaration

Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

details, names and addresses) will be made public.

Page 2 of 3

CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: <u>Unitary Plan</u>

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Pete Sinton

Date: Thursday, 23 November 2023 9:00:24 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Pete Sinton

Organisation name:

Agent's full name:

Email address: petesinton@townplanner.co.nz

Contact phone number: 021 637 772

Postal address: 49 Beach Street Sandspit Warkworth Auckland 0982

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Total Plan Change 93 (Private)

Property address:

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we oppose the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

- 1. The Plan Change is premature.
- 2. Growth strategy does not allow for growth until 2028-2032 (or 2040+ if proposed Future Development Strategy is approved by Auckland Council).
- 3. Infrastructure of major arterial roads, sewerage, etc, should be in place first before any development takes place.
- 4. Terraced Housing in Warkworth South is not appropriate.
- 5. Terraced Housing usually requires a small town centre which may not be financially viable. The existing commercial centre of Warkworth should be the only centre for the Warkworth area.

6. The area of the proposed Plan Change is more suited to Large Lot Zoning and Single Family Dwelling Zoning.

I or we seek the following decision by council: Decline the plan change

34.1

Submission date: 23 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? Yes

Would you consider presenting a joint case at a hearing if others have made a similar submission? Yes

I accept by taking part in this public submission process that my submission (including personal

Declaration

Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

details, names and addresses) will be made public.

CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: <u>Unitary Plan</u>

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Bevan Morrison

Date: Thursday, 23 November 2023 9:30:27 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Bevan Morrison

Organisation name:

Agent's full name:

Email address: bevanmorrison75@gmail.com

Contact phone number: 0220350582

Postal address: 1829 state highway 1

RD3

Warkworth 0983

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Full plan change proposal

Property address: 1829 SH1, Warkworth

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

The plan change is well thought out and will bring huge amenity value to South Warkworth where we live. They are investing millions of dollars in infrastructure that the council would not otherwise have the capacity to deliver for decades to come. The plan change which includes Morrison Heritage orchard will provide certainty for developers to plan and provide a beautiful space for the broader community.

I or we seek the following decision by council: Approve the plan change without any amendments

Details of amendments:

Submission date: 23 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? Yes

Would you consider presenting a joint case at a hearing if others have made a similar submission? Yes

Declaration

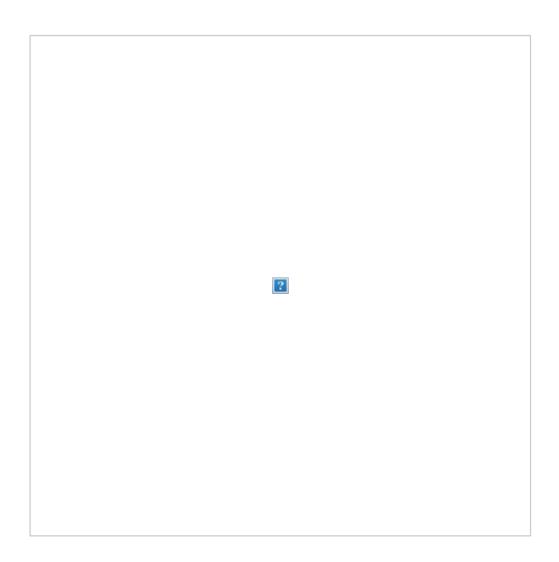
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Bevan Morrison

Date: Thursday, 23 November 2023 9:30:31 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Bevan Morrison

Organisation name: Red Bluff investment Itd

Agent's full name:

Email address: bevanmorrison75@gmail.com

Contact phone number: 0220350582

Postal address: 1829 SH1 RD3

Warkworth 0983

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules: Full submission

Property address: Unit G 9 Gumfield Drive, Warkworth

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

The plan change will bring online more housing and construct a large portion of the Wider Western Link Road as well as foot path up to McKinney Rd which will be a great thing for those working in the industrial area but living in south Warkworth, giving us a safe option to walk or ride to work.

I or we seek the following decision by council: Approve the plan change without any amendments

Details of amendments:

Submission date: 23 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? Yes

Would you consider presenting a joint case at a hearing if others have made a similar submission? Yes

Declaration

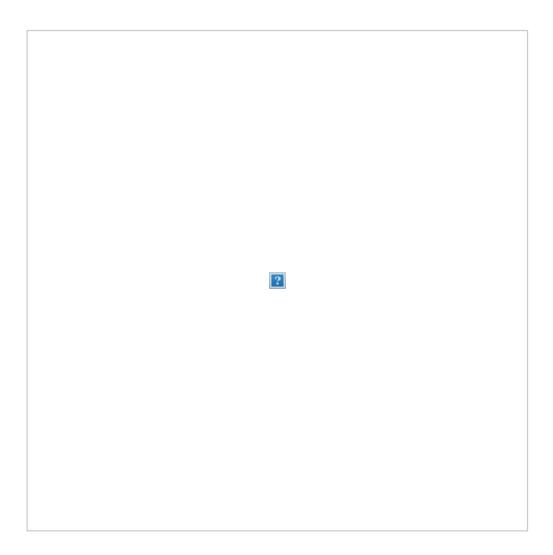
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: <u>Unitary Plan</u>

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Robyn Morrison

Date: Thursday, 23 November 2023 9:30:32 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Robyn Morrison

Organisation name: Gumfield Property Ltd

Agent's full name:

Email address: tdrj.morrison@xtra.co.nz

Contact phone number:

Postal address: 1791 Old SH1 Warkworth Auckland 0983

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

Property address: 5/9 Gumfield Drive, 4/9 Gumfield Drive, 21 Gumfield Drive

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

We support the application for rezoning of 159 Ha of rural and future urban land on the Old SH1 south of Warkworth. This will facilitate some of Warkworth's future housing needs in an integrated community structure.

I or we seek the following decision by council: Approve the plan change without any amendments

Details of amendments:

Submission date: 23 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

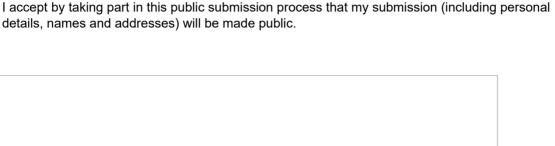
Declaration

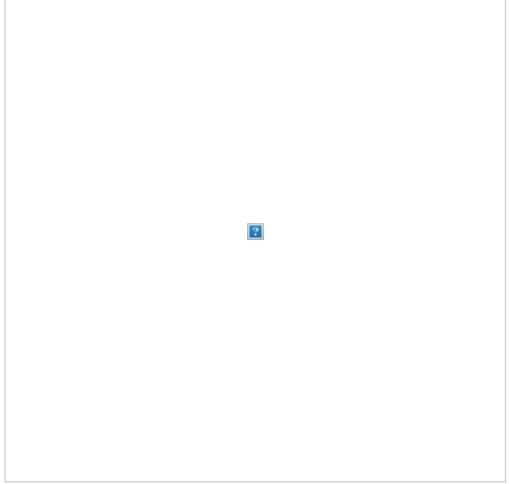
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No





CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: Unitary Plan

Subject: Unitary Plan Publicly Notified Submission - Plan Change 93 - Robyn Morrison

Date: Thursday, 23 November 2023 9:45:24 pm

The following customer has submitted a Unitary Plan online submission.

Contact details

Full name of submitter: Robyn Morrison

Organisation name: Kenilworth Orchards

Agent's full name: Robyn Morrison

Email address: tdrj.morrison@xtra.co.nz

Contact phone number:

Postal address: 1791 Old SH1 Warkworth Auckland 0983

Submission details

This is a submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

My submission relates to

Rule or rules:

The rezoning of 159 HA of rural and future urban land on the Old SH1 south of Warkworth

Property address: 1773 Old SH1

Map or maps:

Other provisions:

Do you support or oppose the provisions you have specified? I or we support the specific provisions identified

Do you wish to have the provisions you have identified above amended? No

The reason for my or our views are:

We support the application for rezoning of 159 Ha of rural and future urban land on the Old SH1 south of Warkworth. And also the establishment of the precinct for the Morrison Heritage Orchard. This is part of the history of the Warkworth area and will be a permanent green space focusing on the production of fresh fruit, vegetables and other local produce.

I or we seek the following decision by council: Approve the plan change without any amendments

Details of amendments:

Submission date: 23 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? No

Declaration

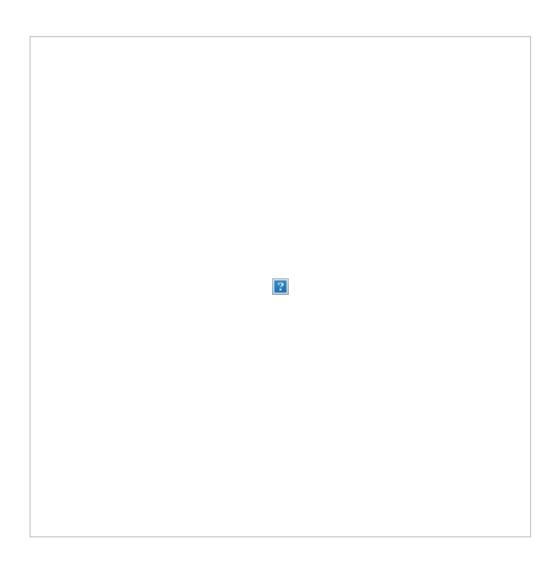
Could you gain an advantage in trade competition through this submission? No

Are you directly affected by an effect of the subject matter of this submission that:

- · Adversely affects the environment; and
- Does not relate to trade competition or the effects of trade competition.

No

I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.



Submission on Proposed Private Plan Change 93 – Warkworth South - Waimanawa

Clause 6 of Schedule 1, Resource Management Act 1991 (Form 5)

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter(s): **Thompson Road Residents**

This is a submission on Proposed Private Plan Change 93 ("PPC93") to the Auckland Unitary Plan – ("AUP").

Thompson Road Residents could not gain an advantage in trade competition through this submission.

The Submitter's own properties on Thompson Road, Warkworth A map showing the location of Thompson Road in relation to the Plan Change area is **Attachment A**.

The Submitter's **SUPPORT** the Proposed Plan Change Request in principle, subject to the matters stated in this submission being addressed and for the reasons stated.

2. The Plan Change Request

PPC93 – Warkworth South - Waimanawa seeks a comprehensive rezoning and the introduction of Precinct provisions for Waimanawa (comprising of Waimanawa Valley and Waimanawa Hills) and the Morrison Orchard areas. The stated purpose of PPC93 is:

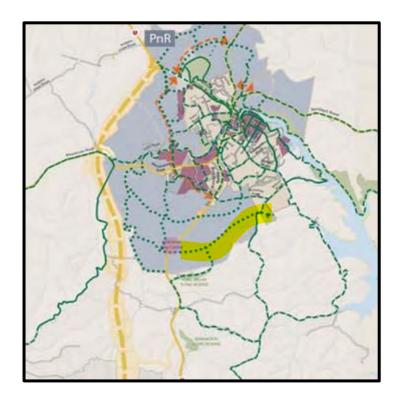
The purpose of the plan change is to re-zone land in Warkworth South to:

- (a) Provide for the continuation and expansion of the Morrison Heritage Orchard and further development of this site with supporting activities and limited residential development.
- (b) Enable the urban development of the remainder of the area (referred to as Waimanawa) to proceed generally in accordance with the outcomes sought through the Warkworth Structure Plan.

SCOPE OF SUBMISSION

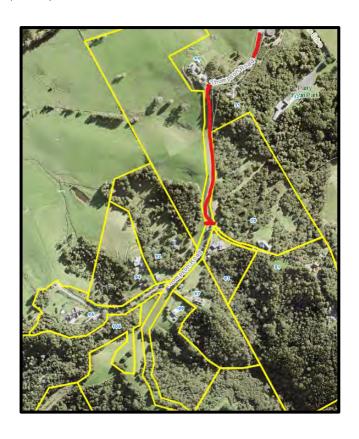
3. SUBMISSION

PPC93 Waimanawa – Precinct Plan 1 – Spatial provisions shows Indicative Off-Road Greenways Routes. There is a proposed route connecting through the existing native bush at the south-eastern end of 1768 State Highway 1 (the north-eastern most property included in PPC93) to the north. These indicative greenways appear to align with the networks shown on Rodney Greenways | Paths and Trails Plan – Pūhoi to Pakiri May 2017 maps – set out below:



It is unclear where the trail will connect to the north but the Pūhoi to Pakiri Trail indicates the trail traversing over private land.

Thomspon Road Residents consider it is more likely the trail will at some point in time, connect to Thompson Road. The formed part of Thompson Road – indicated with the red line below, is metal formation and in very poor condition. There are relatively high traffic volumes – traffic counted in May 2023 was approximately 60 vehicles in each direction per day which is almost double the previous traffic count in 2016 which was 38 vehicles in each direction per day.



Thompson Road Residents consider that given various issues, such as access over private property, kauri die back and the fact there is legal road in the vicinity, that is more likely than not, the trail will be directed to Thompson Road.

Walking and cycling access is supported in principle but it needs to be safe and functional. Future connections from the PPC93 area need to ensure that access on roads is safe and therefore road upgrades need to be planned accordingly.

Whilst outside of the matters that can be secured in the Plan Change the submission seeks to highlight wider infrastructure issues that will arise and need to be properly planned for to achieve outcomes indicated in the Plan Change documentation. The Agencies – Auckland Transport, Watercare and Auckland Council need to be aware of the flow on effects of the proposed plan change and make appropriate plans to achieve the effective and efficient integration of the infrastructure and urban development. The flow on effects should not be left with local residents and communities to manage.

3.3 Decisions Sought

Thompson Road Residents seek that PPC93 – Warkworth South plan change be **approved** with changes to provisions to address the matters raised in this submission.

It is sought that a note be added to Precinct Plan 1 – Spatial Provisions to indicate that the Trail to the north of 1768 State Highway is indicative and planned upgrades of Thompson Road to facilitate the trail will be required.

Thompson Road Residents wish to be heard in support of this submission.

If others make a similar submission, the Submitters will consider presenting a joint case at the hearing.

Yours sincerely

Burnette O'Connor Director | Planner

The Planning Collective Limited

Butte O'Genow

Ph: +64 021 422 346

Email: burnette@thepc.co.nz

Attachment A – Thompson Road Location Map

Auckland Council



DISCLAIMER:

This map/plan is illustrative only and all information should be independently verified on site before taking any action. Copyright Auckland Council. Land Parcel Boundary information from LINZ (Crown Copyright Reserved). Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and plan completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information. Height datum: Auckland 1946.





From: <u>Murray Wilson</u>
To: <u>Unitary Plan</u>

Subject: Plan Change 93 Private) - Warkworth South Submission

Date: Friday, 24 November 2023 4:08:23 pm

Hi

I appreciate the formal submission date closed at midnight last night. This is an oversight on my part, so would appreciate your support in taking this submission into consideration. Specifically we have no objection to the above Plan Change 93 (Private), provided that there will be no further degradation of telecoms and Internet / broadband supply to our property as a result of the increase in residential and commercial premises within this defined zone i.e. the contention ratio, must be taken into consideration, inclusive of the nearby properties with the proposal.

Thanking you in advance for the support Kind regards M A & MG Wilson 120 Perry Road RD3 Warkworth 0983 Auckland

Form 5 Submission on notified proposal for policy statement or plan, change or variation

Clause 6 of Schedule 1, Resource Management Act 1991

To Auckland Council unitaryplan@aucklandcouncil.govt.nz

Submission No: Receipt Date:

Attn: Planning Technician Auckland Council Level 16, 135 Albert Street Private Bag 92300 Auckland 1142

Name of submitter: R and T Morrison, D Morrison

Submitter details

Full Name or Name of Agent (if applicable)

Terra Nova Planning Ltd (Contact: Shane Hartley)

Organisation Name (if submission is made on behalf of Organisation)

n/a

Address for service of Submitter

Terra Nova Planning, PO Box 466, Orewa

Telephone: 021 159 3240 **Email:** shanehartley@tnp.co.nz

Contact Person: Shane Hartley; Terra Nova Planning Ltd

Scope of submission

This is a submission on the following proposed plan change / variation to an existing plan:

Plan Change/Variation Number PC 93 (Private)

Plan Change/Variation Name: Warkworth South

The specific provisions that my submission relates to are:

(Please identify the specific parts of the proposed plan change / variation)

<u>Plan provision(s):</u> The Plan Change generally, and specifically the activity rules for the Part C Morrison Heritage Orchard Precinct

Or

Property Address:

Or

Мар:

Or

Other (specify):

Submission

My submission is: (Please indicate whether you support or oppose the specific provisions or wish to have them amended and the reasons for your views)

I support the specific provisions identified above

X

The reasons for my views are:

- (a) We support the plan change in general.
- (b) We seek amendment to the activity table and standards relating to the Morrison Heritage Orchard Precinct as sought in the **Attachment** to this submission, or such alternative wording as may be appropriate. The amendments sought will provide greater clarity and certainty than the notified provisions.

I seek the following decision by Council:

Accept the proposed plan change / variation

Accept the proposed plan change / variation with amendments as outlined below

Decline the proposed plan change / variation

If the proposed plan change / variation is not declined, then amend it as outlined below.

Refer Attachment with amendments sought.

I wish to be heard in support of my submission

<u>X</u>

I do not wish to be heard in support of my submission

If others make a similar submission, I will consider presenting a joint case with them at a hearing

Χ

Shane Hartley

Signature of Submitter

Date: 28 November 2023 (Lodged

online 23 November 2023)

(or person authorised to sign on behalf of submitter)

Notes to person making submission:

If you are making a submission to the Environmental Protection Authority, you should use Form 16B. Please note that your address is required to be made publicly available under the Resource Management Act 1991, as any further submission supporting or opposing this submission is required to be forwarded to you as well as the Council.

If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of Part 1 of Schedule 1 of the Resource Management Act 1991.

I could /could not gain an advantage in trade competition through this submission.

If you could gain an advantage in trade competition through this submission please complete the following:

I am / am not directly affected by an effect of the subject matter of the submission that:

- (a) adversely affects the environment; and
- (b) does not relate to trade competition or the effects of trade competition.

Table XXX.X.1 Activity table

	Use	Activity status
Visitor Activiti	es and Accommodation	
(A1)	A maximum of four dwellings in Activity Area A as of [INSERT OPERATIVE PLAN CHANGE DATE] or a single site comprising Activity Area A.	Р
(A2)	One dwelling per site in Activity Areas A, B and C other than as permitted in (A1) above and (A12) of this Table.	Р
(A3)	Camping ground	Р
(A4)	Garden centre	Р
(A5)	Market s	Р
(A6)	One minor dwelling per principal dwelling, excluding dwellings established under (A12) of this Table.	Р
(A7)	Produce sales	Р
(A8)	Restaurant and café	Р
(A9)	Rural commercial services	Р
(A10)	Rural tourist and visitor activities	Р
(A11)	Visitor accommodation	Р
(A12)	Workers' accommodation	Р
(A13)	Weddings and functions	Р
(A14)	Activities (A1) to (A13) not complying with the standards in Rule XXX.6 below	RD
Development		
(A15)	New buildings or additions up to 250m ² GFA in all Precinct Activity Areas	Р
(A16)	New buildings or additions 250m ² GFA or greater in all Precinct Activity Areas.	RD
Subdivision		
(A17)	Subdivision complying with Standard XXX.6.11.	RD
(A18)	Subdivision not complying with Standard XXX.6.11.	D

XXX.5. Notification

- (1) An application for resource consent for a restricted discretionary activity listed in Table XXX.X.1 above will be considered without public or limited notification or the need to obtain written approval from affected parties unless the Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.
- (2) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4).

41.1

41.14

41.2

41.3

XXX.6. Standards

The overlay, zone and Auckland-wide standards apply in this precinct unless otherwise specified below.

All activities listed as permitted, restricted discretionary in (A16) and subdivision in (A17) in **Table XXX.X.1** Activity table must comply with the following standards.

XXX.6.1 General access and traffic generation standard

- (1) All activities shall obtain access to State Highway One in accordance with the Approved Entry Point (AEP) shown on the Precinct Plan.
- (2) Activities A3 to A13, excluding produce sales (A7), listed in Table XXX.X.1 above do not either singularly or cumulatively exceed a trip generation threshold of 100 v/hr (any hour).

XXX.6.2. Camping grounds within Precinct PlanActivity Areas A and B

- (1) Camping ground(s) for a maximum of 50 sites with in each either of Activity Areas A and B.
- (2) <u>Camping ground sites shall not cumulatively exceed 100 sites over both Activity Areas A</u> and B

XXX.6.3. Garden Centre within Precinct Plan Activity Areas A and B

- (1) The maximum area of a garden centre in including building and outdoor sales and storage areas is 750m².
- (2) Only one garden centre may be established in either Activity Area A or B, but not both.

XXX.6.4. Markets

- (1) The location of the market shall be located within Activity Area B.
- (2) A-The market shall have a maximum of 100 stalls.
- (3) The trading hours of markets are limited to 7.00am until to 11.00pm.
- (4) Any other activities associated with the market must not occur between midnight and 6.00am.
- (5) Stalls involved in the markets are limited to the sale of food and beverages or items produced by the stall holder which may include fresh and processed goods, small holding livestock, artwork, crafts and pottery and includes locally made products. This includes shops with an operational function (e.g. cheese making).

41.4

41.5

41.6

41.7

XXX.6.5. Produce sales

- (1) The location of the Orchard produce sales shop shall be located within Activity Area B of the Precinct plan.
- (2) A The produce shop shall have a maximum of 450m² including building and outdoor sales for the display and sale of produce.
- (3) The type of produce offered for sale on the site must be confined to the following:
 - (a) fruit, vegetables, plants, eggs, flowers, honey, dairy products, meat, beer, wine, juices.
 - (b) produce or products from on-site primary produce manufacturing.
 - (c) produce and handcrafts not grown or produced on the site or on a site in the locality, shall not exceed 10 % of the GFA produce display and sales area.

XXX.6.6. Restaurant and cafe

- (1) One restaurant and one café may be established in Activity Area B.
- (2) A restaurant or café shall <u>each provide have maximum</u> seating for a <u>maximum of 120</u> people.
- (3) The hours of operation of both a restaurant or and café are limited to 7.00am to midnight.

XXX.6.7. Rural tourist and visitor activities

(1) Rural tourist and visitor activities for a maximum of 500 people <u>cumulatively</u> in Activity Areas A and B.

XXX.6.8 Visitor accommodation

- (1) Visitor accommodation (including manager's accommodation) for a maximum of 25 units or 100 people (whichever is greater) within either or both each of Activity Areas A and B.
- (2) <u>Visitor accommodation shall not cumulatively exceed 50 units or 200 people (whichever is greater)</u> over both Activity Areas A and B.

XXX.6.9 Weddings and functions

- (1) Wedding and function activities may occur within either or both Activity Areas A and B.
- (2) The activity may include use of an existing restaurant / café on the site and temporary or semi-permanent marquees.

XXX.6.10. Workers accommodation

- (1) Workers accommodation with a maximum of 10 dwellings in total in either or both within each of Activity Areas A and B complying with the following:
 - (a) Dwellings shall comply with all the relevant yard setbacks and height standards for buildings in the Zone.

41.8

41.9

44.40

41.11

41.12

41.13

- (b) Dwellings shall have a maximum floor area of 120m² excluding decks and garaging. The floor area may include a dormitory or individual rooms.
- (c) The accommodation may accommodate seasonal workers.
- (2) Workers accommodation shall not cumulatively exceed 20 dwellings over both Activity Areas A and B.

From: UnitaryPlanFurtherSubmissionForm@donotreply.aucklandcouncil.govt.nz

To: <u>Unitary Plan</u>

Subject: Unitary Plan further submission - Plan Change 93 - Ray Crosswell

Date: Wednesday, 31 January 2024 8:00:29 pm

The following customer has submitted a Unitary Plan online further submission.

Contact details

Full name of person making a further submission: Ray Crosswell

Organisation name:

Full name of your agent:

Email address: rayslr@oitlook.com

Contact phone number:

Postal address: 30 Valerie Close Warkworth Auckland 0983

Submission details

This is a further submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

Original submission details

Original submitters name and address:

Ka waimanawa limited partnership with stepping towards far limited

Submission number: Pc93

Do you support or oppose the original submission? I or we support the submission

Specific parts of the original submission that your submission relates to:

Point number Approve the plan change without change

The reasons for my or our support or opposition are:

Well thought out development great for the community and growth

I or we want Auckland council to make a decision to: Allow the whole original submission

Submission date: 31 January 2024

Attend a hearing

I or we wish to be heard in support of this submission: No

Declaration

What is your interest in the proposal? I am a person who has an interest in the proposal that is greater than the interest that the general public has

Specify upon which grounds you come within this category:

Owner of property in the development

I declare that:

- I understand that I must serve a copy of my or our further submission on the original submitter within five working days after it is served on the local authority
- I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: UnitaryPlanFurtherSubmissionForm@donotreply.aucklandcouncil.govt.nz

To: <u>Unitary Plan</u>

Subject: Unitary Plan further submission - Plan Change 93 - Sarah Menzies

Date: Tuesday, 6 February 2024 7:15:12 pm

The following customer has submitted a Unitary Plan online further submission.

Contact details

Full name of person making a further submission: Sarah Menzies

Organisation name:

Full name of your agent: Sarah Menzies

Email address: s.menzies@actrix.co.nz

Contact phone number:

Postal address: 1 Rural View Lane Warkworth Auckland 0910

Submission details

This is a further submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

Original submission details

Original submitters name and address:

Auckland Transport

Submission number: #20

Do you support or oppose the original submission? I or we support the submission

Specific parts of the original submission that your submission relates to:

Point number 20.1 Point number 20.2

The reasons for my or our support or opposition are:

I support Auckland Transports request to OPPOSE the Plan Change for the reasons given in points #20.1 and #20.2.

I agree that appropriate provision has not been made to ensure that the transport needs of the precinct can be met and that future strategic transport infrastructure is provided for and protected.

I agree that transport infrastructure and services are not sufficiently provided to support the planned growth, mitigate adverse transport effects and achieve a well-functioning urban environment.

I agree that the plan change will enable development in a location which does not have frequent public transport services and where there is no Auckland Transport funding available to improve the services. To support transport land use integration, subdivision and development must not occur in advance of the availability of operational transport infrastructure.

In its submission, Auckland Transport notes that the trip generation rates in part assume a public

transport infrastructure that is not provided for.

I would further note that, even if public transport is provided for in the immediate vicinity, it will still *not* address the lack of *bus lanes* anywhere between Warkworth and Othea Valley Road. The current plan change request plans for 1600 new residential lots. It is very clear based on numbers alone that the majority of the residents of those dwellings will not find jobs in Warkworth and so will need to commute south to the North Shore and beyond.

Significant and unreasonable traffic congestion *already* occurs for hours every day between Milldale and Othea Valley Road travelling south across peak times. Significant congestion occurs even more frequently and at any time of day, including on weekends, between Redvale and Silverdale. Traffic is most frequently congested in this stretch anywhere from 2.30-6.30 pm on weekdays.

Until bus lanes are provided in both directions along this route, there will be *no incentive* for drivers to take public transport instead of private cars. Commuters are, after all, highly unlikely to choose to walk or bike to a bus stop (in all weather and at all times of day), only to be caught in exactly the same traffic they'd be caught in if driving their car and while adding to their discomfort and lengthening their day by losing the convenience of being able to go exactly where they need (only as close as possible on a bus).

It would make no sense for Auckland Council to declare a climate emergency, as it has done, and then to enable the incompatible and premature growth of Warkworth, a centre over 60 km from the city centre for which no public transport infrastructure exists.

Until transport infrastructure can be provided, subdivision and / or development of Warkworth South should be assessed as a non-complying activity and the plan change application declined.

I or we want Auckland council to make a decision to: Allow part of original submission

Specify the parts of the original submission you want to allow or disallow: 20.1 and 20.2

Submission date: 6 February 2024

Attend a hearing

I or we wish to be heard in support of this submission: No

Declaration

What is your interest in the proposal? I am the person representing a relevant aspect of the public interest

Specify upon which grounds you come within this category:

I live in Warkworth and believe my views represent a relevant aspect of the public interest. I apologise if I have misunderstood.

I declare that:

- I understand that I must serve a copy of my or our further submission on the original submitter within five working days after it is served on the local authority
- I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.

Summer splash pads are calling.				
_				
?				

CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

From: <u>UnitaryPlanFurtherSubmissionForm@donotreply.aucklandcouncil.govt.nz</u>

To: Unitary Plan

Subject: Unitary Plan further submission - Plan Change 93 - Sarah Menzies

Date: Tuesday, 6 February 2024 7:15:20 pm

The following customer has submitted a Unitary Plan online further submission.

Contact details

Full name of person making a further submission: Sarah Menzies

Organisation name:

Full name of your agent: Sarah Menzies

Email address: s.menzies@actrix.co.nz

Contact phone number:

Postal address: 1 Rural View Lane Warkworth Auckland 0910

Submission details

This is a further submission to:

Plan change number: Plan Change 93

Plan change name: PC 93 (Private): Warkworth South

Original submission details

Original submitters name and address:

Paula Christine Anderson 63 Perry Road Warkworth 0983

Submission number: #9

Do you support or oppose the original submission? I or we support the submission

Specific parts of the original submission that your submission relates to:

Point number #9

The reasons for my or our support or opposition are:

I support the whole of the submission and the reasons given.

I or we want Auckland council to make a decision to: Allow the whole original submission

Submission date: 6 February 2024

Attend a hearing

I or we wish to be heard in support of this submission: No

Declaration

What is your interest in the proposal? I am the person representing a relevant aspect of the public interest

Specify upon which grounds you come within this category:

I believe I represent a relevant aspect of the public interest.

I declare that:

- I understand that I must serve a copy of my or our further submission on the original submitter within five working days after it is served on the local authority
- I accept by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public.



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

Before you fill out the attached submission form, you should know: $^{\mbox{FS }03}$

You need to include your full name, an email address, or an alternative postal address for your submission to be valid. Also provide a contact phone number so we can contact you for hearing schedules (where requested).

By taking part in this public submission process your submission will be made public. The information requested on this form is required by the Resource Management Act 1991 as any further submission supporting or opposing this submission is required to be forwarded to you as well as Auckland Council. Your name, address, telephone number, email address, signature (if applicable) and the content of your submission will be made publicly available in Auckland Council documents and on our website. These details are collected to better inform the public about all consents which have been issued through the Council.

Please note that your submission (or part of your submission) may be struck out if the authority is satisfied that at least one of the following applies to the submission (or part of the submission):

- It is frivolous or vexatious.
- It discloses no reasonable or relevant case.
- It would be an abuse of the hearing process to allow the submission (or the part) to be taken further.
- It contains offensive language.
- It is supported only by material that purports to be independent expert evidence, but has been prepared by a person who is not independent or who does not have sufficient specialised knowledge or skill to give expert advice on the matter.

Further Submission in support of, or opposition to, a **notified proposed plan change or variation**Clause 8 of Schedule 1, Resource Management Act 1991

FORM 6



Send your submission to unitaryplan@aucklandcouncil.gov/post to :	nz or For office use only Further Submission No:
Attn: Planning Technician Auckland Council Level 16, 135 Albert Street Private Bag 92300 Auckland 1142	Receipt Date:
Further Submitter details	
Full Name or Name of Agent (if applicable)	
Mr/Mrs/Miss/Ms(Full Name)	
Organisation Name (if further submission is made on be	ehalf of Organisation)
Address for service of Further Submitter	
Telephone: Email:	
Contact Person: (Name and designation, if applicable)	
Scope of Further Submission	
This is a further submission in support of (<i>or</i> opposition change / variation:	to) a submission on the following proposed plan
Plan Change/Variation Number PC 93 (Private)	
Plan Change/Variation Name Warkworth South	
I support : ☐ Oppose ☐ (tick one) the submission of:	(Please identify the specific parts of the original submission)
(Original Submitters Name and Address)	Submission Number Point-Number
The reasons for my support / opposition are:	

Page 2 of 4 661

	FS 03				
(continue on a separate	e sheet if necessary)				
I seek that: the whole : or part					
I wish to be heard in support of my submission I do not wish to be heard in support of my submission If others make a similar submission, I will consider presenting a joint case with them at a hearing	I wish to be heard in support of my submission I do not wish to be heard in support of my submission If others make a similar submission, I will consider presenting a joint case with them at a				
Signature of Further Submitter (or person authorised to sign on behalf of further submitter) PLEASE COMPLETE THE FOLLOWING SECTION					
Please tick one					
I am a person representing a relevant aspect of the public interest. (Specify upon v you come within this category) I am a person who has an interest in the proposal that is greater than the interest that					
public has. (Specify on what grounds you come within this category)	- 				
Notes to person making submission: A copy of your further submission must be served on the original submitter within 5 working days af the local authority If you are making a submission to the Environmental Protection Authority, you should use Form 16C					

Submitter Name/Contact	Submission Number	Support or Oppose	The particular parts of the submission I support or oppose are:	The reasons for my support or opposition are:	I seek that the whole or part of the submission be allowed or disallowed:
Auckland Council, submitter – craig.cairncross@aucklandcouncil.govt.nz	17.1	Support	Proposed text change to include the word 'avoid'	The proposed change will assist in the integration of transport and land use development	NZTA seeks the submission point be allowed.
Auckland Council, submitter – craig.cairncross@aucklandcouncil.govt.nz	17.3	Support	Proposed non-complying activity status	The proposed change will assist in the integration of transport and land use development	NZTA seeks the submission point be allowed.
Auckland Council, submitter – craig.cairncross@aucklandcouncil.govt.nz	17.4	Support	Proposed non-complying activity status	The proposed change will assist in the integration of transport and land use development	NZTA seeks the submission point be allowed.
Auckland Council, submitter – craig.cairncross@aucklandcouncil.govt.nz	17.5	Support	Require public notification of resource consents for clause 1XXX6.8 (Western Link Road)	Affected parties should be given an opportunity to submit if this critical piece of infrastructure is not in place	NZTA seeks the submission point be allowed.
Auckland Council, submitter – craig.cairncross@aucklandcouncil.govt.nz	17.6	Support	Reduce the infrastructure trigger from 20 residential lots to three	The proposed change will assist in the integration of transport and land use development	NZTA seeks the submission point be allowed.
KA Waimanawa Partnership and Stepping Towards Far Limited – ian.smallburn@tattico.co.nz	24.15	Oppose	Add a note to state that the walking and cycling connection on old State Highway 1 will be temporary	It is not known if the walking or cycling connection (or parts of it) will be temporary or permanent at this stage.	NZTA seeks the submission point be disallowed.
Mikel Jon Thorogood – burnette@thepc.co.nz	25.1	Support	The need to include the McKinney Road intersection and walking and cycling connections in the event that the proposed development proceeds ahead of the McKinney Road Precinct.	The proposed change will assist in the integration of transport and land use development	NZTA seeks the submission point be allowed.
Guy Matches – <u>burnette@thepc.co.nz</u>	26.1	Oppose	Inclusion of the submitter's land in the plan change.	There may be merit in including the submitter's site (and/or other 'stranded' land) but unless such an inclusion has been assessed, the proposal should be declined	NZTA seeks the submission point be disallowed



20 Viaduct Harbour Avenue, Auckland 1010 Private Bag 92250, Auckland 1142, New Zealand **Phone** 09 355 3553 **Website** www.AT.govt.nz

9 February 2024

Plans and Places Auckland Council Private Bag 92300 Auckland 1142

Email: <u>unitaryplan@aucklandcouncil.govt.nz</u>

Further Submission for Proposed Private Plan Change 93 - Warkworth South

Please find attached Auckland Transport's further submission to the submissions lodged on Proposed Private Plan Change 93 Warkworth South. The applicants are the KA Waimanawa Limited Partnership and Stepping Towards Far Limited.

If you have any queries in relation to this submission, please contact me at katherine.dorofaeff@at.govt.nz or on 021 932 722.

Yours sincerely

Katherine Dorofaeff

* Morotael

Principal Planner, Spatial Planning and Policy Advice



Further submission by Auckland Transport on Proposed Private Plan Change 93 - Warkworth South

To: Auckland Council Private Bag 92300

Auckland 1142

Further submission

on:

Submissions to Proposed Private Plan Change 93 from KA Waimanawa Limited Partnership and Stepping Towards Far Limited seeking to rezone future urban, open space, and rural land to a mix of residential, business, open space and rural zones and introduce two precinct plans. The land is located either side

of (former) State Highway 1 at Warkworth South.

From: Auckland Transport

Private Bag 92250 Auckland 1142

1. Introduction

- 1.1 Auckland Transport represents a relevant aspect of the public interest and also has an interest in the proposal that is greater than the interest that the general public has. Auckland Transport's grounds for specifying this are that it is a Council-Controlled Organisation of Auckland Council ('the Council') and Road Controlling Authority for the Auckland region.
- 1.2 Auckland Transport's legislated purpose is "to contribute to an effective, efficient and safe Auckland land transport system in the public interest."

2. Scope of further submission

- 2.1 The specific parts of the submissions supported or opposed, and the reasons for that support or opposition, are set out in **Attachment 1.**
- 2.2 The decisions which Auckland Transport seeks from the Council in terms of allowing or disallowing submissions are also set out in **Attachment 1**.

3. Appearance at the hearing

- 3.1 Auckland Transport wishes to be heard in support of this further submission.
- 3.2 If others make a similar submission, Auckland Transport will consider presenting a joint case with them at the hearing.

Name: Auckland Transport

Signature:

666 Page 2-of∈5

Rory Power

Spatial Planning Manager

Date: 9 February 2024

Contact person: Katherine Dorofaeff

Principal Planner, Spatial Planning and Policy Advice

Address for service: Auckland Transport

Private Bag 92250 Auckland 1142

Telephone: 021 932 722

Email: <u>katherine.dorofaeff@at.govt.nz</u>

667

Attachment 1

#	Submitter	Summary of submission	Support or oppose	Reasons	Decision sought
21.3	Ash Hames and Fiona Rayner burnette@thepc.co.nz	Amend Policy 16 as follows; (16) Subdivision, use and land development shall avoid direct vehicle access from newly created individual sites on to the Wider Western Link Road and State Highway One [rename to reflect the AT road name eg Great North Road], while allowing direct pedestrian and cycle access.	Oppose	Limiting this policy to newly created sites only does not address development or change in use which results in more intensive use of an existing site and greater traffic effects. Avoiding direct access from individual sites to arterial roads such as State Highway 1 promotes safe and efficient operation of transport infrastructure including safe, accessible and high-quality pedestrian and cycle connections. Auckland Transport agrees the reference to State Highway 1 should be updated with the new road name once renaming has occurred. However the road will continue to have an arterial function.	Disallow
21.5	Ash Hames and Fiona Rayner burnette@thepc.co.nz	Rule Ixxx.6.7 – Limited Access Restrictions, Pedestrian Connections and Cycle Facilities (2) needs to be amended so it is clear that the rule applies only to new sites being created as a result of subdivision and land development within the PPC93 area and associated Precinct. In the Residential - Large Lot zone this rule only appears to apply to Supported Residential Care accommodating greater than 10 people per site	Oppose in part	Avoiding direct access from individual sites to arterial roads such as State Highway 1 promotes safe and efficient operation of transport infrastructure including safe, accessible and high-quality pedestrian and cycle connections. Applying this rule to newly created sites only does not address the need to assess the effects of more intensive use of an existing site resulting from additional development or change of use. Auckland Transport agrees the reference to State Highway 1 should be updated with the new road name once renaming has occurred. However the road will continue to have an arterial function. State Highway 1 is identified as an arterial road in the controls layer of the AUP(OP). This means that the submitters' site at 1684A State Highway 1 is already subject to a vehicle access restriction under E27 of the AUP(OP). Relevant rules are Table E27.4.1(A5), E27.6.4.1(2) and 3(b). Under E27.6.4.1(2) the vehicle access restrictions apply	Disallow

668 Page 4 of 5 Page 4

#	Submitter	Summary of submission	Support or oppose	Reasons	Decision sought
				where there is a new vehicle crossing proposed, a new or changed activity, or building development. Some wording of this nature, adjusted according the context of the precinct, could be considered.	
24.12	KA Waimanawa Limited Partnership and Stepping Towards Far Limited ian.smallburn@tattico.co.nz	Update the Transport Infrastructure Upgrade within the second column of Table IXXX.6.15.1 relating to (T2) with the following wording: 'Upgrading of old State Highway One though the WW South Precinct to the extent shown on Precinct Plan 3.' Update the Transport Infrastructure Upgrade within the second column of Table IXXX.6.15.1 relating to (T3) with the following wording: 'Construction of the temporary pedestrian/cycle path on old State Highway One from the Wider Western Link Road/old State Highway One Intersection to McKinney Road.' Delete row (T4).		The submitters' request is inconsistent with Auckland Transport's submission points 20.45, 20.48, and 20.50 which seek: • provision of pedestrian and cycle facilities along State Highway 1 from the precinct to the northern end of Wech Drive • upgrading of State Highway 1 where it has frontage to the precinct to an urban arterial standard with active mode facilities. The transport infrastructure sought in Auckland Transport's submission points is needed to support the development and integrate it with the existing urban area, and contribute to a well-functioning urban environment.	Disallow

669 Page 5 of 5 Page 5

9 February 2024



Auckland Council Level 16, 135 Albert Street Private Bag 92300 Auckland 1142

Attn: Planning Technician C/o unitaryplan@aucklandcouncil.govt.nz

Dear Planning Technician

Further Submission on Plan Change 93 (Private) Warkworth South

Please find attached further submissions made on behalf of Barry and Lorraine Blennerhassett (Blennerhassett Family) – Submitter # 22 and Guy Matches – Submitter # 26.

The further submitters have an interest greater than the public generally.

The Submitters wish to speak in support of the further submissions.

Yours sincerely

Burnette O'Connor

Director/Planner

The Planning Collective

E: <u>burnette@thepc.co.nz</u>

guette O' Courow

M: 021-422 346

Attachments:

A. Form 6

B. Further Submission Table

Attachment A:



Form 6 FURTHER SUBMISSION/S TO Plan Change 93 (Private) Warkworth South

Clause 8 of Schedule 1, Resource Management Act 1991 (Form 6)

.....

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter: Barry and Lorraine Blennerhassett (Blennerhassett Family) (Submitter

#22)

Name of Submitter: Guy Matches (Submitter #26)

Address for Service: The Planning Collective C/o Burnette O'Connor

Mobile: 021 422 346

Email: burnette@thepc.co.nz

2 SCOPE OF FURTHER SUBMISSION

This is a further submission addressing the following submissions on Plan Change 93 (Private):

- Submission No. 17 Auckland Council
- Submission No. 20 Auckland Transport
- Submission No. 24 KA Waimanawa Limited Partnership and Stepping Toward Far Limited
- Submission No. 28 Department of Conservation
- Submission No. 32 Watercare Services Limited

Please refer to the further submission table provided as **Attachment B** which details the further submission/s and decisions sought.

The Submitters wish to speak in support of the further submissions.

(Person authorised to sign on behalf of submitter)

Butte O' Corrow

Date: 9 February 2024

Attachment B:

Further Submissions Table

ATTACHMENT B

Further Submission on Plan Change 93 (Private) – Warkworth South

DATE: 9 February 2024

Sub#	Sub	Submitter	Summary	Further Submission
	Point			
20	20.53	Auckland Transport	Amend (T9) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to better describe the transport infrastructure upgrade as follows; 'Upgrading of Mason Heights including filling in any gaps in the existing footpath network to provide a continuous connection between the precinct and the intersection of Mason Heights with Woodcocks Road'	The changes are supported because they will assist in achieving a more integrated approach to urban development and appropriate connectivity between the plan change area and the existing urban area of Warkworth.
20	20.54	Auckland Transport	Amend (T9) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to better describe the trigger as follows: 'Any subdivision or development with access to frontage to that section of Mason Heights. or in the event that Mason Heights is extended or a new road is connected to it within the Waimanawa Precinct.	The changes are supported because they will assist in achieving a more integrated approach to urban development and appropriate connectivity between the plan change area and the existing urban area of Warkworth.
24	24.10		Update standard Ixxx.6.14(2) with the following wording 'Where the Council does not want or is unable to accept vesting of the walkway/cycleway and associated riparian yard and stream bank, then there is no requirement to provide the walkway/cycleway.	This submission is opposed because walkway and cycleway connectivity is vital to achieving a well-functioning urban environment and there are other mechanisms that could be investigated for securing these connections — e.g. easements in gross, outdoor access commission easements etc.
24	24.17	KA Waimanawa Limited Partnership and Stepping Toward Far Limited	Updates and amendments to PC93 to align with the progression and outcomes of PC78.	The submission is supported as this will ensure robust and consistent planning outcomes.
28	28.4	Department of Conservation	 Amend the plan to adequately cover the following issues: Zone the Bat Flight Corridor as Open Space – Conservation. Increase the minimum corridor width to one hundred metres. Require the lighting provisions alongside the bat flight corridor to abide by the Australian Government "National Light Pollution Guidelines for Wildlife". 	The submission is supported in part to the extent it is important and necessary to protect indigenous biodiversity; however any provisions such as a prohibition on keeping domestic cats within a 1 kilometre area need to be fully researched, tested, and justified in terms of the requirements of s32 and s32AA of the Resource Management Act.

673 Page 4 of 100f 2

Sub#	Sub Point	Submitter	Summary	Further Submission
	Tonic		 Require that development in, and adjacent to, the bat flight corridor utilises the Department of Conservation's Protocols for minimising the risk of felling occupied bat roosts (2021). Require a prohibition in keeping domestic cats within one kilometre of the bat flight corridor. 	
32	32.6	Watercare Services Limited	To ensure there is strong and directive policy support for the non-complying activity classification for development and subdivisions that do not comply with Standard 1XXX.6 Wastewater and Potable Water Connections, Watercare seeks the inclusion of the following new policy. IXXX.3 Policies (XX) Avoid subdivision and development progressing ahead of the provision of a functioning water and wastewater network with sufficient capacity to service the proposed development.	The submission is supported in part to the extent that the policy also needs to direct that there needs to be sufficient capacity to service the proposed development and Future Urban and undeveloped residential land, between the plan change area and the existing urban area of Warkworth. The capacity needs to be provided for all foreseeable and planned development to ensure that the planning and provision of infrastructure is coordinated, efficient and as cost effective as possible. The requirement for the water and wastewater systems to be functioning ahead of subdivision and development is not supported because there needs to be some certainty of development occurring to fund and deliver the required infrastructure and as required by the NPS Urban Development – urban development should be integrated with the provision of infrastructure. There are many mechanisms to secure this outcome including Developer Agreements, resource consent conditions and the like.
17	17.1	Auckland Council	Waimanawa Precinct - Amend objective (8) to add the word avoid subdivision and development unless it is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements.	The submission is supported because it will direct integration of between urban development and the delivery of infrastructure.

674 Page 5 of 120of 2

 From:
 Shannon Yates

 To:
 Unitary Plan

 Cc:
 Burnette O"Connor

Subject: RE: Further Submission on PC93 (Private) Warkworth South - Blennerhassett Family & Guy Matches

Date: Wednesday, 14 February 2024 1:54:28 pm

Attachments: image001.png

image002.png image003.png image007.png image004.png

FS Table Blennerhassett Matches corrected 14 02 24.pdf

Hi Diana

Apologies for the confusion! The Further submission point should have been 28.3 NOT 28.4.

Please see attached for an amended version of the Further submission table.

Ngā mihi / Kind regards



Shannon Yates
Planning Assistant





PLANNING
COLLECTIVE

Working Days: Mon & Wed

M: +64-21-422-367 W: www.thepc.co.nz E: shannon@thepc.co.nz

A hub of planning excellence

From: Diana Luong <diana.luong@aucklandcouncil.govt.nz>
On Behalf Of Unitary Plan

Sent: Tuesday, February 13, 2024 12:31 PM

To: Shannon Yates <Shannon@thepc.co.nz>; Unitary Plan

<unitaryplan@aucklandcouncil.govt.nz>

Cc: Burnette O'Connor <burnette@thepc.co.nz>; guymatches.nz@gmail.com; bastiaan@gpgroup.co.nz; michael.blennerhassett@gmail.com; darryl@bmh.co.nz; lorraine.blennerhassett@gmail.com; Maninder Kaur-Mehta (Manisha) < Maninder.Kaur-Mehta@aucklandcouncil.govt.nz>

Subject: RE: Further Submission on PC93 (Private) Warkworth South - Blennerhassett Family & Guy Matches

Hi Shannon,

Thank you for your further submission.

Please clarify with regards to your further submission to submission number 28, submission point 28.4. Were you were meaning to refer to submission point 28.3 in column two?

Please either send us an amended version or send an email to clarify the submission point to unitaryplan@aucklandcouncil.govt.nz and we will attach that email to your further submission.

Regards,

Diana

Diana Luong | Planning Technician | Plans and Places Department Phone 027 201 7368

Auckland Council, Level 16, 135 Albert Street, Auckland 1011

Visit our website: www.aucklandcouncil.govt.nz

From: Shannon Yates <Shannon@thepc.co.nz>

Sent: Friday, February 9, 2024 12:12 PM

To: Unitary Plan < unitaryplan@aucklandcouncil.govt.nz >

Cc: Burnette O'Connor < <u>burnette@thepc.co.nz</u>>; <u>guymatches.nz@gmail.com</u>; bastiaan@gpgroup.co.nz; michael.blennerhassett@gmail.com; darryl@bmh.co.nz; lorraine.blennerhassett@gmail.com

Subject: Further Submission on PC93 (Private) Warkworth South - Blennerhassett Family & Guy

Matches

Good Afternoon

Please find attached further submissions on PC93 (Private) Warkworth South made on behalf of Barry and Lorraine Blennerhassett (Blennerhassett Family) – Submitter # 22 and Guy Matches – Submitter # 26.

Ngā mihi / Kind regards



Shannon Yates **Planning Assistant**





#PLANNING COLLECTIVE

Working Days: Mon & Wed

M: +64-21-422-367 W: www.thepc.co.nz E: shannon@thepc.co.nz

A hub of planning excellence



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this

email may be those of the individual sender and may not necessarily reflect the views of Council.

ATTACHMENT B

Further Submission on Plan Change 93 (Private) – Warkworth South

DATE: 9 February 2024

Sub#	Sub	Submitter	Summary	Further Submission
oub	Point		Samma. y	
20	20.53	Auckland Transport	Amend (T9) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to better describe the transport infrastructure upgrade as follows; 'Upgrading of Mason Heights including filling in any gaps in the existing footpath network to provide a continuous connection between the precinct and the intersection of Mason Heights with Woodcocks Road'	The changes are supported because they will assist in achieving a more integrated approach to urban development and appropriate connectivity between the plan change area and the existing urban area of Warkworth.
20	20.54	Auckland Transport	Amend (T9) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, to better describe the trigger as follows: 'Any subdivision or development with access to frontage to that section of Mason Heights. or in the event that Mason Heights is extended or a new road is connected to it within the Waimanawa Precinct.	The changes are supported because they will assist in achieving a more integrated approach to urban development and appropriate connectivity between the plan change area and the existing urban area of Warkworth.
24	24.10		Update standard Ixxx.6.14(2) with the following wording 'Where the Council does not want or is unable to accept vesting of the walkway/cycleway and associated riparian yard and stream bank, then there is no requirement to provide the walkway/cycleway.	This submission is opposed because walkway and cycleway connectivity is vital to achieving a well-functioning urban environment and there are other mechanisms that could be investigated for securing these connections — e.g. easements in gross, outdoor access commission easements etc.
24	24.17	KA Waimanawa Limited Partnership and Stepping Toward Far Limited	Updates and amendments to PC93 to align with the progression and outcomes of PC78.	The submission is supported as this will ensure robust and consistent planning outcomes.
28	28. <mark>3</mark>	Department of Conservation	 Amend the plan to adequately cover the following issues: Zone the Bat Flight Corridor as Open Space – Conservation. Increase the minimum corridor width to one hundred metres. Require the lighting provisions alongside the bat flight corridor to abide by the Australian Government "National Light Pollution Guidelines for Wildlife". 	The submission is supported in part to the extent it is important and necessary to protect indigenous biodiversity; however the imposition of Open Space zoning and any related provisions need to be fully researched, tested, and justified in terms of the requirements of s32 and s32AA of the Resource Management Act.

679 Page 9 of 110 of 2

Sub#	Sub Point	Submitter	Summary	Further Submission
			 Require that development in, and adjacent to, the bat flight corridor utilises the Department of Conservation's Protocols for minimising the risk of felling occupied bat roosts (2021). Require a prohibition in keeping domestic cats within one kilometre of the bat flight corridor. 	
32	32.6	Watercare Services Limited	To ensure there is strong and directive policy support for the non-complying activity classification for development and subdivisions that do not comply with Standard 1XXX.6 Wastewater and Potable Water Connections, Watercare seeks the inclusion of the following new policy. IXXX.3 Policies (XX) Avoid subdivision and development progressing ahead of the provision of a functioning water and wastewater network with sufficient capacity to service the proposed development.	Urban and undeveloped residential land, between the plan change area and the existing urban area of Warkworth.
				The requirement for the water and wastewater systems to be functioning ahead of subdivision and development is not supported because there needs to be some certainty of development occurring to fund and deliver the required infrastructure and as required by the NPS Urban Development – urban development should be integrated with the provision of infrastructure. There are many mechanisms to secure this outcome including Developer Agreements, resource consent conditions and the like.
17	17.1	Auckland Council	Waimanawa Precinct - Amend objective (8) to add the word avoid subdivision and development unless it is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements.	The submission is supported because it will direct integration of between urban development and the delivery of infrastructure.

680 Page 10 of 120of 2

9 February 2024



Auckland Council Level 16, 135 Albert Street Private Bag 92300 Auckland 1142

Attn: Planning Technician C/o unitaryplan@aucklandcouncil.govt.nz

Dear Planning Technician,

Further Submission on Plan Change 93 (Private) Warkworth South

Please find attached further submissions made on behalf of Mikel Jon Thorogood (Mike Thorogood) Submitter # 25.

The further submitters have an interest greater than the public generally.

The Submitter wishes to speak in support of the further submissions.

Yours sincerely

Burnette O'Connor

Director/Planner

The Planning Collective

guette O' Courow

E: <u>burnette@thepc.co.nz</u>

M: 021-422 346

Attachments:

A. Form 6

B. Further Submission Table

Attachment A:



Form 6 FURTHER SUBMISSION/S TO Plan Change 93 (Private) Warkworth South

Clause 8 of Schedule 1, Resource Management Act 1991 (Form 6)

.....

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter: Mikel Jon Thorogood (Mike Thorogood) (Submitter #25)

Address for Service: The Planning Collective C/o Burnette O'Connor

Mobile: 021 422 346

Email: burnette@thepc.co.nz

2 SCOPE OF FURTHER SUBMISSION

This is a further submission addressing the following submissions on Plan Change 93 (Private):

- Submission No. 17 Auckland Council
- Submission No. 20 Auckland Transport
- Submission No. 24 KA Waimanawa Limited Partnership and Stepping Toward Far Limited
- Submission No. 32 Watercare Services Limited

Please refer to the further submission table provided as **Attachment B** which details the further submission/s and decisions sought.

The Submitter wishes to speak in support of the further submissions.

(Person authorised to sign on behalf of submitter)

Butte O'Canow

Date: 9 February 2024

Attachment B:

Further Submissions Table

ATTACHMENT B

Further Submission on Plan Change 93 (Private) – Warkworth South

DATE: 9 February 2024

Sub#	Sub	Submitter	Summary	Further Submission
	Point			
20	20.9	Auckland Transport	Amend Objective 2, and split it into two objectives as follows: '(2) The Warkworth South Precinct is subdivided and developed in a manner that Subdivision and development achieves an accessible urban area with efficient, safe and integrated vehicle, walking and cycle connections internally and to the wider Warkworth urban area. (2A) while Subdivision and development providesing for and supporting the safety and efficiency of	and direct the outcomes required.
			the current and future national-strategic and local roading transport network.'	
20	20.14	Auckland Transport	Add a new objective as follows: ITHE precinct develops and functions in a way that: ITHE (b) provides safe and effective movement between the local centre, community facilities, housing, jobs, open spaces and the public transport facilities by active modes.	The submission point is supported as it provides a clear policy direction to support the rules and direct the outcomes required.
20	20.45	Auckland Transport	 Amend the title and purpose statement of lxxx.6.15 as follows: 'Transportation Infrastructure Purpose: To achieve the integration of land use and transportation infrastructure (including walking and cycling). To ensure transportation infrastructure is appropriately provided for. To provide a pedestrian and cycle connection to the McKinney Road/ northwards along State Highway One Intersection to the existing urban area.' 	The changes, with all consequential amendments, are supported because they will assist in achieving an integrated approach to urban development and appropriate connectivity between the plan change area and the existing urban area of Warkworth.
20	20.49	Auckland Transport	Amend (T2) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, by deleting the existing trigger for the State Highway 1 upgrade and replacing it with the following: 'Any subdivision and/or development: • within the Business - Local Centre zone; • for a retirement village; or • resulting in a cumulative total of 20 residential lots or dwellings within the Precinct.'	This submission point is supported because it is appropriate for management of transportation effects on the wider network and environment.
20	20.50	Auckland Transport	Amend the provisions relating to active mode connections along State Highway 1 to: • require pedestrian and cycle facilities to be provided in their ultimate form and location as part of the upgrade of State Highway 1 where it has frontage to the precinct • clarify which pedestrian and cycle facilities are to be provided in an interim or temporary form • require pedestrian and cycle facilities to be provided along State Highway 1 from the precinct to the northern end of Wech Drive.	The changes, and all consequential amendments, are supported because they will assist in achieving a more integrated approach to urban development and appropriate connectivity between the plan change area and the existing urban area of Warkworth.
			This is likely to require amendments to Table IXXX.6.15.1(T1), (T3) and (T4), Table IXXX.6.15.2 Note 2, and possibly Precinct Plan 3 Transportation. Require the Applicant to provide additional detail to demonstrate that safe pedestrian and cycle facilities can be provided along SH1 from the Precinct to the northern end of Wech Drive.	

Page 4 of 16 of 3

Sub#	Sub Point	Submitter	Summary	Further Submission
20	20.51	Auckland Transport	Amend (T5) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, by deleting the existing trigger for the Wider Western Link Road / State Highway 1 intersection and replacing it with the following: 'Any subdivision and/or development: • within the Business - Local Centre zone; • for a retirement village; or • resulting in a cumulative total of 20 residential lots or dwellings within the Precinct.'	
20	20.77	Auckland Transport	Delete or amend XXX.5 Notification (1) to enable public or limited notification of applications which have a potential adverse effect on the transport network.	The submission point is supported because the normal tests for notification should apply given the potential traffic effects associated with development of the plan change area on infrastructure outside the plan change area e.g. the McKinney Road intersection. The underlying zones enable development of four or more dwellings, integrated residential development without notification. These activities could generate adverse effects on the adjoining and wider environment that necessitate notification processes.
20	20.81	Auckland Transport	Amend Xxxx8.1 Transportation and Safety by replacing the reference to E27.9 with a special information requirement for a transport assessment which is more specific to the precinct, and includes consideration of the access point on State Highway One. Amend Xxxx8.1 Transportation and Safety as follows: The special information requirements under E27.9 apply. The Council may require applications which affect the transport network to include a transport assessment prepared by a suitably qualified transport planner or traffic engineer. Any upgrading of existing State Highway One access illustrated on the Precinct Plan as the Approved Entrance Point must be supported by a Transport Design Report and Concept Plans (including forecast transport modelling and land use assumptions), prepared by a suitably qualified transport engineer confirming the location and design of any access supports the safe and efficient function of the existing and future (ultimate) transport network and can be accommodated within the proposed or available road reserves. This may be included within a transport assessment supporting land use or subdivision consents. In addition, where an interim upgrade is proposed, information must be provided, detailing how the design allows for the ultimate upgrade to be efficiently delivered.	provision XXX.8.1. The addition is necessary to ensure appropriate assessment and analysis of transportation
24	24.12		Update the Transport Infrastructure Upgrade within the second column of Table IXXX.6.15.1 relating to (T2) with the following wording: 'Upgrading of old State Highway One though the WW South Precinct to the extent shown on Precinct Plan 3.' Update the Transport Infrastructure Upgrade within the second column of Table IXXX.6.15.1 relating to (T3) with the following wording: 'Construction of the temporary pedestrian/cycle path on old State Highway One from the Wider Western Link Road/old State Highway One Intersection to McKinney Road.'	submission 22.50 from Auckland Transport to ensure consistency. The reasons for the further
24	24.15	KA Waimanawa Limited Partnership and	Update Note 3 to Table IXXX.6.15.2 with the following wording:	The submission is opposed. The cycle and pedestrian path on the eastern side of the road should be permanent. This is required to address the effects of the plan change and provide appropriate connectivity from the plan change area back to Warkworth.

686 Page 5 of 26 of 3

				F5 U6
Sub#	Sub	Submitter	Summary	Further Submission
	Point			
		Stepping Toward Far	'Note 3: The shared walking and cycle path provision on old State Highway One will be a temporary	
		Limited	cycling and walking facility from the Wider Western Link Road/old State Highway One intersection to	
			the McKinney Road/old State Highway One intersection	
32	32.6	Watercare Services	To ensure there is strong and directive policy support for the non-complying activity classification for	The submission is supported in part to the extent that the policy also needs to direct that there
32	32.0	Limited	development and subdivisions that do not comply with Standard 1XXX.6 Wastewater and Potable	
		Lillited		
			Water Connections, Watercare seeks the inclusion of the following new policy.	undeveloped residential land, between the plan change area and the existing urban area of
			IXXX.3 Policies	Warkworth.
			(XX) Avoid subdivision and development progressing ahead of the provision of a functioning water and	
			wastewater network with sufficient capacity to service the proposed development.	The capacity needs to be provided for all foreseeable and planned development to ensure that
				the planning and provision of infrastructure is coordinated, efficient and as cost effective as
				possible.
				The requirement for the water and wastewater systems to be functioning ahead of subdivision
				and development is not supported because there needs to be some certainty of development
				occurring to fund and deliver the required infrastructure and as required by the NPS Urban
				Development – urban development should be integrated with the provision of infrastructure.
				There are many mechanisms to secure this outcome including Developer Agreements,
				resource consent conditions and the like.
17	17.1	Auckland Council	Waimanawa Precinct - Amend objective (8) to add the word avoid subdivision and development unless	The submission is supported because it will direct integration of between urban development
1,	1,	, tastiana ee anon	it is coordinated with the delivery of infrastructure (including transportation, stormwater, potable	
			water, wastewater and future education infrastructure) and services required to provide for	and the delivery of initiastructure.
			development within the precinct and future community requirements.	
	1		development within the precinct and ruture community requirements.	

687 Page 6 of 36 of 3



FURTHER SUBMISSIONS ON PRIVATE PLAN CHANGE 93: WARKWORTH SOUTH TO THE AUCKLAND UNITARY PLAN – OPERATIVE IN PART

Clause 6 of Schedule 1 of the Resource Management Act 1991

To: Auckland Council

Name: KA Waimanawa Limited Partnership and Stepping Towards Far Limited (jointly the

Submitters)

Submission details

- 1. This is a further submission both in support of and opposition to submissions on Plan Change 93 (Private): Warkworth South (**PC93**).
- 2. The Submitters are the applicants for PC93.
- 3. KA Waimanawa Limited Partnership is a wholly owned subsidiary of Kaha Ake, a partnership between The New Zealand Super Fund and Classic Group. Kaha Ake brings together long-term financial support and experienced development capability to support the creation of homes at pace and scale around New Zealand. Classic Group is a privately owned, integrated portfolio of businesses in the property sector. Stepping Towards Far Limited has the right to develop part of the Waimanawa Precinct land and has partnered with KA Waimanawa Limited Partnership.
- 4. The Submitters could not gain an advantage in trade competition through this further submission.
- 5. The specific original submissions that this further submission relates to are set out in **Appendix A** to this submission.

Reasons for submission

- 6. The reasons for this submission are as follows:
 - (a) The relief sought in the original submissions that are supported by the Submitters:
 - (i) Promotes the sustainable management of natural and physical resources and is consistent with the purpose and principles of the Resource Management Act 1991 (RMA);
 - (ii) Is appropriate in terms of the section 32 of the RMA; and
 - (iii) Gives effect to national policy statements including the NPS on Urban Development 2020 (NPS-UD).
 - (b) The relief sought in the original submissions that are opposed by the Submitters:



- (i) Does not promote the sustainable management of natural and physical resources and is inconsistent with the purpose and principles of the RMA;
- (ii) Is not appropriate in terms of the section 32 of the RMA; and
- (iii) Does not give effect to national policy statements including the NPS-UD.
- 7. Without limiting the generality of the above, **Appendix A** to this further submission comprises a schedule setting out the following details:
 - (a) the original submissions to which this further submission relates;
 - (b) whether the Submitters support or oppose the original submission;
 - (c) the particular part of the original submissions to which this further submission relates:
 - (d) the reasons for the support/opposition; and
 - (e) whether the Submitters seek that the original submission be allowed or rejected.
- 8. The relief sought by the Submitters is to allow submissions it supports and reject submissions is opposes, which is set out in detail in **Appendix A**.
- 9. The Submitters wish to be heard in support of their further submission.

DATED at Auckland this 9th day of February 2024

W S Loutit / F M Wach Counsel for KA Waimanawa Limited Partnership and Stepping Towards Far Limited

Address for service of further submitters:

Simpson Grierson Level 27, 88 Shortland Street Private Bag 92518 Auckland 1141

Attention: Bill Loutit / Felicity Wach

Email: bill.loutit@simpsongrierson.com / felicity.wach@simpsongrierson.com

Telephone: 09 977 5306



APPENDIX A – FURTHER SUBMISSIONS

Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
1. Hugh Briggs	hugh@briggs.kiwi	1.1	Support in part	The Submitters support the submission point that the Plan Change be approved, but do not agree any amendments to PC93 are appropriate.	Allow in part
2. David Owen Morgan	oyster109@yahoo.com	2.1	Support	The submission supports PC93 without any amendments.	Allow
3. Dianne Lillian Morgan	musicmakerdiannem@gmail.co m	3.1	Support	The submission supports PC93 without any amendments.	Allow
4. Dominique Coote	dominiquecoote@outlook.com	4.1	Support	The submission supports PC93 without any amendments.	Allow
5. Louisa Gowing	jandlgowing@gmail.com	5.1	Support	The submission supports PC93 without any amendments.	Allow
6. Stanley Coote	stanleycoote@outlook.com	6.1	Support	The submission supports PC93 without any amendments.	Allow
7. Stephen Haycock	steve@haycocks.nz	7.1	Support	The submission supports PC93.	Allow
		7.2	Support	The Submitters agree that the land release date in the Future Development Strategy (FDS) should be bought forward but acknowledge that the FDS is not part of the Auckland Unitary Plan (AUP(OP)) and cannot be amended by PC93.	Allow
8. Warkworth Area Liaison Group (WALG) and One Mahurangi	hugh@briggs.kiwi	8.1	Support in part	The Submitters support the submission point that PC93 be approved. The Submitters agree that the land release date in the FDS should be bought forward but acknowledge that the FDS is not part of the AUP(OP) and cannot be amended by PC93.	Allow
9. Paula Christine Anderson	piindibolli@gmail.com	9.1	Oppose	The Submitters oppose the submission seeking to decline PC93. The Plan Change will not result in an inappropriate, intensive, human habitat that will resemble a modern ghetto with no meaningful protection of the current environment. PC93 has been the subject of a comprehensive master planning process that strikes the right balance between zoning that enables optimal urban growth while ensuring the protection of key areas including streams and open space. The development will provide important community facilities including a local centre, public transport interchange, sports fields, and wastewater, water and roading infrastructure.	Reject
10. Maria Collins, Tui House, Harbour Hospice	maria.collins@harbourhospice. org.nz	10.1	Oppose	The Submitters oppose the submission seeking to decline PC93. The traffic effects of the Plan Change will not affect the Tui House, Harbour Hospice, which is located in Glenmore Drive. There are no direct roading connections between the PC93 area and Glenmore Drive. In addition, the documents supporting PC93 clearly demonstrate that appropriate provision has been made to ensure that the transport needs of the precinct can be met, and that future strategic transport infrastructure is provided and protected. The applicants will fund the required bulk transport infrastructure including: • The upgrading of part of old State Highway 1 (SH1) through the Plan Change area to urban arterial standard; • Construction of a temporary shared footpath/cycle path from the Plan Change area to McKinney Road; • Construction of the Wider Western Link Road (WWLR); and	Reject



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				 Construction of a new roundabout at the intersection of the WWLR and old SH1. The applicants will also set aside land for a public transport interchange. PC93 proposes robust plan provisions, including objectives and policies that ensure subdivision and development is coordinated with the delivery of infrastructure and standards that trigger transport infrastructure upgrades at the time of development.¹ PC93 has comprehensively addressed how transport infrastructure and services will be provided to support the planned growth, mitigate adverse effects and achieve a well-functioning urban environment. 	
11. William Arthur Endean12. Arthur Douglas Brown	bill@dawsonslawyers.co.nz dougbrown.nz@gmail.com	11.1	Support Oppose	The submission supports PC93 without any amendments. The submission does not relate to PC93 because the intersection of the proposed Western Link road and old SH1 is not part of the Plan Change. The proposed Western Link road is part of the Supporting Growth	Allow Reject
13. Wendy Patricia Court	courtwp@hotmail.com	13.1	Oppose	Alliance notices of requirement and is to be located to the north of the PC93 area. Any expectation that the area surrounding Warkworth would not change was misplaced. Warkworth was identified in the Auckland Plan 2050 as one of two satellite towns in the Auckland region. The Warkworth Structure Plan 2019 identified the land for residential use, including high density Terrace Housing and Apartment Building zoning. The AUP zoned the land Future Urban Zone, which is applied to greenfield land that has been identified as suitable for urbanisation. In addition, the developer's commitment to fund all necessary infrastructure upgrades and the robust Plan Change provisions proposed resolves all infrastructure effects of the Plan Change and therefore the proposal is not inconsistent with the FDS. It also results in cost expenditure savings for Auckland Council (Council), which would otherwise have to fund the infrastructure upgrades, and provides community facilities that will benefit the wider Warkworth area.	
14. Mark Calvert	mark.calvert360@gmail.com	14.1	Support	The submission supports PC93 without any amendments.	Allow
15. Warwick William Scown	w1g1b1s1@gmail.com	15.1	Support	The submission supports PC93 without any amendments.	Allow
Stevenson Family Trust	admin@stevensonfamilytrust.n z	16.1	Support	The submission supports PC93 without any amendments.	Allow
17. Auckland Council as Submitter	35 Albert Street Private Bag 92300 Auckland 1142 Attn: Craig Cairncross	17.1	Oppose	It is neither necessary nor appropriate to add the word "avoid" to Objective (8) because the current drafting ensures subdivision and development is coordinated with the delivery of infrastructure. The outcome is also supported by policies (12), (13), (14) and (15) and associated Activity Tables, rules and standards.	Reject
		17.2	Support	The submission supports the retention of non-complying activity status for activities that do not comply with the Wastewater and Potable Water Connections standard (I.xxx.6.9) and/or the Stormwater standard (Ixxx.6.10).	Allow

 $^{^{\}rm 1}$ lxxx.6.15 Transportation Infrastructure.

692 Page 4 of 24



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		17.3	Oppose	The Submitters do not agree that it is necessary for all activity tables to be amended to require subdivision and development not complying with Standard Ixxx.6.8 Wider Western Link Road to be a non-complying activity. The activity is already provided for in all zones that the WWLR traverses: Residential - Mixed Housing Urban, Residential - Terrace Housing and Apartment Building and Business — Local Centre and does not need to be provided for in those zones which the WWLR does not traverse.	Reject
		17.4	Oppose	The Submitters do not agree that the activity tables should be amended to require subdivision and development not complying with Standard Ixxx.6.15 Transportation Infrastructure to be a non-complying activity. Discretionary activity status is appropriate because it ensures a full assessment of the application, including consideration of any relevant adverse effects, but it also provides greater flexibility than non-complying activity status. Flexibility is required because the transport upgrades listed in Standard Ixxx.6.15 are largely dictated by Auckland Transport and there may be circumstances identified during the detailed design process where some variation is acceptable (or is sought by Auckland Transport at that time) and provides a better urban design and/or transportation outcome. It would be inappropriate to apply the non-complying threshold in those circumstances. In addition, the discretionary activity status is supported by robust objectives and policies (Objective (8) and policies (13), (14) and (15)).	Reject
		17.5	Oppose	The Submitters do not agree that the notification rule should be amended to require public notification of activities that do not comply with the listed standards. The usual tests for notification are appropriate and will ensure that the activities will be publicly notified if they will or are likely to have adverse effects on the environment that are more than minor or special circumstances exist. Rule Ixxx.5 Notification is appropriate and should be retained.	Reject
		17.6	Oppose	The Submitters do not agree that the Transport Infrastructure Requirements triggers should be reduced from 20 residential lots to 3 residential lots. Reducing the trigger to 3 residential lots would be inappropriate, unworkable and have unintended outcomes. The standard could be triggered by the creation of super lots or a small subdivision of one of the existing small lots within the Plan Change area. A 20 residential lot trigger ensures the Transport Infrastructure Upgrades will be integrated with development without being triggered inappropriately early. Standard Ixxx.6.15 Transport Infrastructure Requirements should be retained.	Reject
		17.7	Oppose	The Submitters do not agree that an additional indicative north-south connection on Precinct Map 3 should be added. A north-south connection is not practical because of the steep topography of the escarpment which would need to be traversed to reach Mason Heights and an appropriate route has not been able to be identified to date.	Reject
		17.8	Oppose	The Submitters do not oppose drafting style amendments where appropriate, but the specific amendments need to be identified by Auckland Council as submitter.	Reject
		17.9	Oppose	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		17.10	Oppose	The Submitters do not agree that provisions should be added to recognise, maintain and enhance the existing planting, particularly the shelter belt, and identify the streams and planting within the Morrison	Reject



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				Heritage Orchard Precinct. Such provisions fail to recognise the age and poor health of the current shelterbelts and that the Morrison Orchard is a working orchard. In addition, were the shelterbelt to be removed for any farm operational or plan health reasons, the rural values offered by the Orchard to the urban development to the south-west would largely be retained by the ongoing orchard operation or similar rural activities. Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	
18. Mahurangi Trail Society Incorporated	hugh@briggs.kiwi	18.1	Support	The submission seeks to approve the Plan Change. The Submitters agree that the Plan Change will provide for a number of cycle and pedestrian path options that will link with other paths and trails being developed in the Warkworth area and that it will encourage greater use of cycling and walking reducing overall vehicle emissions and promoting better health.	Allow
19. Karen and Stefan Richardson	stefan_richardson@cheerful.com	19.1	Support	The Submitters support the submission that the Plan Change be accepted. In response to the issues raised in the submission, the Submitters confirm that the plan provisions ensure appropriate access will be retained from the submitter's property to old SH1 at all stages of development be it either through direct access or via a new Collector Road. The Collector Road will now be referred to as "Collector Road 2" in accordance with the updated Waimanawa Precinct Plan 3 Transportation attached as Appendix B to this further submission. Direct vehicle access from individual sites to Collector Road 2 will be permitted in accordance with the amendments the Submitters are proposing in response to submissions by Auckland Transport set out in Auckland Transport's submission points #20.39, 20.40, 20.41, 20.57 and 20.71. In addition, the timing and delivery of infrastructure is provided for through robust objectives and policies and standards, including standards that trigger the construction of Collector Roads when any subdivision or development with frontage to that section of the Collector Road occurs. The standards also require any development (apart from those within the proposed Residential – Large Lot zoned areas) to be connected to a functioning water and wastewater network before a certificate under s224(c) of the RMA is issued and that all land use and development is designed and implemented to be consistent with any stormwater management plan approved by the network utility operator, including the application of water sensitive design.4	Allow
20. Auckland Transport	Private Bag 92250 Auckland 1010 Attn: Katherine Dorofaeff	20.1	Oppose	The submission requests that PC93 be declined. The documents supporting PC93 clearly demonstrate that appropriate provision has been made to ensure that the transport needs of the precinct can be met, and that future strategic transport infrastructure is provided and protected. The applicants will fund the required bulk transport infrastructure including: The upgrading of part of old SH1 through the Plan Change area to urban arterial standard; Construction of a temporary shared pedestrian/cycle path from the Plan Change area to McKinney Road; Construction of the WWLR; and Construction of a new roundabout at the intersection of the WWLR and old SH1.	Reject

² Ixxx.6.15 Transportation Infrastructure.

Page 6 of 24

³ lxxx.6.9 Wastewater and Potable Water Connections. ⁴ lxxx.6.10 Stormwater Management.



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				The applicants will also set aside land for a public transport interchange in the location previously identified by the Supporting Growth Alliance. In addition, PC93 proposes robust plan provisions, including objectives and policies that ensure subdivision and development is coordinated with the delivery of infrastructure and standards that trigger transport infrastructure upgrades at the time of development. PC93 has comprehensively addressed how transport infrastructure and services will be provided to support the planned growth, mitigate adverse effects and achieve a well-functioning urban environment.	
		20.2	Oppose	The Submitters do not agree that there are public transport deficiencies with PC93. PC93 has been assessed against the National Policy Statement for Urban Development (NPS-UD) and the Regional Policy Statement (RPS) objectives and policies relevant to public transport and transport choice. The applicants will set aside land for a public transport interchange in the location identified by the Supporting Growth Alliance. The public transport interchange is proposed to the immediate west of the new local centre and adjacent to the WWLR. More intensive development is also enabled in close proximity to public transport networks which supports efficiency. Auckland Transport has indicated its support for this facility in its submission #20.4. In addition, there are public transport alternatives that could operate before the public transport interchange is operational, including a newly proposed local bus service that services the Warkworth Township that could be expanded to include the Plan Change area when demand dictates.	Reject
		20.3	Support	The Submitters agree that Map 3 – Control: Arterial Roads should be amended to more clearly identify the WWLR as an arterial road in the controls layer of the AUP(OP) map viewer and that the annotations for old SH1 and the WWLR/old SH1 intersection should be deleted. The WWLR/old SH1 intersection is currently subject to a Notice of Requirement and may therefore shortly be designated in the AUP(OP) with this designated identified on the AUP(OP) planning maps.	Allow
		20.4	Oppose	The Submitters do not agree that a minimum area of 2,500m² should be identified in PC93 for the public transport interchange. The indicative area in Waimanawa Precinct Plan 3 Transportation is 2, 350m², which reflects the size recommended by the Supporting Growth Alliance to the applicants, which was between 2000m² and 2500m². It is unclear as to how Auckland Transport has determined that a minimum 2,500m² is now required for this interchange.	Reject
		20.5	Support	The Submitters support deleting reference to the opening of the Puhoi to Warkworth Motorway in 2023 in the Precinct description.	Allow
		20.6	Oppose	The Submitters oppose the deletion of the text "to a collector road standard" because the WWLR will initially be built to a collector road standard. However, the Submitters agree to insert the word "initially" before "collector road" for clarity.	Reject
		20.7	Support	The Submitters agree that the greenway network is an "off-road" network and that the text can be added to the Precinct description.	Allow

 $^{^{\}rm 5}$ lxxx.6.15 Transportation Infrastructure.

695 Page 7 of 24



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		20.8	Oppose	The Submitters do not agree that PC93 should be amended to require future developments and alterations to existing buildings to mitigate potential road traffic noise effects on activities sensitive to noise. It is inappropriate to introduce such provisions in an ad-hoc basis in response to private Plan Change requests. This type of policy should be considered and implemented on a region-wide basis through a separate Plan Change to the AUP(OP) if such a requirement is considered necessary by Auckland Transport and/or Auckland Council.	Reject
		20.9	Support	The Submitters support the drafting amendments to Objective 2 for the purposes of clarity.	Allow
		20.10	Oppose	The Submitters do not agree that the text "future education infrastructure" should be deleted from Objective (8). Education infrastructure is an important social infrastructure and should be retained. The rationale for Auckland Transport's submission is not clear.	Reject
				It is also noted that the Submitters have agreed to amend Objective (8) to refer to "education facilities" rather than "education infrastructure" in response to the Ministry of Education's submission #29.1.	
		20.11	Oppose	The Submitters do not agree that the text "the opportunity for" a future public transport interchange should be deleted from Objective (10). The text is important and appropriate as it clarifies that while the applicants will set aside land for a public transport interchange, but there are no rules in PC93 that trigger or require its construction which will be undertaken by others at the time it is deemed necessary.	Reject
		20.12	Oppose	A new objective is unnecessary because Objective (8) appropriately ensures that subdivision and development is coordinated with the delivery of transportation infrastructure.	Reject
		20.13	Oppose	A new objective is unnecessary because Objective (2) in PC93 already addressed access to, from and within the precinct occurs in an effective, efficient and safe manner that mitigates the adverse effects of traffic generation on the surrounding road network.	Reject
		20.14	Oppose	A new objective is unnecessary because Objectives (2) and (10) in PC93 already provide an appropriate focus on active modes and public transport.	Reject
		20.15	Oppose	The Submitters do not agree that the text "future education infrastructure" should be deleted from Policy 12. Education infrastructure is an important social infrastructure and should be retained. The rationale for Auckland Transport's submission is not clear.	Reject
				It is also noted that the Submitters have agreed to amend Objective (8) to refer to "education facilities" rather than "education infrastructure" in response to the Ministry of Education's submission #29.1.	
		20.16	Oppose	The amendments to Policy 13 proposed in the submission are unnecessary and inappropriate and do not make the policy clearer.	Reject
		20.17	Oppose	The amendments to Policy 14 proposed in the submission are unnecessary and inappropriate and do not make the policy clearer. It is inappropriate for a policy to refer to a specific rule or standard.	Reject



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		20.18	Support in part	The amendments to Policy 15 proposed in the submission are unnecessary and inappropriate and do not make the policy clearer. However, the Submitters agree with addition of the word "future" before "strategic transport connection".	Allow in part
		20.19	Support	The Submitters support adding text to Policy 16 to clarify that the public transport interchange is exempt from the vehicle access restrictions. Consequential amendments are also made in original submission #20.35 and 20.39.	Allow
		20.20	Support	The Submitters agree that Policy 19 should be retained.	Allow
		20.21	Oppose	The new policy is unnecessary as the provision of a public transport interchange (being a form of infrastructure) is already addressed in Policy 2.	Reject
		20.22	Oppose	The Submitters do not oppose drafting style amendments where appropriate, but the specific amendments need to be identified by Auckland Transport and should be consistent with the drafting style sought by Auckland Council as a submitter.	Reject
		20.23	Oppose	The Submitters do not agree that the activity tables should be amended to include a restricted discretionary activity for subdivision and/or development that does not comply with Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements. The activity is already a restricted discretionary activity in accordance with Part C1.9(2) of the AUP(OP) if the standard is not complied with.	Reject
		20.24	Oppose	The proposed addition of standard lxxx6.15 Transport Infrastructure is unnecessary because the standard already applies in accordance with Part C1.9(1) of the AUP(OP) and is explicitly provided for as a separate activity in the relevant zoning Activity Tables.	Reject
		20.25	Oppose	It is inappropriate to amend (A3) in Table IXXX.4.2 Residential – Large Lot Zone. Discretionary activity status is appropriate because it ensures a full assessment of the application, including consideration of any relevant adverse effects, but it also provides greater flexibility than non-complying activity status. Flexibility is required because the transport upgrades listed in Standard Ixxx.6.15 are largely dictated by Auckland Transport and there may be circumstances where some variation is identified at the detailed design stage and is acceptable in terms of providing for a better urban design and/or transportation outcome. It would be inappropriate to apply the non-complying threshold in those circumstances. In addition, the discretionary activity status is supported by robust objectives and policies (Objective (8) and policies (13), (14) and (15)).	Reject
		20.26	Oppose	It is inappropriate to amend (A4) in Table IXXX.4.2 Residential – Large Lot Zone. Discretionary activity status is appropriate because it ensures a full assessment of the application, including consideration of any relevant adverse effects, but it also provides greater flexibility than non-complying activity status. Flexibility is required because the transport upgrades listed in Standard Ixxx.6.15 are largely dictated by Auckland Transport and there may be circumstances where some variation is identified at the detailed design stage and is acceptable in terms of providing for a better urban design and/or transportation outcome. It would be inappropriate to apply the non-complying threshold in those circumstances. In addition, the discretionary activity status is supported by robust objectives and policies (Objective (8) and policies (13), (14) and (15)).	Reject



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		20.27	Oppose	It is unnecessary and inappropriate to amend Table IXXX.4.3 Residential – Single House Zone to include a non-complying activity status for activities that do not comply with Standard xxx.6.7 because the Single House Zone is not located next to the relevant roads.	Reject
		20.28	Oppose	It is inappropriate to amend (A6) in Table IXXX.4.4 Residential – Mixed Housing Urban Zone. Permitted activity status for restaurants and cafes within the existing former Ranson Vineyard Building should be retained. The proposed standards provide appropriate controls for these activities.	Reject
		20.29	Oppose	It is inappropriate to amend (A7) in Table IXXX.4.4 Residential – Mixed Housing Urban Zone. Permitted activity status for education facilities within the existing former Ransom Vineyard Building should be retained. The proposed standards provide appropriate controls for these activities.	Reject
		20.30	Oppose	It is inappropriate to amend (A8) in Table IXXX.4.4 Residential – Mixed Housing Urban Zone. Discretionary activity status is appropriate because it ensures a full assessment of the application, including consideration of any relevant adverse effects, but it also provides greater flexibility than non-complying activity status. Flexibility is required because the transport upgrades listed in Standard Ixxx.6.15 are largely dictated by Auckland Transport and there may be circumstances where some variation is identified at the detailed design stage and is acceptable in terms of providing for a better urban design and/or transportation outcome. It would be inappropriate to apply the non-complying threshold in those circumstances. In addition, the discretionary activity status is supported by robust objectives and policies (Objective (8) and policies (13), (14) and (15)).	Reject
		20.31	Oppose	It is inappropriate to amend (A11) in Table IXXX.4.4 Residential – Mixed Housing Urban Zone. Discretionary activity status is appropriate because it ensures a full assessment of the application, including consideration of any relevant adverse effects, but it also provides greater flexibility than non-complying activity status. Flexibility is required because the transport upgrades listed in Standard Ixxx.6.15 are largely dictated by Auckland Transport and there may be circumstances where some variation is identified at the detailed design stage and is acceptable in terms of providing for a better urban design and/or transportation outcome. It would be inappropriate to apply the non-complying threshold in those circumstances. In addition, the discretionary activity status is supported by robust objectives and policies (Objective (8) and policies (13), (14) and (15)).	Reject
		20.32	Oppose	It is inappropriate to amend (A6) in Table IXXX.5. Residential – Terrace Housing and Apartment Buildings Zone. Discretionary activity status is appropriate because it ensures a full assessment of the application, including consideration of any relevant adverse effects, but it also provides greater flexibility than non-complying activity status. Flexibility is required because the transport upgrades listed in Standard Ixxx.6.15 are largely dictated by Auckland Transport and there may be circumstances where some variation is identified at the detailed design stage and is acceptable in terms of providing for a better urban design and/or transportation outcome. It would be inappropriate to apply the non-complying threshold in those circumstances. In addition, the discretionary activity status is supported by robust objectives and policies (Objective (8) and policies (13), (14) and (15)).	Reject
		20.33	Oppose	It is inappropriate to amend (A19) in Table IXXX.5. Residential – Terrace Housing and Apartment Buildings Zone. Discretionary activity status is appropriate because it ensures a full assessment of the application, including consideration of any relevant adverse effects, but it also provides greater flexibility than non-	Reject



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				complying activity status. Flexibility is required because the transport upgrades listed in Standard Ixxx.6.15 are largely dictated by Auckland Transport and there may be circumstances where some variation is identified at the detailed design stage and is acceptable in terms of providing for a better urban design and/or transportation outcome. It would be inappropriate to apply the non-complying threshold in those circumstances. In addition, the discretionary activity status is supported by robust objectives and policies (Objective (8) and policies (13), (14) and (15)).	
		20.34	Support	The Submitters agree it is appropriate to apply a permitted activity status to the operation and maintenance of a public transport interchange once it is established and therefore support the relief sought.	Allow
		20.35	Support	The Submitters agree that an exemption is required for the future public transport interchange as this has a functional need for vehicle access. In addition, a controlled activity status is appropriate for the "Development of a public transport interchange and associated facilities."	Allow
		20.36	Oppose	It is inappropriate to amend (A17) in Table IXXX.6. Business – Local Centre. Discretionary activity status is appropriate because it ensures a full assessment of the application, including consideration of any relevant adverse effects, but it also provides greater flexibility than non-complying activity status. Flexibility is required because the transport upgrades listed in Standard Ixxx.6.15 are largely dictated by Auckland Transport and there may be circumstances where some variation is identified at the detailed design stage and is acceptable in terms of providing for a better urban design and/or transportation outcome. It would be inappropriate to apply the non-complying threshold in those circumstances. In addition, the discretionary activity status is supported by robust objectives and policies (Objective (8) and policies (13), (14) and (15)).	Reject
		20.37	Oppose	It is inappropriate to amend (A11) in Table IXXX.6. Business – Local Centre. Discretionary activity status is appropriate because it ensures a full assessment of the application, including consideration of any relevant adverse effects, but it also provides greater flexibility than non-complying activity status. Flexibility is required because the transport upgrades listed in Standard Ixxx.6.15 are largely dictated by Auckland Transport and there may be circumstances where some variation is identified at the detailed design stage and is acceptable in terms of providing for a better urban design and/or transportation outcome. It would be inappropriate to apply the non-complying threshold in those circumstances. In addition, the discretionary activity status is supported by robust objectives and policies (Objective (8) and policies (13), (14) and (15)).	Reject
		20.38	Oppose	The Submitters oppose the proposed amendments to Standard Ixxx.6.7 because the standards referred to are only to apply to those permitted activities listed in the tables.	Reject
		20.39	Support in part	The Submitters agree to the following amendments to Standard Ixxx.6.7 and to Waimanawa Precinct Plan 3 Transportation attached as Appendix B to this further submission in response to submission points 20.39, 20.40 and 20.41. The amendments exclude the public transport interchange site and the Collector Road now identified as "Collector Road 2" from the vehicle access restrictions. Standard Ixxx.6.7 is amended as follows (additions shown as underlining and deletions as strike-through):	Allow in part
				Standard Ixxx.6.7	
				Limited Vehicle Access Restrictions, Pedestrian Connections and Cycle Facilities	



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				 Purpose: to avoid direct vehicle access from individual sites onto <u>old</u> State Highway One, <u>Green Avenue, Collector Road 1 (except any public transport interchange site)</u> and the Wider Western Link Road; and to have promote safe and efficient operation of transport infrastructure; and to achieve <u>safe</u>, accessible and high-quality pedestrian and cycle connections within the Precinct and including to the Local Centre and any future public transportation interchange, that provides positively for the needs of the local community. Sites that front onto the Wider Western Link Road, Green Avenue, <u>old</u> and State Highway One <u>and Collector Road 1 (except any public transport interchange site)</u> must not have direct vehicle access to the road and must be provided with access from <u>a rear driveway</u>, rear lanes (access lots) or side roads at the 	
		20.40	Support in	time of subdivision (4) Residential sites that front a collector road other than the "Green Avenue" as shown on Precinct Plan 3, must not have direct vehicle access to the road and must be provided with access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision." See above submission point 20.39.	Allow in part
		20.41	part Support in part	See above submission point 20.39. The Submitters oppose the addition of "subdivision and/or" to lxxx.6.7 (3) as it is unnecessary.	Allow in part
		20.42	Oppose	Retain Standard 1xxx.6.8 Wider Western Link Road. The proposed standard appropriately provides for the transport needs of the precinct while also allowing for the delivery of the WWLR.	Reject
		20.43	Oppose	Retain proposed wording of Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands. It is appropriate to reference the integration of the section of the watercourse along the WWLR within a road berm or as a separate open space so that it appears visually integrated (rather than, for example, having a visually impervious fence along the road boundary blocking views into the watercourse/riparian planting).	Reject
		20.44	Support in part	The Submitters support the amendments to the purpose text in lxxx6.14 and lxxx.6.14 (1). The Submitters oppose the deletion of text in lxxx6.14 (1)(a) because it is appropriate to allow the public walkway and cycleway network to be constructed to normal footpath standards if it is part of a vested formed road.	Allow in part
		20.45	Support in part	The Submitters support the change from "transportation" to "transport infrastructure" in lxxx.6.15. However, the Submitters oppose the relief sought to provide a pedestrian and cycle connection further northwards along old SH1, as this is already addressed in the Operative I555 Warkworth McKinney Road Precinct (PC72).	Allow in part
				The Submitters support the amendments sought to the first two bullet points but oppose the amendments sought to third bullet point which seek to delete reference to the McKinney Road and old State Highway intersection.	



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		20.46	Oppose	The amendment to lxxx.6.15 is unnecessary and inappropriate. The current provision is appropriately drafted.	Reject
		20.47	Oppose	The amendment to IXXX.6.15.1 is unnecessary and inappropriate. The current provision is appropriately drafted.	Reject
		20.48	Support in part	The Submitters support replacing the reference to "through" with the text "where it has frontage to" but oppose the other amendments sought to lxxx.6.15.1 (T2) which seek to require old SH1 to be upgraded to an urban arterial standard with active mode facilities. Refer to the relief sought in the applicant's submission points 24.11, 24.12 and 24.13.	Allow in part
		20.49	Support in part	Further to the Submitters original submission points #24.11, - 24.13, the Submitters agree to amend T2) in Table Ixxx.6.15.1 Transportation Infrastructure Requirements as follows (additions shown as underlining): As part of the first subdivision and/or development of any land: (a) within the Business – Local Centre zone; (b) for a retirement village; or	Allow in part
				(c) for a residential development creating <u>a cumulative total</u> of more than 20 <u>new</u> residential lots.	
		20.50	Support in part	The Submitters support the requirement for pedestrian and cycle facilities to be provided as part of the upgrade of SH1 where it has frontage to the Precinct, and relief which seeks to clarify which pedestrian and cycle facilities are to be provided in an interim or temporary form.	Allow in part
				However, the Submitters strongly oppose the relief sought for pedestrian and cycle facilities to be provided along SH1 from the precinct to the northern end of Wech Drive. Refer to the applicant's submission point 24.12 which proposes requiring the construction of temporary pedestrian and cycle path from the WWLR to McKinney Road which more appropriately provides for pedestrian and cycling connection.	
		20.51	Support in part	Further to the Submitters original submission points #24.11, - 24.13, the Submitters agree to amend T5) in Table Ixxx.6.15.1 Transportation Infrastructure Requirements as follows (additions shown as underlining): As part of the first subdivision and/or development of any land:	Allow in part
				 (a) within the Business – Local Centre zone; (b) for a retirement village; or (c) for a residential development creating <u>a cumulative total</u> of more than 20 <u>new</u> residential lots. 	
				Note that the Submitters submission on (T5) has not been recorded in the 'Summary of Decisions Requested Report'.	
		20.52	Support	The Submitters agree to amend Table IXXX.6.15.1 Transportation Infrastructure Requirements (T7) and (T8) as follows:	Allow



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				(T7) [Delete entire line] (T8) Construction of Collector Roads (including Green Avenue)	
		20.53	Oppose	Retain wording in Table Ixxx.6.15.1 Transport Infrastructure Requirements (T9). The proposed amendments are unnecessary and inappropriate. It is recognised that some recent residential developments fronting Mason Heights have not provided a formed footpath, but any failure of Auckland Council and/or Auckland Transport to require this footpath at the time of those developments should now not be addressed through this Plan Change.	Reject
		20.54	Support	The Submitters agree to the proposed amendments to (T9) in Table IXXX.6.15.1 because they better define the trigger for upgrading Mason Heights (additions shown as underlining and deletions as strike-through): "Any subdivision or development with access to frontage to that section of Mason Heights or in the event that Mason heights is extended or a new road is connected to it within the Waimanawa Precinct"	Allow
		20.55	Support	The Submitters agree to the consequential amendment to the note under Table IXXX.6.15.1.	Allow
		20.56	Support	The Submitters agree to the amendment to the title of Table IXXX.6.15.2 for conciseness: "Minimum Road width, Function and Required Design Elements"	Allow
		20.57	Support in part	The Submitters agree that amendments are required to ensure consistency. Note 6 under Table IXXX.6.15.2 can be deleted as follows because it is addressed in the amendments the Submitters have proposed to Standard Ixxx.6.7 in response to Auckland Transport's submission points #20.39 to 20.41 above. Note 6: No access restriction proposed on collector roads. However, lots fronting collector roads are preferred to be designed with rear access.	Allow in part
		20.58	Support in part	The Submitters do not oppose drafting amendments to ensure consistency where appropriate, but the specific amendments need to be identified by Auckland Transport.	Allow in part
		20.59	Support	The Submitters agree that the minor amendment clarifies Table IXXX.6.15.2.	Allow
		20.60	Support	The Submitters support the proposed amendments from Auckland Transport to Note 5, Table Ixxx.6.15.2 which provides greater clarity, although the Submitters consider the wording should be amended further to "Only a bi-directional facility may be appropriate' which provides clarity that a pedestrian connection may not be provided."	Allow
		20.61	Support	Proposed wording addition to Ixxx.7.2(1)(b) is appropriate.	Allow
		20.62	Oppose	Retain applicant's proposed wording for Ixxx.8.1 Matters of discretion (1) as amended by the applicant's original submission point #24.16. The matters of discretion relate only to new buildings and alterations to buildings within the Business - Local Centre zone.	Reject



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		20.63	Support	The Submitters do not oppose the amendments proposed to the matters of discretion Ixxx.8.1(1). It is noted that the numbering and referencing to this section needs amending to ensure double ups are removed i.e. (a)(b)(a)(b). It is also considered appropriate that the word 'including' be removed, as per Auckland Transport's submission, as a comprehensive list of those matters to be considered now forms part of the list of matters of discretion. This also allows the current matter of discretion beneath (1)(c) "The design and operation of any intersection with the Wider Wester Link Road and old State Highway 1" to be incorporated into this list.	Allow
		20.64	Oppose	Retain proposed wording of lxxx.8.1(1)(b) matters of discretion in applicant's proposed provisions. It is not appropriate to apply the assessment criteria to new buildings prior to subdivision because the provisions of the respective residential zones apply which include appropriate design criteria for residential buildings (in multi-unit developments).	Reject
		20.65	Oppose	Retain proposed wording of lxxx.8.2(1) Assessment Criteria for restricted discretionary activities in applicant's proposed provisions. It is not appropriate to apply the assessment criteria to new buildings prior to subdivision because the provisions of the respective residential zones apply which include appropriate design criteria for residential buildings (in multi-unit developments).	Reject
		20.66	Oppose	The Submitters oppose the amendments to lxxx.8.2(1)(c) for Transport because the use of the words "The extent to which" follows Auckland Council style guidelines.	Reject
		20.67	Oppose	Retain proposed wording of lxxx.8.2(1)(d) Assessment Criteria for restricted discretionary activities for stormwater management. The proposed amendment is unnecessary and inappropriate given the current cross-refencing of policies E1.3(1) $-$ 1(14).	Reject
		20.68	Support	The Submitters agree the broader term "public facilities" rather than "public transport interchange" is appropriate.	Allow
		20.69	Oppose	The Submitters consider the proposed additional text is unnecessary and a Transport Design Report does not need to be provided as a special information requirement under Ixxx.9.1 Transport and safety.	Reject
		20.70	Oppose	The Submitters consider the information on Precinct Plan 1 Spatial Provisions is necessary and should be retained. However, the reference to "Indicative Future Public Transport Hub" should be changed to "Indicative Future Public Transport Interchange".	Reject
		20.71	Support in part	The Submitters support changing "hub" to "interchange" in Precinct Plan 3 Transportation but oppose adding reference to "(approximately 2100m2)". The indicative area in Precinct Plan 3 - Transportation for the public transport interchange is 2, 350m², which reflects the size recommended by the Supporting Growth Alliance to the applicants (between 2000m² and 2500m²). The updated Waimanawa Precinct Plan 3 Transportation attached as Appendix B to this further submission.	Allow in part
		20.72	Support	The Submitters support including all proposed cycle paths on Precinct Plan 3 Transportation.	Support



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		20.73	Oppose	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in submission #41.	Reject
		20.74	Oppose	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		20.75		No submission on this submission point.	
		20.76	Oppose	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		20.77	Oppose	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		20.78	Oppose	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		20.79	Oppose	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		20.80	Oppose	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		20.81	Oppose	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in submission #41.	Reject
. Ash Hames and Fiona Rayner	burnette@thepc.co.nz Attn: Burnette O'Connor	21.1	Support	The Submitters support the retention of the Residential – Large Lot Zone on the submitter's property at 1684A State Highway 1.	Allow
		21.2	Support	The Submitters support the retention of the Indicative Special Yard – Avice Miller Scenic Reserve and agree that the Precinct Plan 1 – Spatial Provisions and standard IXXX.6.2 Special Yard: Avice Miller Reserve should be clarified so that they are consistent.	Allow
		21.3	Oppose	The amendment to Policy (16) is unnecessary as Policy 16 relates to <i>new</i> vehicle access points. However, the Submitters agree that there is existing access to this site from old SH1 which is appropriate and should be retained for existing properties where it will remain the only practical access into that property as the area is developed. The only sites affected are to be zoned Residential – Large Lot. If the Commissioners are mindful to amend this Policy, then the Policy could exclude the Residential – Large Lot zone only, which would continue to ensure that access to the more intensive housing in the other residential zones is not accessed off Old SH1.	Reject
		21.4	Support	The submission is consistent with the Submitters' original submission point #24.3.	Allow
		21.5	Oppose	The Submitters oppose the proposed amendment to Standard Ixxx.6.7 – Limited Access Restrictions, Pedestrian Connections and Cycle Facilities for the reasons outlined in #21.3.	Reject



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		21.6	Oppose	The Submitters do not agree that activity (A3) should be deleted from Table IXXX.4.2 Residential – Large Lot Zone for development that does not comply with the Transportation Infrastructure. It is appropriate for it to be retained as T2) will apply.	Reject
		21.7	Support	The proposed minimum lot site in the "Eastern Escarpment Area" minimum net site area is to apply to the Residential – Single House zone only because these sites can be serviced whereas the Residential – Large Lot while providing a higher landscape amenity within this part of the precinct. The submitters recommend that lxxx.6.11 (1) is amended to read (additions shown as underlining and deletions as strike-through): (1) Proposed Residential – Single House Zoned sites shown as "Eastern Escarpment Areas" on Precinct Plan 1 must comply with the minimum net site area of 1,000m ² .	Reject
		21.8	Support	The Submitters agree that the restricted discretionary activity status in Activity Table IXXX.4.1 All Zones, Rule (A10) should be retained.	Allow
		21.9	Oppose	The Submitters do not agree that the activity status should be changed from non-complying to restricted discretionary in (A6) Table IXXX.4.1 All Zones for development that is not in accordance with the Avice Miller Reserve special yard. A more restrictive non-complying activity status should be retained given the importance of creating a buffer to respect the landscape, ecological and other values associated with the Avice Miller Scenic Reserve (which the submission acknowledges elsewhere in its submission).	Reject
22. Barry Blennerhassett and Lorraine Margaret Blennerhasset	burnette@thepc.co.nz Attn: Burnette O'Connor	22.1	Support in part; Oppose in part	The Submitters are neutral about whether this land is included within PC93 but do not agree that the land holding will be "stranded" if it is not included. Putting aside the issue of whether such relief is within scope, the submitter will need to provide the appropriate RMA assessments to support the rezoning of the land. In addition, if individuals wish to expand the Plan Change area to include their landholdings, they must commit to fund the necessary infrastructure required to service those areas. The Submitters confirm that the Bat Corridor does not apply to any land outside PC93.	Allow to the extent it supports the Plan Change. Reject to the extent it seeks to extend the Plan Change area, but subject to the comments in the further submission.
23. David Lawrence Morrison	dmorrison@davcoelectrical.co.n z	23.1	Support	The submission supports PC93 without any amendments.	Allow
25. Mikel Jon Thorogood	burnette@thepc.co.nz Attn: Burnette O'Connor	25.1	Support in part	The Submitters support the submission point that PC93 be approved, but do not agree that if the Plan Change proceeds ahead of the McKinney Road Precinct development, the Warkworth South – Waimanawa Precinct should secure the upgrade of the McKinney Road and Old SH1 intersection and construct a formed pedestrian and cycle connection to Wech Drive. These works are already addressed in I555 (Warkworth McKinney Road Precinct). In addition, the Submitters say that the infrastructure effects of PC93 will be appropriately avoided, remedied or mitigated by the proposed Plan Change provisions and the developer's commitment to fund all necessary infrastructure upgrades to service the development.	Allow in part



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		25.2	Oppose	The Submitters do not agree that the Plan Change should be refused if the matters addressed in the submission cannot be addressed.	Reject
26. Guy Matches	burnette@thepc.co.nz Attn: Burnette O'Connor	26.1	Support in part; Oppose in part	The Submitters support the submission point that the Plan Change be approved. The Submitters are neutral about whether this land is included within PC93 but do not agree that the land holding will be "stranded" if it is not included. Putting aside the issue of whether such relief is within scope, the submitter will need to provide the appropriate RMA assessments to support the rezoning of the land. In addition, if individuals wish to expand the Plan Change area to include their landholdings, they must commit to fund the necessary infrastructure required to service those areas. In addition, the submitters do not agree that the bridge location and the WWLR from the submitter's land sought in NoR 8 – Wider Western Link Road should be shown on Map 3 Indicative Arterial Roads and Precinct Plan 1 Spatial Provisions. No further assessment of infrastructure is required to support PC93. The Infrastructure Report prepared by Maven Associates Ltd provided a comprehensive assessment of all infrastructure issues relating to PC93. The key infrastructure for the urban development of Warkworth South (the water reservoir and wastewater pump stations) along with the local centre and the public transport interchange are all within the Waimanawa Precinct. The Submitters confirm that the Bat Corridor does not apply to any land outside PC93.	Allow to the extent it supports the Plan Change. Reject to the extent it seeks to extend the Plan Change area, but subject to the comments in the further submission.
27. John and Sue Wynyard	burnette@thepc.co.nz Attn: Burnette O'Connor	27.1	Support in part; Oppose in part	The Submitters support the submission point that the Plan Change be approved. The Submitters are neutral about whether this land is included within PC93 but do not agree that the land holding will be "stranded" if it is not included. Putting aside the issue of whether such relief is within scope, the submitter will need to provide the appropriate RMA assessments to support the rezoning of the land. In addition, if individuals wish to expand the Plan Change area to include their landholdings, they must commit to fund the necessary infrastructure required to service those areas. In addition, the submitters do not agree that the bridge location and the WWLR from the submitter's land sought in NoR 8 – Wider Western Link Road should be shown on Map 3 Indicative Arterial Roads and Precinct Plan 1 Spatial Provisions. No further assessment of infrastructure is required to support PC93. The Infrastructure Report prepared by Maven Associates Ltd provided a comprehensive assessment of all infrastructure issues relating to PC93. The key infrastructure for the urban development of Warkworth South (the water reservoir and wastewater pump stations) along with the local centre and the public transport interchange are all within the Waimanawa Precinct. The Submitters confirm that the Bat Corridor does not apply to any land outside PC93.	Allow to the extent it supports the Plan Change. Reject to the extent it seeks to extend the Plan Change area, but subject to the comments in the further submission
28. Department of Conservation	cschipper@doc.govt.nz	28.1	Support	The Submitters agree that a further survey of the lang-tailed bats is required. The survey is currently being undertaken.	Allow



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		28.2	Oppose	The insertion of Bat Roost Protocols is not necessary to ensure adverse effects on the habitat of the long-tailed bat are minimised. The proposed plan provisions, including standard Ixxx.6.3 Special Yard: Bat Flight Corridor that provides an unobstructed flight corridor for bats, are appropriate and ensure any adverse effects are avoided, remedied or mitigated.	Reject
		28.3	Oppose	The Bat Flight Corridor proposed in the Plan Change gives effect to the National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB) and Objectives B.7.2.1 of the RPS for Auckland. The amendments sought in the submission to the Bat Flight Corridor are unduly restrictive and impractical, including zoning the area as Open Space — Conservation, increasing the minimum corridor width to 100m (rather than 20m as currently provided) ⁶ , restricting lighting, inserting the Bat Roost Protocols and prohibiting keeping domestic cats within one kilometre.	Reject
		28.4	Oppose	It is unnecessary to amend the Plan Change to prohibit keeping domestic cats within one kilometre of the Avice Scenic Reserve. The proposed plan provisions, including standard lxxx.6.3 Special Yard: Bat Flight Corridor that provides an unobstructed flight corridor for bats, are appropriate and ensure any adverse effects are avoided, remedied or mitigated.	Reject
9. Ministry of Education	vicky.hu@beca.com and moe.submissoins@beca.com	29.1	Support	The Submitters support the amendment to Objective 8 to change "educational infrastructure" to "educational facilities" so that it is consistent with the terminology in the National Planning Standards.	Allow
		29.2	Support	The Submitters support the amendment to Policy 12 to change "educational infrastructure" to "educational facilities" so that it is consistent with the terminology in the National Planning Standards.	Allow
0. GW Boyes	gcwboyes@xtra.co.nz	30.1	Oppose	The Submitters oppose the submission seeking to decline the Plan Change. The Plan Change provisions cannot require a school to be established because that is the role of the Ministry of Education, and its decision-making cannot be constrained by planning rules. Representatives from the Ministry of Education have confirmed that the Ministry has a strong interest in acquiring land and developing a primary school in Waimanawa. In addition, infrastructure upgrades will be funded by the developers as part of the Plan Change development. Any adverse effects on infrastructure will be avoided, remedied or mitigated by the proposed Plan Change provisions.	Reject
31. Waka Kotahi NZ Transport Agency	Level 5, AON Centre Customs Street West Private Bag 106602 Auckland 1143 Attn: Evan Keating	31.1	Oppose	The application for PC93 did not include an assessment of the FDS because it had not been adopted by the Council at the time the application was lodged. An assessment is currently underway and will be provided to Waka Kotahi NZ Transport Agency in due course. The FDS is a document that the Council must only "have regard to" when considering PC93. The Council must "give effect" to higher order documents including the NPS – UD, which requires Council to be responsive to Plan Changes that would add significantly to development capacity, even if it is out-of-	Reject

Waimanawa Precinct Plan 1 – Spatial Provisions
 Clause 3.17(1)(a) of the National Policy Statement on Urban Development 2020.
 Section 75(3) of the Resource Management Act 1991.



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				sequence with planned release, ⁹ and for local authorities to provide a least sufficient development capacity to meet expected demand for housing and for business land. ¹⁰ In addition, while the FDS delays the date for the urban development of Warkworth South to 2040+ based on Council's ability to fund the required infrastructure, it also recognises that legislation requires the Council to be responsive to out-of-sequence development and there can be situations in which it is appropriate. ¹¹ It further states that the council will consider agreements with the private sector to provide the bulk infrastructure for development that would otherwise be constrained by limited council resources. ¹² Warkworth South is an appropriate out-of-sequence development. The documents supporting PC93 clearly demonstrate that appropriate provision has been made to ensure that the transport needs of the precinct can be met and that future strategic transport infrastructure is provided and protected. The applicants will fund the required bulk transport infrastructure including: • The upgrading of part of old SH1 through the Plan Change area to urban arterial standard; • Construction of a shared footpath/cycle path from the Plan Change area to McKinney Road; • Construction of a new roundabout at the intersection of the WWLR and old SH1. The applicants will also set aside land for a public transport interchange. In addition, PC93 proposes robust plan provisions, including objectives and policies that ensure subdivision and development is coordinated with the delivery of infrastructure and standards that trigger transport infrastructure upgrades at the time of development. ¹³ PC93 has comprehensively addressed how transport infrastructure and services will be provided to support the planned growth, mitigate adverse effects and achieve a well-functioning urban environment.	
		31.2	Oppose	The Emissions Reduction Plan (ERP) is a document that Auckland Council must only have regard to. ¹⁴ It requires measures to support reductions in emissions. PC93 with its local centre, public infrastructure and the provision for a school is designed to achieve exactly what the ERP seeks. An assessment is currently underway and will be provided to Waka Kotahi NZ Transport Agency in due course.	Reject
		31.3	Oppose	The applicant's proposed provisions are appropriate and sufficiently clear as they relate to the walking and cycling connection on old SH1 and the timing of assessment of any future intersection upgrade for Valerie Close. The submission is seeking a level of detail that is not necessary at the Plan Change stage. It is appropriate to retain some flexibility for matters to be finalised at the resource consent stage.	Reject

Page 20 of 24 708

 $^{^9}$ Objective 6(c) and 8 of the National Policy Statement on Urban Development 2020. 10 Policy 2 of the National Policy Statement on Urban Development 2020.

¹¹ Tāmaki – Whenua Taurikura Auckland Future Development Strategy 2023-2053, Principle 5(a) Provide direction for where and when growth is appropriate
12 Tāmaki – Whenua Taurikura Auckland Future Development Strategy 2023-2053, Principle 3 (d) Work with the private sector to find new innovative ways to fund infrastructure

¹³ Ixxx.6.15 Transportation Infrastructure. ¹⁴ Section 74(2)(d) of the Resource Management Act 1991.



Name of original Submitter	Address of original Submitter	Original submiss ion point number	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		31.4	Oppose	The application material comprehensively assesses all potential transport effects of the Plan Change including pedestrian connectivity and no additional assessment is necessary in regard to pedestrian crossings. The submission is seeking a level of detail that is not necessary at the Plan Change stage.	Reject
		31.5	Oppose	Road noise and reverse sensitivity effects are more appropriately addressed through a region-wide Plan Change that can apply a consistent approach across Auckland. It is inappropriate to assess these matters in an ad hoc manner in response to private Plan Changes.	Reject
22. Watercare Services Limited	Private Bag 92521 Victoria Street West Auckland 1142 Attn: Mark Iszard	32.1	Oppose	The Submitters oppose this submission to the extent any amendments are requested. PC93 as proposed ensures that the water and wastewater capacity and servicing requirements of the Plan Change will be adequately met, such that the water and wastewater related effects are appropriately managed.	Reject
		32.2	Support	The submission strongly supports the precinct provisions relating to water supply and wastewater infrastructure in PC93.	Allow
		32.3	Support	The submission supports the non-complying activity status for subdivision and development that proceeds the provision of a functioning water and wastewater infrastructure in PC93.	Allow
		32.4	Support	The submission supports standard 1xxx.6 Wastewater and Potable Water Connections in PC93.	Allow
		32.5	Support	The Submitters agree to insert the additional text into standard Ixxx.6.9 Wastewater and Potable Water Connections clause (3) "with sufficient capacity to service the proposed development" given Watercare can refuse to accommodate a connection if there is insufficient capacity.	Allow
		32.6	Oppose	The Submitters oppose the additional text proposed to the precinct description. The existing text is correct and there is no need to refer to every specific standard in the precinct description. Other standards are not specifically described in the precinct description. The text proposed by Watercare does not recognise the fact that standard Ixxx.6.9 Wastewater and Potable Water Connections does not apply to Residential – Large Lot Zone. The amendments to standard Ixxx.6.9 Wastewater and Potable Water Connections agreed to in submission #32.5 above provides sufficient clarity regarding the position.	Reject
		32.7	Oppose	It is unnecessary to add a new policy that is specific to water and wastewater because the policy is already appropriately addressed in Policy (12) in PC93, which addresses all critical infrastructure including referring explicitly to waste water and potable water.	Reject
33. Caroline Barrett	carolinebarrett1@mac.com	33.1	Oppose	The Submitters oppose the submission seeking to decline the Plan Change on the basis the FDS does not allow for growth until 2040+. The FDS is a document that the Council must only "have regard to" when considering PC93. The Council must "give effect" to higher order documents including the NPS – UD, 15 which requires Council to be responsive to Plan Changes that would add significantly to development capacity, even if it is out-of-sequence with planned release. Local authorities have an obligation to provide a least sufficient development capacity to meet expected demand for housing and for business land. 17	Reject

Page 21 of 24

 ¹⁵ Section 75(3) of the Resource Management Act 1991.
 ¹⁶ Objective 6(c) and 8 of the National Policy Statement on Urban Development 2020.
 ¹⁷ Policy 2 of the National Policy Statement on Urban Development 2020.



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				In addition, while the FDS delays the date for the urban development of Warkworth South to 2040+ based on Council's ability to fund the required infrastructure, it also recognises that legislation requires the Council to be responsive to out-of-sequence development and there can be situations in which it is appropriate. ¹⁸ It further states that the council will consider agreements with the private sector to provide the bulk infrastructure for development that would otherwise be constrained by limited council resources. ¹⁹ Warkworth South is an appropriate out-of-sequence development.	
				The Submitters also disagree that Terraced Housing and the local centre are inappropriate. The Warkworth Structure Plan 2019 identified the land for residential use, including high density Terrace Housing and Apartment Building zoning. The economic assessment prepared by M.E. consulting in support of PC93 demonstrates that the zoning proposed in PC93 and the local centre will meet future demand for housing and retail space in Warkworth. PC93 has been the subject of a comprehensive master planning process that strikes the right balance between zoning that enables optimal urban growth while ensuring the protection of key areas including streams and open space.	
				Terraced Housing and the local centre are appropriate in the area. The Warkworth Structure Plan 2019 identified the land for residential use, including high density Terrace Housing and Apartment Building zoning. The economic assessment prepared by M.E consulting in support of PC93 demonstrates that PC93 will meet future demand for housing and retail space in Warkworth. PC93 has been the subject of a comprehensive master planning process that strikes the right balance between zoning that enables optimal urban growth while ensuring the protection of key areas including streams and open space.	
34. Pete Sinton petesinton@townplanne	petesinton@townplanner.co.nz	34.1	Oppose	The Submitters oppose the submission seeking to decline the Plan Change on the basis the FDS does not allow for growth until 2040+. The FDS is a document that the Council must only "have regard to" when considering PC93. The Council must "give effect" to higher order documents including the NPS – UD, 20 which requires Council to be responsive to Plan Changes that would add significantly to development capacity, even if it is out-of-sequence with planned release, 21 and for local authorities to provide a least sufficient development capacity to meet expected demand for housing and for business land. 22	Reject
				In addition, while the FDS delays the date for the urban development of Warkworth South to 2040+ based on Council's ability to fund the required infrastructure, it also recognises that legislation requires the Council to be responsive to out-of-sequence development and there can be situations in which it is appropriate. ²³ It further states that the council will consider agreements with the private sector to provide the bulk infrastructure for development that would otherwise be constrained by limited council resources. ²⁴ Warkworth South is an appropriate out-of-sequence development.	
				The Submitters also disagree that Terraced Housing and the local centre are inappropriate. The Warkworth Structure Plan 2019 identified the land for residential use, including high density Terrace Housing and Apartment Building zoning. The economic assessment prepared by M.E. consulting in support of PC93	

¹⁸ Tāmaki – Whenua Taurikura Auckland Future Development Strategy 2023-2053, Principle 5(a) Provide direction for where and when growth is appropriate

710 Page 22 of 24

¹⁹ Tāmaki – Whenua Taurikura Auckland Future Development Strategy 2023-2053, Principle 3 (d) Work with the private sector to find new innovative ways to fund infrastructure

 $^{^{\}rm 20}\,\text{Section}$ 75(3) of the Resource Management Act 1991.

 $^{^{\}rm 21}$ Objective 6(c) and 8 of the National Policy Statement on Urban Development 2020.

 $^{^{\}rm 22}$ Policy 2 of the National Policy Statement on Urban Development 2020.

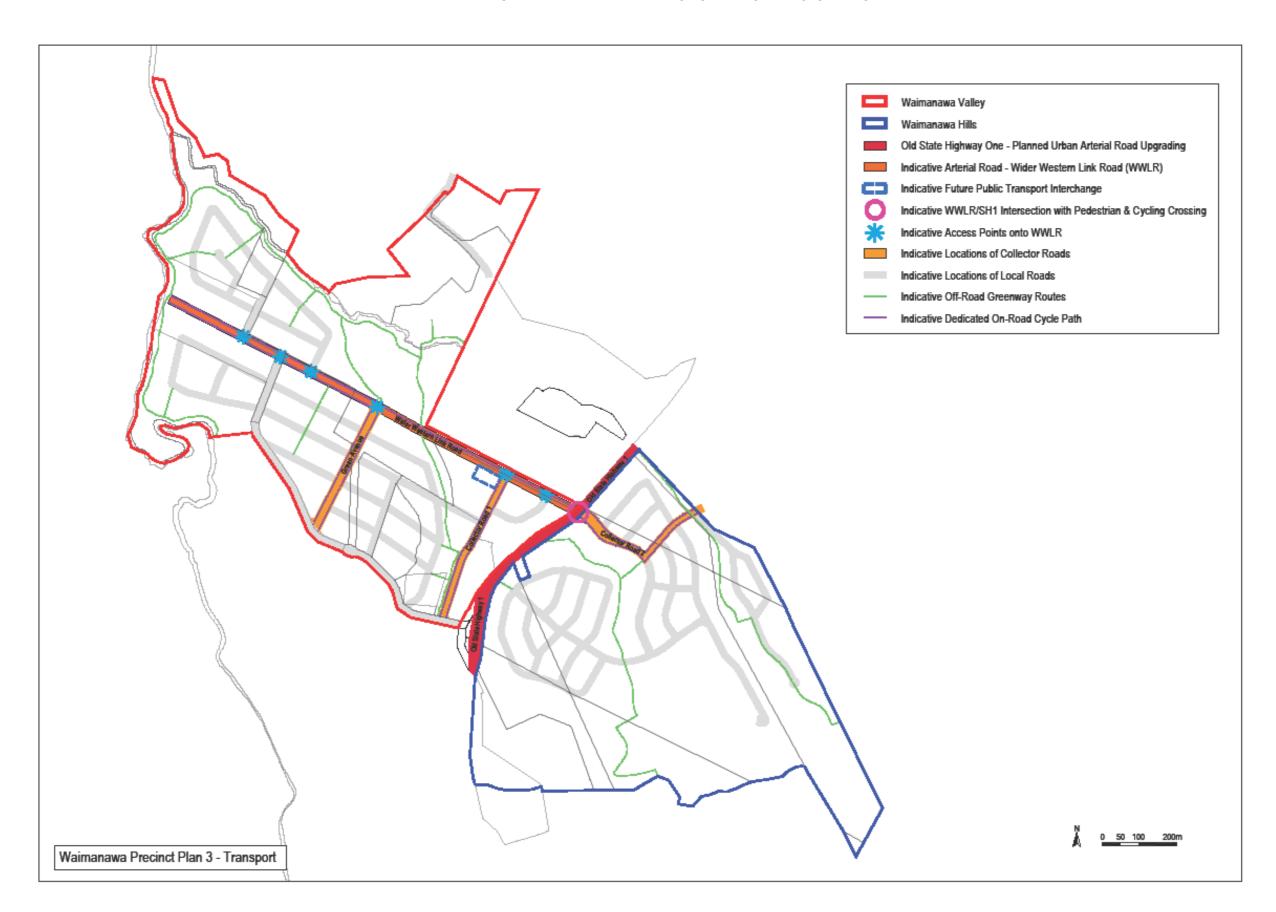
²³ Tāmaki – Whenua Taurikura Auckland Future Development Strategy 2023-2053, Principle 5(a) Provide direction for where and when growth is appropriate.
²⁴ Tāmaki – Whenua Taurikura Auckland Future Development Strategy 2023-2053, Principle 3 (d) Work with the private sector to find new innovative ways to fund infrastructure.



Name of original Submitter	Address of original Submitter	Original submiss ion point number /s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				demonstrates that the zoning proposed in PC93 and the local centre will meet future demand for housing and retail space in Warkworth. PC93 has been the subject of a comprehensive master planning process that strikes the right balance between zoning that enables optimal urban growth while ensuring the protection of key areas including streams and open space.	
35. Bevan Morrison	bevanmorrison75@gmail.com	35.1	Support	The submission supports the Plan Change without any amendments.	Allow
36. Red Bluff Investment Ltd	bevanmorrison75@gmail.com	36.1	Support	The submission supports the Plan Change without any amendments.	Allow
37. Gumfield Property Ltd	tdrj.morrison@xtra.co.nz	37.1	Support	The submission supports the Plan Change without any amendments.	Allow
38. Kenilworth Orchards	tdrj.morrison@xtra.co.nz	38.1	Support	The submission supports the Plan Change without any amendments.	Allow
39. Thompson Road Residents	burnette@thepc.co.nz Attn: Burnette O'Connor	39.1	Support in part	The Submitters support the submission point that the Plan Change be approved but oppose the addition of the proposed note to Precinct Plan 1 – Spatial provisions. It is unnecessary to add a note to indicate that the Trail to the north of 1768 old State Highway 1 is indicative because the Trail is already identified as an "Indicative Off-Road Greenway Route". It is also inappropriate to refer to any upgrades of Thompson Road as this is outside the scope of the Plan Change.	Allow in part
40. MA & MG Wilson	murray@mwilson13.com	40.1	Support	The Submitters support the submission point that does not oppose the Plan Change and confirm that the development will not affect telecommunications to surrounding properties.	Allow
41. R & T Morrison, D Morrison	shanehartley@tnp.co.nz	41.1 - 41.14	Support	Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Allow



APPENDIX B - UPDATED WAIMANAWA PRECINCT PLAN 3 TRANSPORTATION



9 February 2024



Auckland Council Level 16, 135 Albert Street Private Bag 92300 Auckland 1142

Attn: Planning Technician C/o unitaryplan@aucklandcouncil.govt.nz

Dear Planning Technician,

Further Submission on Plan Change 93 (Private) Warkworth South

Please find attached further submissions made on behalf of John and Sue Wynyard (Wynyard Family) Submitter # 27.

The further submitters have an interest greater than the public generally.

The further submitters wish to speak in relation to the submission and further submissions.

Yours sincerely

Burnette O'Connor

Director/Planner

The Planning Collective

E: burnette@thepc.co.nz

Swette O' Corrow

M: 021-422 346

Attachments:

A. Form 6

B. Further Submission Table

Attachment A:



Form 6 FURTHER SUBMISSION/S TO Plan Change 93 (Private) Warkworth South

Clause 8 of Schedule 1, Resource Management Act 1991 (Form 6)

.....

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter: John and Sue Wynyard (Wynyard Family) (Submitter #27)

Address for Service: The Planning Collective C/o Burnette O'Connor

Mobile: 021 422 346

Email: burnette@thepc.co.nz

2 SCOPE OF FURTHER SUBMISSION

This is a further submission addressing the following submissions on Plan Change 93 (Private):

- Submission No. 17 Auckland Council
- Submission No. 20 Auckland Transport
- Submission No. 28 Department of Conservation
- Submission No. 32 Watercare Services Limited

Please refer to the further submission table provided as **Attachment B** which details the further submission/s and decisions sought.

The Submitters wish to speak in support of the further submissions.

(Person authorised to sign on behalf of submitter)

Buette O'Corrow

Date: 9 February 2024

Attachment B:

Further Submissions Table

ATTACHMENT B

Further Submission on Plan Change 93 (Private) – Warkworth South

DATE: 9 February 2024

Sub#	Sub	Submitter	Summary	Further Submission
	Point			
20	20.9	Auckland Transport	Amend Objective 2, and split it into two objectives as follows: '(2) The Warkworth South Precinct is subdivided and developed in a manner that Subdivision and development achieves an accessible urban area with efficient, safe and integrated vehicle, walking and cycle connections internally and to the wider Warkworth urban area.	The submission point is supported as it provides a clear policy direction to support the rules and direct the outcomes required.
			(2A) while-Subdivision and development providesing for and supporting the safety and efficiency of the current and future national strategic and local roading transport network.'	
20	20.14	Auckland Transport	Add a new objective as follows: 'The precinct develops and functions in a way that: (a) supports a mode shift to public and active modes of transport (b) provides safe and effective movement between the local centre, community facilities, housing, jobs, open spaces and the public transport facilities by active modes.'	The submission point is supported as it provides a clear policy direction to support the rules and direct the outcomes required.
20	20.42	Auckland Transport	Delete 1xxx.6.8 Wider Western Link Road in its entirety. Retain the non-complying activity status for subdivision and development which does not construct the Wider Western Link Road by applying a non-complying activity status to a 'Subdivision and development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements), as sought elsewhere in this submission.	This submission point is supported because the WWLR connection is reliant on provisions in this plan change to deliver the road because Notice of Requirement #8 does not propose to designate the entire road connection.
20	20.45	Auckland Transport	Amend the title and purpose statement of Ixxx.6.15 as follows: 'Transportation Infrastructure Purpose: • To achieve the integration of land use and transportation infrastructure (including walking and cycling). • To ensure transportation infrastructure is appropriately provided for. • To provide a pedestrian and cycle connection to the McKinney Road/ northwards along State Highway One Intersection to the existing urban area.'	The changes, with all consequential amendments, are supported because they will assist in achieving an integrated approach to urban development and appropriate connectivity between the plan change area and the existing urban area of Warkworth.
20	20.51	Auckland Transport	Amend (T5) in Table IXXX.6.15.1 Transportation Infrastructure Requirements, by deleting the existing trigger for the Wider Western Link Road / State Highway 1 intersection and replacing it with the following: 'Any subdivision and/or development: • within the Business - Local Centre zone; • for a retirement village; or • resulting in a cumulative total of 20 residential lots or dwellings within the Precinct.'	
20	20.63	Auckland Transport	Amend Ixxx.8.1 Matters of discretion, (1)(b) as follows: 'Transport including: (a) access, walking and cycling infrastructure, (b) traffic generation, (c) access to public transport and parking	This submission point and all consequential amendments are supported. The changes will better achieve a well-functioning urban environment.

717 Page 4 of 16 of 3

Sub#	Sub Point	Submitter	Summary	Further Submission
			(d) location and design of the Wider Western Link Road, collector roads, key local roads and connections with neighbouring sites to achieve and integrated street network and appropriately provide for all modes (e) provision of cycling and pedestrian networks and connections (f) provision of public transport facilities (bus stops and shelters	
20	20.75	Auckland Transport	Amend Table XXX.X.1 Activity table, to include the following as a non-complying (NC) activity: 'Subdivision and development with vehicle access to the Wider Western Link Road'	This submission point is opposed and an alternate activity status, such as Discretionary activity is sought. At the least the wording needs to change to clarify the type of access that is enabled e.g public and private road connections. The Wynyard land is earmarked for Business - Heavy Industry and there is currently no development layout or Masterplan. The land needs to be used efficiently as the only Business - Heavy Industry land identified in Warkworth.
20	20.77	Auckland Transport	Delete or amend XXX.5 Notification (1) to enable public or limited notification of applications which have a potential adverse effect on the transport network.	The submission point is supported because the normal tests for notification should apply given the potential traffic effects associated with development of the plan change area on infrastructure outside the plan change area e.g. the McKinney Road intersection. The underlying zones enable development of four or more dwellings, integrated residential development without notification. These activities could generate adverse effects on the adjoining and wider environment that necessitate notification processes.
28	28.3	Department of Conservation	Amend the plan to adequately cover the following issues: • Zone the Bat Flight Corridor as Open Space – Conservation. • Increase the minimum corridor width to one hundred metres. • Require the lighting provisions alongside the bat flight corridor to abide by the Australian Government "National Light Pollution Guidelines for Wildlife". • Require that development in, and adjacent to, the bat flight corridor utilises the Department of Conservation's Protocols for minimising the risk of felling occupied bat roosts (2021). • Require a prohibition in keeping domestic cats within one kilometre of the bat flight corridor.	The submission point is supported in principle to the extent it is important and necessary to protect indigenous biodiversity; however, any provisions that affect the Submitters land need to be considered in the context of the future development of that land and the Business – Heavy Industry land use it is earmarked for.
28	28.4	Department of Conservation	Amend the plan to adequately cover the following issues: • Zone the Bat Flight Corridor as Open Space – Conservation. • Increase the minimum corridor width to one hundred metres. • Require the lighting provisions alongside the bat flight corridor to abide by the Australian Government "National Light Pollution Guidelines for Wildlife". • Require that development in, and adjacent to, the bat flight corridor utilises the Department of Conservation's Protocols for minimising the risk of felling occupied bat roosts (2021). • Require a prohibition in keeping domestic cats within one kilometre of the bat flight corridor.	The submission is supported in part to the extent it is important and necessary to protect indigenous biodiversity; however, any provisions such as a prohibition on keeping domestic cats within a 1 kilometre area need to be fully researched, tested, and justified in terms of the requirements of s32 and s32AA of the Resource Management Act.
32	32.1	Watercare Services Limited	Watercare seeks a decision that ensures that the water and wastewater capacity and servicing requirements of the Plan Change will be adequately met, such that the water and wastewater related effects are appropriately managed.	
32	32.5	Watercare Services Limited	Watercare supports Standard 1XXX.6 Wastewater and Potable Water Connections clause (3) which requires development to be connected to a functioning water and wastewater network prior to the issue of a s224(c) certificate, subject to the following amendment to ensure that the network also has the capacity to serve the proposed development.	

718 Page 5 of 26 of 3

Sub#	Sub	Submitter	Summary	FS 08 Further Submission
	Point		•	
			Ixxx.6.9 Wastewater and Potable Water Connections (3) Prior to the issue of s224(c), the development shall be connected to a functioning water and wastewater network with sufficient capacity to service the proposed development.	
32	32.6	Watercare Services Limited	To ensure there is strong and directive policy support for the non-complying activity classification for development and subdivisions that do not comply with Standard 1XXX.6 Wastewater and Potable Water Connections, Watercare seeks the inclusion of the following new policy. IXXX.3 Policies (XX) Avoid subdivision and development progressing ahead of the provision of a functioning water and wastewater network with sufficient capacity to service the proposed development.	needs to be sufficient capacity to service the proposed development <u>and Future Urban and undeveloped residential land</u> , between the plan change area and the existing urban area of <u>Warkworth</u> .
32	32.7	Watercare Services Limited	To ensure there is strong and directive policy support for the non-complying activity classification for development and subdivisions that do not comply with Standard 1XXX.6 Wastewater and Potable Water Connections, Watercare seeks the inclusion of the following new policy. IXXX.3 Policies (XX) Avoid subdivision and development progressing ahead of the provision of a functioning water and wastewater network with sufficient capacity to service the proposed development.	needs to be sufficient capacity to service the proposed development <u>and Future Urban and undeveloped urban land</u> , between the plan change area and the existing urban area of <u>Warkworth</u> .
17	17.1	Auckland Council	Waimanawa Precinct - Amend objective (8) to add the word avoid subdivision and development unless it is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements.	the delivery of infrastructure.

719 Page 6 of 36 of 3

FURTHER SUBMISSIONS ON PRIVATE PLAN CHANGE 93: WARKWORTH SOUTH TO THE AUCKLAND UNITARY PLAN – OPERATIVE IN PART

Clause 6 of Schedule 1 of the Resource Management Act 1991

To: Auckland Council

Name: R and T Morrison, D Morrison (jointly the Submitters)

Submission details

- 1. This is a further submission both in support of and opposition to submissions on Plan Change 93 (Private): Warkworth South (**PC93**).
- 2. The submitters own or have an interest in the Morrison Heritage Orchard land included in PC 93.
- 3. The Submitters could not gain an advantage in trade competition through this further submission.
- 4. The specific original submission lodged by the Submitters and to which this further submission refers to is in **Appendix A** of this further submission. **The original submission has been allocated #41** by the Council.

Reasons for submission

- 5. The reasons for this submission are as follows:
 - (a) The relief sought in the original submissions that are supported by the Submitters:
 - Promotes the sustainable management of natural and physical resources and is consistent with the purpose and principles of the Resource Management Act 1991 (RMA);
 - (ii) Is appropriate in terms of the section 32 of the RMA; and
 - (iii) Gives effect to national policy statements including the NPS on Urban Development 2020 (NPS-UD).
 - (b) The relief sought in the original submissions that are opposed by the Submitters:
 - (i) Does not promote the sustainable management of natural and physical resources and is inconsistent with the purpose and principles of the RMA;
 - (ii) Is not appropriate in terms of the section 32 of the RMA; and
 - (iii) Does not give effect to national policy statements including the NPS-UD.
- 6. Without limiting the generality of the above, this further submission comprises a schedule setting out the following details:

- (a) whether the Submitters support or oppose the original submission;
- (b) the particular part of the original submissions to which this further submission relates;
- (c) the reasons for the support/opposition; and
- (d) whether the Submitters seek that the original submission be allowed or rejected.
- 7. The relief sought by the Submitters is to allow submissions they support and reject submissions they oppose, which are set out in detail.
- 8. The Submitters wish to be heard in support of their further submission.

DATED at Auckland this 9th day of February 2024



Full Name or Name of Agent (if applicable)

Terra Nova Planning Ltd (Contact: Shane Hartley)

Organisation Name (if submission is made on behalf of Organisation) n/a

Address for service of Submitters

Terra Nova Planning, PO Box 466, Orewa

Telephone: 021 159 3240 Email: shanehartley@tnp.co.nz

Contact Person: Shane Hartley; Terra Nova Planning Ltd

FURTHER SUBMISSION SCHEDULE

Name of original Submitter	Address of original Submitter	Original submissi on point number/s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
Auckland Council as Submitter	35 Albert Street Private Bag 92300 Auckland 1142 Attn: Craig Cairncross	17.9	Support in part	It is appropriate to amend Table XXX.X.1 Activity table, XXX.6. Standards and make consequential amendments to address the cumulative effects of the activities, either in combination or where more than one of the same activity occurs within the precinct, but only to the extent in the Submitter's original submission #41. Retain the applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Allow in part
		17.10	Oppose	The Submitters do not agree that provisions should be added to recognise, maintain and enhance the existing planting, particularly the shelter belt, and identify the streams and planting within the Morrison Heritage Orchard Precinct. Such provisions fail to recognise the age and poor health of the current shelterbelts and that the Morrison Orchard is a working orchard. In addition, were the shelterbelt to be removed for any farm operational or plan health reasons, the rural values offered by the Orchard to the urban development to the south-west would largely be retained by the ongoing orchard operation or similar rural activities. Streams remain subject to the requirements of National Environmental Standards for Freshwater and the Auckland Unitary Plan. Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
2. Auckland Transport	Private Bag 92250 Auckland 1010 Attm: Katherine Dorofaeff	20.50	Support in part	The Submitters support the requirement for pedestrian and cycle facilities to be provided as part of the upgrade of SH1 where it has frontage to the precinct, and relief which seeks to clarify which	Allow in part

Name of original Submitter	Address of original Submitter	Original submissi on point number/s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				pedestrian and cycle facilities are to be provided in an interim or temporary form.	
				The Submitters oppose the relief sought for pedestrian and cycle facilities to be provided along SH1 from the precinct to the northern end of Wech Drive. Refer to the applicant's submission point 24.12 which proposes requiring the construction of temporary pedestrian and cycle path from the Wider Western Link Road to McKinney Road which more appropriately provides for pedestrian and cycling connection.	
		20.60	Support	The Submitters support the proposed amendments from Auckland Transport to Note 5, Table lxxx.6.15.2 which provides greater clarity, although the Submitters consider the wording should be amended further to "Only a bi-directional facility may be appropriate" which provides clarity that a pedestrian connection may not be provided."	Allow
		20.73	Oppose	There is no need to amend precinct provisions, including objectives, policies and rules, to further address transport effects and promote good transport land use integration. These matters are appropriately addressed by the applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in submission #41.	Reject
		20.74	Oppose	The amendment of Precinct provisions (objectives, policies and rules) within the Morrison Heritage Orchard Precinct to require that future developments and alterations to existing buildings mitigate potential road traffic noise effects on activities sensitive to noise from the existing State Highway 1 arterial and the future Wider Western Link Road arterial, is unnecessary given the limited provision for, and likelihood of, noise sensitive activities occurring in proximity to these roads. Retain the applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		20.75	Support	Preventing further subdivision and development with frontage to the Wider	Allow

Name of original Submitter	Address of original Submitter	Original submissi on point number/s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
				Western Link Road is appropriate and it is not intended to have vehicle access to that road from the Morrison Heritage Orchard Precinct. The amendment sought to Table XXX.X.1 Activity table, to include as a non-complying (NC) activity: 'Subdivision and development with vehicle access to the Wider Western Link Road' is supported.	
		20.76	Oppose	There is no necessity to amend the precinct provisions applying to weddings and functions to ensure that transport effects can be appropriately assessed and addressed. Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		20.77	Oppose	There is no need to delete or amend XXX.5 Notification (1) to enable public or limited notification of applications which have a potential adverse effect on the transport network. Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject
		20.78	Support	The proposed amended wording 'All activities shall obtain Vehicle access is limited to State Highway One in accordance with at the Approved Entry Point (AEP) shown on the Precinct Plan.' more clearly states the restriction of vehicular access to the Approved Entry Point, while still allowing alternative access points for pedestrian and cycles.	Allow
		20.79	Oppose	There is no need to amend or replace XXX.6.1 General access and traffic generation standard (2), with robust, and enforceable standards which can be easily measured by the Council and applicants and which appropriately address transport effects and transport land use integration and provide for the access to the precinct to be upgraded if required. Retain applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in original submission #41.	Reject

Name of original Submitter	Address of original Submitter	Original submissi on point number/s	Support or Oppose	Reasons for the Submitters' support or opposition	Relief sought
		20.80	Support	Preventing further subdivision and development with frontage to the Wider Western Link Road is appropriate as it is not intended to have vehicle access to that road. The proposed additional clause in XXX.6.1 stating that 'Subdivision and development that has frontage to the Wider Western Link Road must not be provided with vehicle access to that road" is supported.	Allow
		20.81	Oppose	Replacing the reference to E27.9 with a special information requirement for a transport assessment specific to the precinct, and includes consideration of the access point on State Highway One is unnecessary. E27.9 provides sufficient scope and direction to address traffic effects in combination with the applicant's proposed provisions for the Morrison Heritage Orchard Precinct as proposed to be amended in submission #41.	Reject

Form 5 Submission on notified proposal for policy statement or plan, change or variation

Clause 6 of Schedule 1, Resource Management Act 1991

To Auckland Council unitaryplan@aucklandcouncil.govt.nz

Submission No: Receipt Date:

Attn: Planning Technician Auckland Council Level 16, 135 Albert Street Private Bag 92300 Auckland 1142

Name of submitter: R and T Morrison, D Morrison

Submitter details

Full Name or Name of Agent (if applicable)

Terra Nova Planning Ltd (Contact: Shane Hartley)

Organisation Name (if submission is made on behalf of Organisation)

n/a

Address for service of Submitter

Terra Nova Planning, PO Box 466, Orewa

Telephone: 021 159 3240 **Email:** shanehartley@tnp.co.nz

Contact Person: Shane Hartley; Terra Nova Planning Ltd

Scope of submission

This is a submission on the following proposed plan change / variation to an existing plan:

Plan Change/Variation Number PC 93 (Private)

Plan Change/Variation Name: Warkworth South

The specific provisions that my submission relates to are:

(Please identify the specific parts of the proposed plan change / variation)

<u>Plan provision(s):</u> The Plan Change generally, and specifically the activity rules for the Part C Morrison Heritage Orchard Precinct

Or

Property Address:

Or

Мар:

Or

Other (specify):

Submission

My submission is: (Please indicate whether you support or oppose the specific provisions or wish to have them amended and the reasons for your views)

I support the specific provisions identified above

X

The reasons for my views are:

- (a) We support the plan change in general.
- (b) We seek amendment to the activity table and standards relating to the Morrison Heritage Orchard Precinct as sought in the **Attachment** to this submission, or such alternative wording as may be appropriate. The amendments sought will provide greater clarity and certainty than the notified provisions.

I seek the following decision by Council:

Accept the proposed plan change / variation

Accept the proposed plan change / variation with amendments as outlined below

X

Decline the proposed plan change / variation

If the proposed plan change / variation is not declined, then amend it as outlined below.

Refer Attachment with amendments sought.

I wish to be heard in support of my submission

<u>X</u>

I do not wish to be heard in support of my submission

If others make a similar submission, I will consider presenting a joint case with them at a hearing

Χ

Shane Hartley

Signature of Submitter

Date: 28 November 2023 (Lodged

online 23 November 2023)

(or person authorised to sign on behalf of submitter)

Notes to person making submission:

If you are making a submission to the Environmental Protection Authority, you should use Form 16B. Please note that your address is required to be made publicly available under the Resource Management Act 1991, as any further submission supporting or opposing this submission is required to be forwarded to you as well as the Council.

If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of Part 1 of Schedule 1 of the Resource Management Act 1991.

I could /could not gain an advantage in trade competition through this submission.

If you could gain an advantage in trade competition through this submission please complete the following:

I am / am not directly affected by an effect of the subject matter of the submission that:

- (a) adversely affects the environment; and
- (b) does not relate to trade competition or the effects of trade competition.

Table XXX.X.1 Activity table

	Use	Activity status
Visitor Activitie	es and Accommodation	
(A1)	A maximum of four dwellings in Activity Area A as of [INSERT OPERATIVE PLAN CHANGE DATE] or a single site comprising Activity Area A.	Р
(A2)	One dwelling per site in Activity Areas A, B and C other than as permitted in (A1) above and (A12) of this Table.	Р
(A3)	Camping ground	Р
(A4)	Garden centre	Р
(A5)	Market s	Р
(A6)	One minor dwelling per principal dwelling, excluding dwellings established under (A12) of this Table.	Р
(A7)	Produce sales	Р
(A8)	Restaurant and café	Р
(A9)	Rural commercial services	Р
(A10)	Rural tourist and visitor activities	Р
(A11)	Visitor accommodation	Р
(A12)	Workers' accommodation	Р
(A13)	Weddings and functions	Р
(A14)	Activities (A1) to (A13) not complying with the standards in Rule XXX.6 below	RD
Development		
(A15)	New buildings or additions up to 250m ² GFA in all Precinct Activity Areas	Р
(A16)	New buildings or additions 250m ² GFA <u>or greater</u> in all Precinct Activity Areas.	RD
Subdivision		
(A17)	Subdivision complying with Standard XXX.6.11.	RD
(A18)	Subdivision not complying with Standard XXX.6.11.	D

XXX.5. Notification

- (1) An application for resource consent for a restricted discretionary activity listed in Table XXX.X.1 above will be considered without public or limited notification or the need to obtain written approval from affected parties unless the Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.
- (2) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4).

XXX.6. Standards

The overlay, zone and Auckland-wide standards apply in this precinct unless otherwise specified below.

All activities listed as permitted, restricted discretionary in (A16) and subdivision in (A17) in **Table XXX.X.1** Activity table must comply with the following standards.

XXX.6.1 General access and traffic generation standard

- (1) All activities shall obtain access to State Highway One in accordance with the Approved Entry Point (AEP) shown on the Precinct Plan.
- (2) Activities A3 to A13, excluding produce sales (A7), listed in Table XXX.X.1 above do not either singularly or cumulatively exceed a trip generation threshold of 100 v/hr (any hour).

XXX.6.2. Camping grounds within Precinct PlanActivity Areas A and B

- (1) Camping ground(s) for a maximum of 50 sites within each-either of Activity Areas A and B.
- (2) <u>Camping ground sites shall not cumulatively exceed 100 sites over both Activity Areas A</u> and B

XXX.6.3. Garden Centre within Precinct Plan Activity Areas A and B

- (1) The maximum area of a garden centre in including building and outdoor sales and storage areas is 750m².
- (2) Only one garden centre may be established in either Activity Area A or B, but not both.

XXX.6.4. Markets

- (1) The location of the market shall be located within Activity Area B.
- (2) A-The market shall have a maximum of 100 stalls.
- (3) The trading hours of markets are limited to 7.00am until to 11.00pm.
- (4) Any other activities associated with the market must not occur between midnight and 6.00am.
- (5) Stalls involved in the markets are limited to the sale of food and beverages or items produced by the stall holder which may include fresh and processed goods, small holding livestock, artwork, crafts and pottery and includes locally made products. This includes shops with an operational function (e.g. cheese making).

XXX.6.5. Produce sales

- (1) The location of the Orchard produce sales shop shall be located within Activity Area B of the Precinct plan.
- (2) A The produce shop shall have a maximum of 450m² including building and outdoor sales for the display and sale of produce.
- (3) The type of produce offered for sale on the site must be confined to the following:
 - (a) fruit, vegetables, plants, eggs, flowers, honey, dairy products, meat, beer, wine, juices.
 - (b) produce or products from on-site primary produce manufacturing.
 - (c) produce and handcrafts not grown or produced on the site or on a site in the locality, shall not exceed 10 % of the GFA produce display and sales area.

XXX.6.6. Restaurant and cafe

- (1) One restaurant and one café may be established in Activity Area B.
- (2) A restaurant or café shall <u>each provide have maximum</u> seating for a <u>maximum of 120</u> people.
- (3) The hours of operation of both a restaurant or and café are limited to 7.00am to midnight.

XXX.6.7. Rural tourist and visitor activities

(1) Rural tourist and visitor activities for a maximum of 500 people <u>cumulatively</u> in Activity Areas A and B.

XXX.6.8 Visitor accommodation

- (1) Visitor accommodation (including manager's accommodation) for a maximum of 25 units or 100 people (whichever is greater) within either or both each of Activity Areas A and B.
- (2) <u>Visitor accommodation shall not cumulatively exceed 50 units or 200 people (whichever is greater)</u> over both Activity Areas A and B.

XXX.6.9 Weddings and functions

- (1) Wedding and function activities may occur within either or both Activity Areas A and B.
- (2) The activity may include use of an existing restaurant / café on the site and temporary or semi-permanent marquees.

XXX.6.10. Workers accommodation

- (1) Workers accommodation with a maximum of 10 dwellings in total in either or both within each of Activity Areas A and B complying with the following:
 - (a) Dwellings shall comply with all the relevant yard setbacks and height standards for buildings in the Zone.

- (b) Dwellings shall have a maximum floor area of 120m² excluding decks and garaging. The floor area may include a dormitory or individual rooms.
- (c) The accommodation may accommodate seasonal workers.
- (2) Workers accommodation shall not cumulatively exceed 20 dwellings over both Activity Areas A and B.

9 February 2024



Auckland Council Level 16, 135 Albert Street Private Bag 92300 Auckland 1142

Attn: Planning Technician C/o unitaryplan@aucklandcouncil.govt.nz

Dear Planning Technician,

Further Submission on Plan Change 93 (Private) Warkworth South

Please find attached further submissions made on behalf of Ash Hames and Fiona Rayner Submitter # 21.

The further submitters have an interest greater than the public generally.

The Submitter wishes to speak in support of the further submissions.

Yours sincerely

Burnette O'Connor

Director/Planner

The Planning Collective

guette O' Courow

E: <u>burnette@thepc.co.nz</u>

M: 021-422 346

Attachments:

A. Form 6

B. Further Submission Table

Attachment A:



Form 6 FURTHER SUBMISSION/S TO Plan Change 93 (Private) Warkworth South

Clause 8 of Schedule 1, Resource Management Act 1991 (Form 6)

.....

To: Auckland Council

1. SUBMITTER DETAILS

Name of Submitter: Ash Hames and Fiona Rayner (Submitter #21)

Address for Service: The Planning Collective C/o Burnette O'Connor

Mobile: 021 422 346

Email: burnette@thepc.co.nz

2 SCOPE OF FURTHER SUBMISSION

This is a further submission addressing the following submissions on Plan Change 93 (Private):

• Submission No. 20 - Auckland Transport

Please refer to the further submission table provided as **Attachment B** which details the further submission/s and decisions sought.

The Submitter wishes to speak in support of the further submissions.

(Person authorised to sign on behalf of submitter)

Swette O' Carrow

Date: 9 February 2024

Attachment B:

Further Submissions Table

ATTACHMENT B

Further Submission on Plan Change 93 (Private) – Warkworth South

DATE: 9 February 2024

Sub#	Sub	Submitter	Summary	Further Submission
	Point			
20	20.19	Auckland Transport	Amend Policy 16 as follows: 'Avoid direct vehicle access from individual sites on to the Wider Western Link Road and State Highway One, while allowing direct pedestrian and cycle access and for bus and service vehicle access to the future public transport interchange.'	This submission point is supported in part to the extent there is no opposition to the words proposed to be added, but the restriction in the Policy relating to direct vehicle access into the old SH1 is opposed for the reasons set out in the submission. It will not be practical to form a road access to service 1 or 2 additional sites or dwellings, if any, in the proposed Residential; Large Lot zoned land.
20	20.25	Auckland Transport	Amend (A3) in Table IXXX.4.2 Residential - Large Lot Zone, to apply a NC activity status to 'Development not complying with Standard Ixxx6.15 Transportation Infrastructure (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'	The submission point is opposed for the reasons set out above and the fact that the transport upgrades set out in Standards Ixxx6.15 are unlikely to be triggered or required relating to any development in the proposed Residential – Large Lot zone.
20	20.26	Auckland Transport	Amend (A4) in Table IXXX.4.2 Residential - Large Lot Zone, to apply a NC activity status to 'Subdivision not complying with Standard Ixxx6.15 (other than Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements)'	The submission point is opposed for the reasons set out above and the fact that the transport upgrades set out in Standards Ixxx6.15 are unlikely to be triggered or required relating to any development in the proposed Residential – Large Lot zone.
20	20.40	Auckland Transport	Amend the title and purpose statement of Ixxx.6.7 as follows: 'Limited Vehicle Access Restrictions, Pedestrian Connections and Cycle Facilities Purpose: • to avoid direct vehicle access from individual sites onto State Highway One, and the Wider Western Link Road, Green Avenue, and collector roads; and • to have promote safe and efficient operation of transport infrastructure; and • to achieve safe, accessible and high-quality pedestrian and cycle connections within the Precinct and including to the Local Centre and any future public transportation interchange that provides positively for the needs to the local community.'	The submission point is opposed for the reasons set out above namely it will not be practical or cost effective to form a road access to service 1 or 2 additional sites or dwellings, if any, in the proposed Residential; Large Lot zoned land.
20	20.41	Auckland Transport	Amend Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, (1) to (4) as follows: '(1) Any new road intersections with State Highway One or the Wider Western Link Road servicing the precinct, shall be generally located as identified as "Access Points" on IXXX.10.3 Waimanawa: Precinct Plan 3. (2) Sites that front onto the Wider Western Link Road, Green Avenue and State Highway One must not have direct vehicle access to the road except where required for the public transport interchange. and Sites, other than the public transport interchange, must be provided with access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision. (3) At the time of adjacent land subdivision and / or development, pedestrian connections, generally as shown in Precinct Plan 3, shall be provided. (4) Residential sites that front a collector road other than the 'Green Avenue" as shown on Precinct Plan 3, must not have direct vehicle access to the road and must be provided with access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision.'	or cost effective to form a road access to service 1 or 2 additional sites or dwellings, if any,

737 Page 4 of 14 of 1



Watercare Services Limited

73 Remuera Road, Remuera, Auckland 1050, New Zealand

Private Bag 92521, Victoria Street West, Auckland 1142, New Zealand

Telephone +64 9 442 2222

www.watercare.co.nz

Auckland Council

Level 24, 135 Albert Street

Private Bag 92300

Auckland 1142

Attn.: Planning Technician

Unitaryplan@aucklandcouncil.govt.nz

To: Auckland Council

Further Submission On: Plan Change 93 (Private): Warkworth South

From: Watercare Services Limited

Address for service: planchanges@water.co.nz

Date: 9th February 2024

Watercare could not gain an advantage in trade competition through this further submission.

1. INTRODUCTION

Watercare Services Limited ("Watercare") is New Zealand's largest provider of water and wastewater services. Watercare is a council-controlled organisation under the Local Government Act 2002 and is wholly owned by the Auckland Council ("Council").

Watercare made an original submission on Proposed Private Plan Change 93: Warkworth South, submission number 32. Defined terms in Watercare's original submission have been used in this further submission.

2. FURTHER SUBMISSION

Watercare wishes to make a further submission on the Plan Change. These further submissions are included in the attached table.

Watercare seeks that the submission points detailed in the table attached, or alternative relief that achieves the same outcome, be allowed.

3. HEARING

Watercare wishes to be heard in support of both its submission and further submission.

Mark Iszard

Head of Major Developments

Watercare Services Limited

Address for Service:

Amber Taylor Development Planning Lead Watercare Services Limited Private Bag 92 521 Victoria Street West Auckland 1142

Phone: 022 158 4426

Email: planchanges@water.co.nz

Further submissions from Watercare Services Limited

Submitter ID	Submission Point #	Submitter Name	Submission Point	Support/oppose	Watercare further submission commentary/relief sought
17	17.1	Auckland Council	Amend objective (8) to add the word avoid subdivision and development unless it is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements.	Support	Notwithstanding any future infrastructure funding agreement between Watercare and the Applicant, Watercare supports the strengthening of provisions commensurate with the significance of the Applicant delivering the infrastructure prerequisites. Watercare agrees that this is fundamental to enabling the Future Urban Zoned land to be rezoned for development ahead of the forecast in the FDS.
17	17.2	Auckland Council	Retain existing non-complying activity status for activities not complying with Standard Ixxx.6.9 Standards for Wastewater and Potable Water Connections and/or Ixxx.6.10 Standards for Stormwater.	Support	See comment to submission point 17.1 above.
17	17.5	Auckland Council	Amend IXXX.5 Notification to require that any application for resource consent for any of the following non-complying activities must be publicly notified: (i) 1xxx.6.8 Wider Western Link Road (ii) Ixxx.6.9 Wastewater and Potable Water Connections	Support	See comment to submission point 17.1 above.
			(iii) Ixxx.6.10 Stormwater Management (iv) Ixxx6.15 Transportation Infrastructure		

741 Page 3 of 4

Submitter ID	Submission Point #	Submitter Name	Submission Point	Support/oppose	Watercare further submission commentary/relief sought
17	17.8	Auckland Council	Amend existing provisions to ensure consistency with drafting in other precincts in the AUP, including standard conventions such as referencing to other parts of the AUP, and correct all numbering references.	Support	Watercare supports the wording in the precinct being consistent with standard conventions, such as referencing to other parts of the AUP and provision drafting follows good practice guidelines.
22	22.1	Barry Blennerhassett and Lorraine Margaret Blennerhassett (Blennerhassett family)	The Blennerhassett family seek that Plan Change 93 – Warkworth South plan change be amended to also include the rezoning of their land at 50 Mason Heights Road, Warkworth (Lot 2 DP336865) from Future Urban Zone to Residential – Mixed Housing Urban Zone.	Oppose	Watercare opposes the inclusion of the submitter's land in the plan change on the basis that it is out of scope
26	26.1	Guy Matches	Guy Matches seeks that Plan Change 93 – Warkworth South plan change be amended to also include the rezoning of their land at 127 Woodcocks Road, Warkworth (Lot 2 DP 341531) from Future Urban Zone to Residential Mixed Housing Urban Zone.	Oppose	Watercare opposes the inclusion of the submitter's land in the plan change on the basis that it is out of scope
27	27.1	John and Sue Wynyard (Wynyard family)	The Wynyard family seek that Plan Change 93 – Warkworth South plan change be amended to also include the rezoning of their land at 317 Woodcocks Road, Warkworth (Lot 2 DP 647897, Lot 1 DP 437211, Lot 4 DP 473567) from Future Urban Zone to Business-Heavy Industry Zone.	Oppose	Watercare opposes the inclusion of the submitter's land in the plan change on the basis that it is out of scope

742 Page 4 of 4

Further Submissions on Proposed Plan Change 93 (Private): Warkworth South

Clause 6 of Schedule 1 of the Resource Management Act 1991

.....

To: Auckland Council
Attn: Planning Technician
Auckland Council
Level 16, 135 Albert Street
Private Bag 92300

Auckland 1142

1. SUBMITTER DETAILS

Name of Submitter: Karen and Stefan Richardson

Address of Submitter: 1768 State Highway 1, RD 3, Warkworth 0983

This is a further submission both in support of and opposition to submissions on Plan Change 93 (Private): Warkworth South (**PC93**).

Karen and Stefan Richardson could not gain an advantage in trade competition through this submission.

2. Reason for Submission

The Submitters have an interest in the proposal that is greater than the interest that the general public has.

Karen and Stefan Richardson own 1768 State Highway One, Lot 1 DP 578389, and will be directly affected by the Request as our property is within the proposed plan change area.

Appendix A comprises a schedule of the Further Submissions being submitted.

Karen and Stefan Richardson wish to be heard in support of this submission.

If others make a similar submission, Karen and Stefan Richardson will consider presenting a joint case at the hearing.

Dated; 9th day of February 2024

Yours sincerely

Stefan Richardson Ph: +64 020 40961374

Email: stefan_richardson@cheerful.com

Appendix A – Further Submissions

Original Submitter Name	Original Submitter Address	Sub#	Sub	Oppose/	Reasons for Submitters Position
Auckland Council	or Contact 35 Albert Street		Point#	Support	The Submitters oppose the requested amendment to all activity tables relating to subdivision and
- normalisa OOMINII	Private Bag 92300 Auckland 1142 Attn: Craig Cairncross	17	17.4	Oppose	The Submitters oppose the requested amendment to an activity tables relating to Subdivision and development. Discretionary activity status is more appropriate than non-complying for subdivision and development that does not comply with Standard bxx.6.15 Transportation Infrastructure. Discretionary activity status allows the appropriate flexibility to align with Auckland Transport and appropriate variations to provide better design and transportation outcomes.
		17	17.5	Oppose	The Submitters oppose the requested amendment to Ixxx.5 Notification. The usual tests for notification are appropriate for the activities identified.
		17	17.6	Oppose	The Submitters oppose the requested amendment to tack.6.15 Transport Infrastructure Requirements. Reducing the trigger from 20 residential lots to 3 residential lots would be unworkable and sets the trigger too low. There needs to be flexibility to allow for efficient development with appropriate Transport Infrastructure upgrades.
Auckland Transport	Private Bag 92250 Auckland 1010 Attn: Katherine Dorofaeff	20	20.1	Oppose	PC93 Should be Approved based on the approriately agreed submissions. PC93 clearly demonstrates appropriate delivery of bulk infrastructure with a coordinated approach that will achieve a Well-Functiong Urban Environment.
		20	20.2	Oppose	PC93 adequately considers and provides for public transport and transport choices including through a public transport interchange as defined in the Warkworth Structure Plan 2019. There are public transport alternatives that are currently operational such as the AT Warkworth Kowhai Coast Network servicing the Warkworth Township as well as private Bus services. The Southern public interchange will extend the current public transport alternatives as well as directly servicing Warkworth South
		20	20.5	Support	The Submitters support updates to reflect the current transport infrastructure
		20	20.9	Support	The Submitters support updates on Objective 2 for clarity on the plan change objectives
		20	20.25	Oppose	The Submitters oppose the requested amendment to (A3) in Table IXXX.4.2 because a discretionary activity status is more appropriate than non-complying for subdivision and development that does not comply with Standard Ixxx.6.15 Transportation Infrastructure
		20	20.26	Oppose	The Submitters oppose the requested amendment to (A4) in Table IXXX.4.2 because discretionary activity status is more appropriate than non-complying for subdivision and development that does not comply with Standard Ixxx.6.15 Transportation Infrastructure.
		20	20.27	Oppose	The Submitters oppose the requested amendment to Table IXXX.4.3 to include the standard Ixxxx6.7 Limited Access Restrictions and Pedestrian Connections because the standard already applies in accordance with the rules in Part C of the AUP(OP).
		20	20.30	Oppose	The Submitters oppose the requested amendment to (A8) in Table IXXX.4.4 because a discretionary activity status is more appropriate than non-complying for subdivision and development that does not comply with Standard Ixxx.6.15 Transportation Infrastructure.
		20	20.31	Oppose	The Submitters oppose the requested amendment to (A11) in Table IXXX.4.4 because a discretionary activity status is more appropriate than non-complying for subdivision and development that does not comply with Standard Ixxx.6.15 Transportation Infrastructure.
		20	20.32	Oppose	The Submitters oppose the requested amendment to (A6) in Table IXXX.4.4 because a discretionary activity status is more appropriate than non-complying for subdivision and development that does not comply with Standard Ixxx.6.15 Transportation Infrastructure.
		20	20.33	Oppose	The Submitters oppose the requested amendment to (A9) in Table IXXX.4.5 because a discretionary activity status is more appropriate than non-complying for subdivision and development that does not comply with Standard Ixxx.6.15 Transportation Infrastructure.
		20	20.41	Oppose	The Submitters oppose the the requested addition to lxxx.6.7 (3) as the addition of "subdivision and/or" is not appropriate or required.
		20	20.45	Oppose	The Submitters opposes the requested amendment to lxxx.6.15 bullet point 3 to replace 'to the McKinney Road Intersection' with 'to the existing urban area'. The current definition is appropriate and specific, whilst the 'existing urban area' encompasses Wech Drive and South past McKinney Road. The McKinney Road/Old State Highway 1 intersection improvements are addressed in the Operative McKinney Road Precinct, PC72 and will be required when PC72 proceeds.
		20	20.50	Oppose	the Submitters oppose the proposed ammendment for providing pedestrian and cycle facilities to to the northern end of Wech Drive. The applicants' proposes requiring the construction of temporary pedestrian and cycle path from the WWLR to McKinney Road which provides an appropriate pedestrian and cycling connection to the Warkworth Urban area. The Submitters support effective active mode connections both within the plan change area and from the plan change area to the existing urban area.
Ash Hames and Fiona Rayner	burnette@thepc.co.nz Attn: Burnette O'Connor	21	21.3	Support in Part	The Submitters agree that existing access from old State Highway 1 is appropriate and should be retained for existing properties where it will remain the only practical access into that property as the area is developed. Appropriate access may also be required by new Residential Large Lot and this needs to be considered, whist intensive and residential zones should not be accessed directly off Old State Highway 1. The amendment to Policy (16) is unnecessary as Policy 16 relates to new vehicle access points
Barry Blennerhassett and Lorraine Margaret Blennerhasset	burnette@thepc.co.nz Attn: Burnette O'Connor	22	22.1	Oppose in Part	The submitters are neutral about whether the land is included within PC93. The Submitters do not agree that the land will be 'stranded' due to not being included under PC93, or that its inclusion would achieve a more integrated planning and infrastructure outcome.
KA Waimanawa Limited Partnership and Stepping Towards Far Limited	The Applicants	24	24.7	Support	The Submitters supports the Reword and update of IXXX6(2)(a) bullet points 2 and 3 to be specific for improved clarity
		24	24.12	Support	The Submitters Support the amendment to IXXX.6.15.1 (T2), (T3) and (T4) to supply the approriate clarity on the Old State Highway 1 upgrades.
		24	24.15	Support	The Submitters supports the amendment to Note 3 to Table IXXX.6.15.2 on the physical extent of the pedestrian and cycle path upgrade due to needing to take into account preliminary design and the current extent of the road reserve to achieve feasible and effective pedestrian and cycle facilities as far as the McKinney Road/Old State Highway 1 Intersection
Mikel Jon Thorogood (Mike Thorogood)	burnette@thepc.co.nz Attn: Burnette O'Connor	25	25.1	Oppose in Part	The Submitters do not agree that if the Plan change proceeds ahead of the McKinney Road Precinct development, then Warkworth South – Waimanawa Precinct needs to secure the upgrade of the McKinney Road State Highway 1 intersection and also the formed pedestrian and cycle connection to Wech Drive. These works are addressed as part of 1555 (Warkworth McKinney Road Precinct). It is also not agreed that the volume increase in traffic associated with Warkworth South development would adversely impact on the functioning of the McKinney Road / State Highway 1 intersection as this is specifically associated with volume of traffic from McKinney Road.
		25	25.2	Oppose in Part	The Submitters do not agree that the Plan Change should be refused if the matters addressed in the submission cannot be addressed. The matters raised, whist relevant to overall infrastructure, should not be considered with respect to PC93 relating to Precinct Provision - 1555 (Warkworth McKinney Road Precinct).

Original Submitter Name	Original Submitter Address or Contact	Sub#	Sub Point#	Oppose/ Support	Reasons for Submitters Position
Guy Matches	burnette@thepc.co.nz Attn: Burnette O'Connor	26			The Submitters are neutral about whether the land is included within PC93. The Submitters do not agree that the land will be 'stranded' due to not being included under PC93, or that its inclusion would achieve a more integrated planning and infrastructure outcome. No further assessment of infrastructure is required to support PC93. The Infrastructure Report supplied with PC93 provides a comprehensive assessment of all infrastructure issues relating to PC93.
John and Sue Wynyard	burnette@thepc.co.nz Attn: Burnette O'Connor	27	27.1	Oppose in Part	The Submitters are neutral about whether the land is included within PC93. The Submitters do not agree that the land will be 'stranded' due to not being included under PC93, or that its inclusion would achieve a more integrated planning and infrastructure outcome. No further assessment of infrastructure is required to support PC93. The PC93 Infrastructure Report provided a comprehensive assessment of all infrastructure issues.
Department of Conservation	Level 4, 73 Rostrevor Street, Hamilton, 3240	28	28.1	Support	The Submitters agree that a further bat survey would be benefical. The survey is currently being undertaken.
Waka Kotahi NZ Transport Agency	Level 5, AON Centre Customs Street West Private Bag 106602 Auckland 1143 Attn: Evan Keating	31	31.1	Oppose	The FDS is a document that the Council must 'have regard to'. PC93 is aligned with the NPS-UD, RPS, Warkworth Structure Plan 2019 and the principles and intent of the FDS. Warkworth Structure Plan 2019 and the principles and intent of the FDS. PC93 fully meets both the intents and the remit of the FDS and will bring forward the planned Warkworth development through private Bulk Infrastructure funding that meets the overall development and infrastructure requirements of Warkworth. FDS delays the planned date for the urban development of Warkworth South to 2040+ based on Council's ability to fund the required infrastructure funding and provision, as well as infrastructure prerequisites. FDS Recognises that legislation requires the Council to be responsive to out-of-sequence development and there can be situations in which it is appropriate. It further states that the council will consider agreements with the private sector to provide the bulk infrastructure for development that would otherwise be constrained by limited council resources. Warkworth South is an appropriate out-of-sequence development that meets the appropriate trigger points. The documents supporting PC93 clearly demonstrate that appropriate provision has been made to ensure that the transport needs of the precinct can be met and that future strategic transport infrastructure is provided and protected. This means that private investment is appropriate for managing the short to medium term growth needs of Warkworth The FDS Assessment of the The Warkworth Future Urban Area Cluster did not identify any significant challenges that would otherwise make development in the FUAs inappropriate
		31	31.3	Oppose	The Submitters view the applicant's proposed provisions as appropriate and provides for the necessary walking and cycling connections and necessary intersections on Old State Highway 1.
Watercare Services Limited	Private Bag 92521 Victoria Street West Auckland 1142 Attn: Mark Iszard	32	32.1	Support	The Submitters support the intent that the plan change ensures water and wastewater capacity and servicing requirements will be adequately met and potential effects appropriately managed. The Submitters consider that the applicant's proposed precinct provisions achieve this outcome.
		32	32.2	Support	The Submitters support the intent that precinct provisions require subdivision and development to be coordinated with the adequate water supply and wastewater infrastructure. The Submitters consider that the applicant's proposed precinct provisions achieve this.
		32	32.4	Support	The Submitters support retaining standard 1xxx.6 Wastewater and Potable Water Connections clauses (1) and (2)
		32	32.5	Support	The Submitters support the proposed wording addition to 1xxx.6 Watewater and Potable Water Connections (3)
		32	32.6	Oppose	The Submitters oppose the amendments, as the new standard as per submission point 32.5 above, is considered acceptable with sufficient clarity.
		32	32.7	Oppose	The Submitters opposes the amendments as existing Policy (12) is consider acceptable with an appropriate threshold. Policy (12) addresses all critical infrastructure including referring explicitly to waste water and potable water.

Form 6

Further submission in support of, or in opposition to, submission on notified proposed policy statement or plan, change or variation under Clause 6 of Schedule 1, Resource Management Act 1991.

To: Auckland Council

Name of submitter: Te Tāhuhu o te Mātauranga | Ministry of Education ('the Ministry')

Address for service: Eden 5, Level 3/12-18

Normanby Road Mount Eden Auckland 1011

Attention: Vicky Hu

Phone: +64 9 301 3772

Email: vicky.hu@beca.com

This is a further submission on the Auckland Unitary Plan Operative in Part (AUP) – Private Plan Change 93 (PPC93) – Warkworth South on behalf of the Ministry of Education

The Ministry provided a submission to Auckland Council on PC93 in November 2023 as submitter number 29 and was neutral in terms of the plan change overall.

The Ministry's further submission is in relation to the following submission(s):

Submitter	Submission details
Sub no. 31 Waka Kotahi NZ Transport Agency (Waka Kotahi)	Waka Kotahi note that the ITA does not provide an assessment of the number and location of pedestrian crossings of SH1 required to service this development. The submission notes the need to ensure safe active modes are well accommodated, and the precinct provisions should be updated to reflect the outcomes of this pedestrian crossings assessment.
Sub no. 37 Auckland Transport	AT notes that the reference to 'education infrastructure' in the objectives and policies is unclear as the precinct provisions do not require education infrastructure to be coordinated with subdivision and development. The submission seeks that 'education infrastructure' be deleted from Objective 8 and Policy 12 of the precinct plan.

The Ministry's further submission is:

Waka Kotahi #31.3 and #31.4

The submission notes that although the ITA assesses the need for upgrades of SH1 and walking and cycling connections along it, an assessment of pedestrian crossings has not been undertaken. The Ministry understands this

level of detail is typically considered at a future stage of development. However, it is noted that the Ministry has an interest in how safe walking and cycling infrastructure around educational facilities will be provided. The Ministry would like pedestrian crossing locations and numbers to be considered at the time future development occurs and when the location of future schools in the plan change area are known or confirmed.

Auckland Transport #20.10 and #20.15

Auckland Transport's submission requests that Objective 8 and Policy 12 remove reference to 'education infrastructure' to be coordinated with subdivision and development, as the other provisions of the precinct do not include this requirement. The Ministry disagrees with this submission point as Objective 8 and Policy 12 are the only provisions which provide for educational facilities, and removing these will mean there are no provisions in the precinct relating to educational facilities. The Ministry's original submission states that the growth enabled by this plan change and other Future Urban zoned areas has confirmed the requirement for a new primary school to serve the future growth in this area. Enabling wording in the objectives and policies is therefore important to allow the Ministry to establish a future school to support the future community.

The Ministry seeks that these submission points be declined.

Vicky Hu

Planner, Beca Ltd

(Consultant to the Ministry of Education)

Date: 9 February 2024

APPENDIX 5 RECOMMENDED CHANGES

PRIVATE PLAN CHANGE xx: S42A Report Recommended Changes

(Additions <u>underlined</u> – deletions struck through)

PART A – AMENDMENT TO AUCKLAND UNITARY PLAN GIS VIEWER (MAPS)

Map 1 - Proposed Zoning of IXXX Warkworth South Plan Change

Notes:

- 1. The proposed change to the viewer (maps) has not been made.
- 2. The map is shown to place the changes in context.

Map number: 1

Geographic area: North

Current zones: Future Urban

Open Space - Conservation

Rural – Rural production

Proposed zones: Residential – Terrace Housing and Apartment Building

Residential – Mixed Housing: Urban

Residential - Single House

Residential – Large Lot

Business – Local Centre

Open Space- Conservation

Rural – Mixed Rural

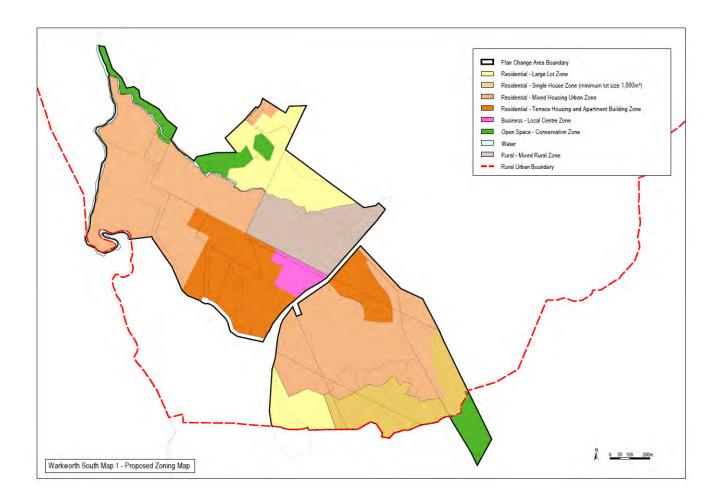
PART A AMENDMENT TO THE MAPS

ZONING

That the land currently zoned Future Urban Zone and Rural – Rural Production to be rezoned Residential – Terrace Housing and Apartment Building, Residential –Single House, Residential – Mixed Housing: Urban, Residential – Large Lot, Business – Local Centre, Open Space- Conservation zone, and Rural – Mixed Rural as shown on the following zoning plan.

The existing area zoned Open Space – Conservation (Lot 3 DP 344489) retains its current zoning.

Map 1 – Zoning



OVERLAYS

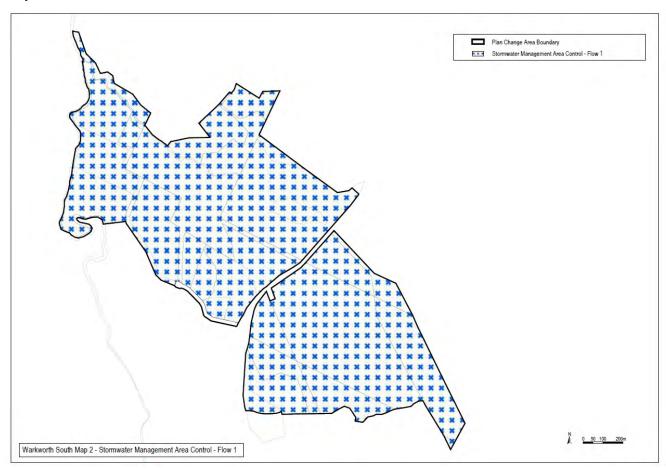
The following existing overlays within the Plan Change area are to be retained:

- Natural Resources: Natural Stream Management Areas Overlay [rp]
- Natural Resources: High-Use Stream Management Areas Overlay [rp]
- Natural Resources: High-Use Aquifer Management Areas Overlay [rp] Mahurangi Waitemata
- Natural Resources: Significant Ecological Areas Overlay SEA T 2367, Terrestrial
- Natural Resources: Significant Ecological Areas Overlay SEA T 2378, Terrestrial
- Outstanding Natural Landscapes Overlay [rcp/dp] Area 43, West Mahurangi Harbour

CONTROLS

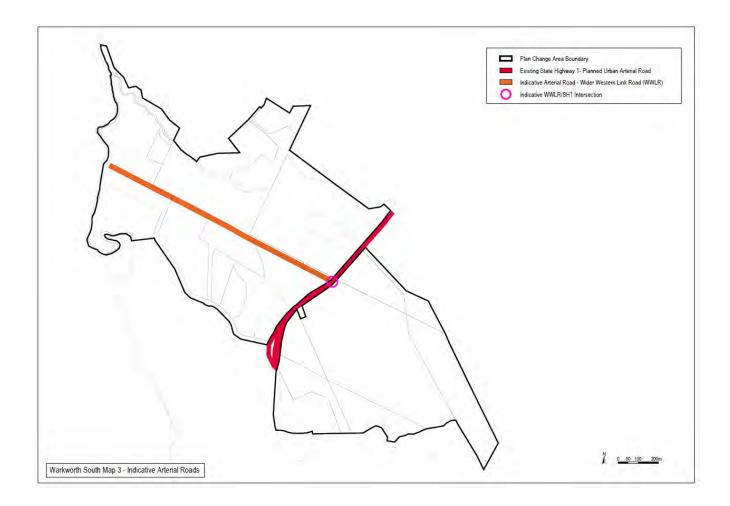
The land shown below be identified as "SMAF1" in the 'Controls' map.

Map 2 - Control: SMAF1



The land shown below be identified as "Arterial Road" in the 'Controls' map.

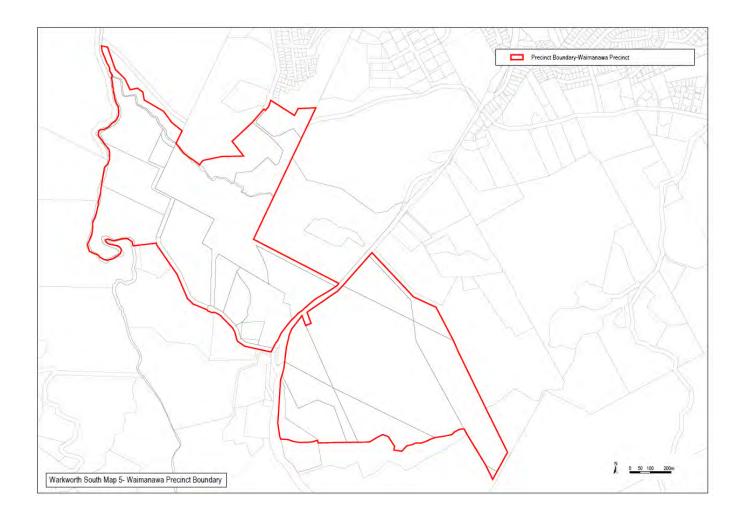
Map 3 - Control: Arterial Roads



PRECINCTS

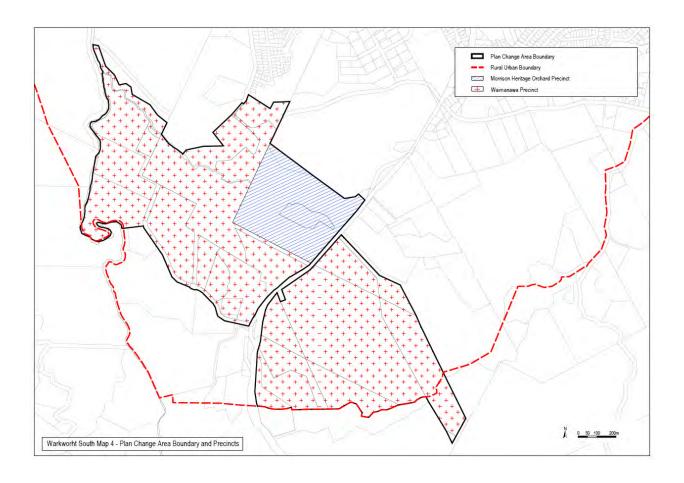
The land shown below be identified as 'Waimanawa' in the 'Precinct' Map.

Map 4 –Precinct Boundary of IXXX Waimanawa Precinct



The land shown below be identified as 'Morrison Heritage Orchard' in the 'Precinct' Map.

Map 5 - Precinct Boundary of IXXX Morrison Heritage Orchard Precinct



PART B IXXX WAIMANAWA PRECINCT

Insert the following new precinct provisions:

IXXX Waimanawa Precinct

IXXX.1 Precinct description

The Waimanawa Precinct assists in providing for urban growth within the Warkworth area. This precinct provides for the development of a new residential neighbourhood within Warkworth and for the coordinated provision of housing, local retail, infrastructure and open spaces. The precinct is located adjacent to the Morrison Heritage Orchard precinct.

The majority of the precinct is within a shallow west-east valley with the upper eastern reaches of the Mahurangi River on the valley floor, with the current Old State Highway One traversing north-south through the middle of the precinct. To the west of Old State Highway One, the precinct is on a generally low to gentle contoured valley with two branches of the upper Mahurangi River within the valley floor. The land gently rises towards Valerie Close to the south while the northern side of the valley is much steeper with vegetated areas.

To the east of Old State Highway One the precinct sits on a low to moderate contoured catchment which rises gently then more steeply to the east where it abuts in part the Avice Miller Scenic Reserve on its eastern edge.

The topography and the watercourses provide a unique opportunity within Warkworth for a residential community within a contained valley and focused along a series of open space areas which adjoin and incorporate the watercourses. With the existing surrounding roading network, the proposed opening of the Puhoi to Warkworth Motorway in 2023 and the possible future development of the Wider Western Link Road, the precinct will be well-connected to both the existing Warkworth urban area and to the wider Auckland Region.

The development of this precinct will create a range of lot sizes providing for different housing typologies focused on a series of open spaces while responding to the topography of the precinct. This will result in a walkable community within a high amenity urban area with enhanced landscape and environmental outcomes.

A range of zonings apply within the Precinct. The zonings are:

- Residential Terrace Housing and Apartment Building
- Residential Mixed Housing: Urban
- Residential Single House
- Residential Large Lot

- Business Local Centre
- Open Space Conservation zone

There are several key open space areas which will be a mix of private, community and public areas which are identified in Precinct Plan 4. These are:

- The Endeans Farm Recreational Park
- The Waimanawa Wetland Reserve
- The Mahurangi River Esplanade Reserve and Parks

These open space areas provide a chain of connected open space areas through the precinct and are to be developed over time to provide for a range of environmental, social and accessibility outcomes.

In addition, a small number of local neighbourhood reserves are proposed.

Provision is made for a local centre designed to be a focal point for the community through providing services to the southern Warkworth community and yet be complementary to the Warkworth town centre. This local centre will be designed to be the gateway to Warkworth from the south and to reflect its location opposite the Morrison Heritage Orchard. The local centre is to be both accessible and functional for the local community.

The precinct provides for an extension of the potable and wastewater network in Warkworth, including the construction of a new potable water reservoir and wastewater pump station(s) which will both service the wider Warkworth South area. The precinct provides for the enhancement of the existing roading network and construction of that part of the Wider Western Link Road which passes through the precinct.

The Wider Western Link Road is a planned future arterial road linking up the current Old State Highway One, the possible future Southern Interchange and Woodcocks Road. Construction of the Wider Western Link Road through the precinct to a collector road standard will be integrated with subdivision and development within the Precinct. A possible future public transport interchange location is also identified adjacent to the local centre and which is in a location which will be accessible by a range of transport modes.

The development controls for the precinct recognise that development of residential lots can occur concurrently with the provision of infrastructure but prior to the issuing of s224(c) certification for subdivision. However, the development controls do require that development is connected to a functioning water and wastewater network with sufficient capacity to service the proposed development prior to the issuing of s224(c) certification for subdivision.

A walking and cycling network is to be incorporated into the roading network and which connects to the wider transportation network. In addition, provision is made for <u>an off road</u> greenway network providing a network of tracks and walkways through the various open spaces and roads and connecting to the broader greenway and roading network outside the precinct. Provision is also made through a special yard control for a bat flight corridor which is identified on Precinct Plan 5.

In respect of the requirements of the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 the Precinct includes the following qualifying matters:

- A more restrictive front yard rule for residential sites adjacent to the Wider Western Link Road and Green Avenue.
- A more restrictive rear yard in part of the Residential Mixed Housing Urban Zone to provide for a Bat Flight Corridor.
- A more restrictive rear yard in part of the Residential –Single House Zone adjoining the Avice Miller Reserve.
- A more restrictive minimum lot size in the Residential –Single House Zone.
- A more restrictive maximum height limited in the Landscape Protection Area (Eastern Escarpment).
- A more restrictive minimum landscaping requirement in the Landscape Protection Areas (Northern and Eastern Escarpments).
- Differing riparian yards and planting requirements alongside some streams.

All relevant overlay, Auckland-wide and zone objectives, policies and provisions apply in this precinct unless otherwise specified below.

IXXX.2 Objectives

- (1) Provide for residential urban growth in the southern Warkworth area that enables a range of housing options and a local centre through a mix of zones.
- (2) The Warkworth South Precinct is subdivided and developed in a manner that <u>Subdivision and development</u> achieves an accessible urban area with efficient, safe and integrated vehicle, walking and cycle connections internally and to the wider Warkworth urban area.
- (2A) while Subdivision and development provides ing for and supports ing the safety and efficiency of the current and future national strategic and local transport reading network.
- (3) The Warkworth South Precinct is subdivided and developed in a manner that achieves a series of active and passive open spaces and linkages within the southern Warkworth area.
- (4) Apply urban zoning efficiently to protect against future urban expansion into Warkworth's valued rural and coastal hinterland.
- (5) Enable the enhancement of the character of the rural-urban interface through limitations on housing density, building location, maximum height, and enhanced landscaping.
- (6) Allow for residential zoning that provides for a variety of housing types and sizes that respond to-
 - (i) housing needs and demand; and
 - (ii) the neighbourhoods planned urban built character, including 3-6 storey buildings.
- (7) Enable the development of a local centre which is designed to reflect its location opposite the Morrison Heritage Orchard, at the southern gateway to Warkworth and adjoining a watercourse.

- (8) Avoid subdivision and development <u>unless it</u> is coordinated with the delivery of infrastructure (including transportation, stormwater, potable water, wastewater and future education infrastructure) and services required to provide for development within the precinct and future community requirements.
- (9) Subdivision and development within the precinct provides for the protection, <u>maintenance</u> and enhancement, of <u>identified</u> landscape features, the <u>protection and enhancement of the ecological</u> values of streams, natural wetlands and areas of indigenous vegetation and <u>habitats</u> of indigenous wildlife <u>retention of a bat flight corridor</u>.
- (10) To provide for the opportunity for a future public transportation interchange of not less than 2500m2 adjacent to the local centre which can be safely accessed by a range of buses and other required transportation modes.
- (11) <u>Subdivision and development does not occur in advance of the availability of operational</u> transport infrastructure.
- (12) The precinct develops and functions in a way that:
 - (a) supports a mode shift to public and active modes of transport; and
 - (b) provides safe and effective movement between the local centre, community facilities, housing, jobs, open spaces and the public transport facilities by active modes.
- (13) Stormwater quality and quantity is managed to maintain the health and well-being of the receiving environment and is enhanced over time in degraded areas.

All relevant overlay, Auckland-wide and zone objectives apply in this precinct in addition to those specified above.

IXXX.3 Policies

- (1) Provide a mix of residential zones to provide for a range of residential lots sizes and housing typologies, to help meet community needs.
- (2) Provide for social infrastructure, infrastructure, open space uses and a local centre to meet the needs of the community over time through a mix of zonings and public assets.
- (3) Provide a zoning and <u>safe</u> transport and greenway network that creates a focus of the precinct on a series of open spaces and is sympathetic to the natural topography of the area.
- (4) Provide a series of open spaces along upper reaches of the Mahurangi River and within the precinct to provide for a range of active and passive opportunities, to promote walkability, and to enhance the overall amenity, <u>including safety</u>, and liveability of the precinct.
- (5) Locate more intensive housing adjacent to the local centre, public transport interchange and overlooking the recreational and wetland open spaces.

- (6) Create low density housing along the rural-urban boundary to form a transition from urban to rural uses.
- (7) Create the opportunity to develop an accessible and functional local centre through zoning at the southern gateway for Warkworth.
- (8) Require subdivision and development to protect and enhance natural wetlands <u>and their buffers</u> and permanent and intermittent streams identified <u>and their riparian margins through indigenous restoration planting on Precinct Plan 1</u>.
- (9) Require subdivision and development to protect the <u>ecological and</u> landscape values of the flanks of the northern and eastern escarpments (as shown on Precinct Plan 1) and to <u>ensure promote</u> the retention of existing native vegetation <u>and</u> or the <u>native</u> revegetation of these escarpments.
- (10) Require subdivision and development to protect the landscape values of the Avice Miller Reserve by requiring a planted special yard setback from the reserve boundary.
- (11) Require subdivision and development to retain the Bat flight corridor alongside part of the Mahurangi River.
- (12) Require subdivision and development to provide stormwater, wastewater, potable water, electricity, communication services and educational infrastructure in a coordinated manner.
- (13) Require subdivision and development to provide for <u>safe</u> walking and cycling networks within the precinct, <u>including to any future public transport interchange</u>, while providing connections to the wider transportation network and any future public transport interchange <u>existing urban</u> development.
- (14) Require subdivision and development to upgrade existing and/or provide new roading infrastructure (which is designed in accordance with Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements for a range of modes of transport and including public transport) within the precinct and to provide connections to adjoining land generally in accordance with Precinct Plan 3.
- (15) Provide for and require the Wider Western Link Road to be constructed to a collector road standard in the interim to service subdivision and development within the precinct, while recognising that it will form part of provision is made for its future upgrading by Auckland Transport to provide a future strategic transport connection.
- (16) Avoid direct <u>new</u> vehicle access from individual sites on to the Wider Western Link Road and Old State Highway One, while allowing direct pedestrian and cycle access <u>and for bus and service vehicle access to the future public transport interchange.</u>
- (17) Manage stormwater runoff from all impervious areas in the precinct through a treatment train approach <u>consistent with any approved stormwater management plan</u> which assists in maintaining high water quality and enhances poor water quality within this upper catchment of the Mahurangi River.

- (18) Require esplanade reserve and riparian yard planting for <u>water quality, biodiversity</u>, stormwater management, ecological corridor and amenity purposes.
- (19) Minimise direct vehicle access from individual sites on to collector roads identified on Precinct Plan 3, while allowing direct pedestrian and cycle access.
- (20) Require subdivision to provide for the recreation and amenity needs of residents by: (a) providing open spaces which are prominent and accessible by pedestrians; (b) providing for the number and size of open spaces in proportion to the future density of the neighbourhood; and (c) providing for pedestrian and/or cycle linkages.
- (21) <u>Provide for the development and operation of a public transport interchange in the indicative</u> location identified on Precinct Plan 3.
- (22) <u>Avoid subdivision and development progressing ahead of the provision of a functioning water</u> and wastewater network with sufficient capacity to service the proposed development.

All relevant overlay, Auckland-wide and zone policies apply in this precinct in addition to those specified above.

IXXX.4 Activity table

The provisions in any relevant overlays, Auckland-wide provisions and zones apply in this precinct except the following:-

- (a) Rule E26.2.3 (A48) Infrastructure Activity table: Above Ground Reservoirs
- (b) Rule E38.4.2 (A16) Subdivision Urban Activity: Vacant sites subdivision involving parent sites of less than 1ha complying with Standard E38.8.2.3
- (c) Rule E38.4.2 (A17) Subdivision Urban Activity: Vacant sites subdivision involving parent sites of less than 1ha not complying with Standard E38.8.2.3.
- (d) Rule E38.4.2 (A18) Subdivision Urban Activity: Vacant sites subdivision involving parent sites of 1ha or greater complying with Standard E38.8.3.1
- (e) Rule E38.4.2 (A19) Subdivision Urban Activity: Vacant sites subdivision involving parent sites of 1ha or greater not complying with Standard E38.8.3.1

Activity Table IXXX.4.1 – IXXX.4.9 specify the activity status of regional and district land use, development and subdivision in the Waimanawa Precinct pursuant to sections 9(2), 9(3), 11 and 13 of the Resource Management Act 1991 or any combination of all of these sections where relevant.

A blank in the activity status column means that the activity status in the relevant overlay, Aucklandwide or zone provision apply and one or more precinct standard applies.

Note

Activities and standards apply to vegetation removal within SEA overlay as listed in Chapter E15 Vegetation management and biodiversity.

Table IXXX.4.1 All zones

	status	Precinct Sstandards to be complied with
ent		
New buildings and additions.		Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4 Special Height Limits, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
New buildings and additions to buildings which meet Standards Ixxx.6.13 High Contaminant Yield Material.		Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4 Special Height Limits, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area
	New buildings and additions to buildings which meet Standards lxxx.6.13 High Contaminant Yield	New buildings and additions to buildings which meet Standards lxxx.6.13 High Contaminant Yield

			Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions High Contaminant Yielding Materials, Ixxx.6.14 Greenways Walking and Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A3)	New buildings and additions to buildings which do not meet Standard Ixxx.6.13 High Contaminant Yield Material.	NC	
(A4) [rp]	New reclamation or drainage, including filling over or piping of a stream shown as a Retained Stream on Precinct Plan 2.	NC	
(A5) [rp/dp]	Removal of any native vegetation shown as covenanted, proposed covenanted bush or area of significant vegetation on Precinct Plan 2, not otherwise provided for except this shall not preclude: (i) removal of deceased or	NC	
	damaged limbs or trees that could create a fall hazard;		
	(ii) clearing of bush up to 2m wide to create or maintain consented walking tracks.		
(A6)	Any development of the land shown on Precinct Plan 1 that is not in accordance with Standard Ixxx.6.1	NC	

	Special Yard – Green Avenue and Wider Western Link Road, or Standard Ixxx.6.2 – Special Yard – Avice Miller Reserve		
(A7)	Public walkways within a riparian yard or esplanade reserve.	RD	Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), 1xxx.6.8 Wider Western Link Road, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A8)	Construction of a wastewater pump station and associated infrastructure including holding tanks and emergency overflow facilities, within the general locations shown on Precinct Plan 2.	С	Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, , Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A9)	Development (except for in the Residential – Large Lot Zone) not complying with Standard Ixxx.6.9 Standards for Wastewater and Potable Water Connections and/or Ixxx.6.10 Standards for Stormwater.	NC	

Subdivision	Subdivision			
(A10)	Subdivision involving parent sites of 1ha or greater complying with Standard E38.8.2.1 or E38.8.3.1, and Standard Ixxx.6.11 Special Subdivision Control Area (Eastern Escarpment) in the Residential – Single House Zone, generally in accordance with Precinct Plan 1.	RD	Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.	
(A11)	Subdivision involving parent sites of less than 1ha complying with Standard E38.8.2.1 or E38.8.2.3 and Standard Ixxx.6.11 Special Subdivision Control Area – (Eastern Escarpment) in Residential - Single House Zone and generally in accordance with Precinct Plans 1.	RD	Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12	

			Riparian Yards for Streams and Natural Wetlands, , Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, , Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A12)	Subdivision involving parent sites of 1ha or greater not complying with Standard E38.8.2.1 or E38.8.3.1.	D	
(A13)	Subdivision involving parent sites of less than 1ha complying with Standard E38.8.2.1 or E38.8.2.3.	D	
(A14)	Subdivision that does not comply with Standard Ixxx.6.11 Special Subdivision Control Area (Eastern Escarpment) in Residential–Single House Zone.	NC	
(A15)	Subdivision not complying with Standard Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands	NC	
(A16)	Subdivision (except for in the Residential – Large Lot Zone) not complying with Standard Ixxx.6.9 Standards for Wastewater and Potable Water Connections and/or Standard Ixxx.6.10 Standards for Stormwater	NC	
(A17)	Subdivision not complying with Standard Ixxx.6.14 Greenways – Walking and Cycling Infrastructure	RD	Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11

Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, , Ixxx.6.14
Greenways – Walking and Cycling Infrastructure, 'Ixxxx6.15 Transportation Infrastructure', Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.

Table IXXX.4.2 Residential - Large Lot Zone

Activity		Activity status	Precinct Sstandards to be complied with
Use			
Developm	nent		
(A1)	Supported residential care accommodating greater than 10 people per site inclusive of staff and residents.		Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4 Special Height Limits, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxx.6.15

			Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A2)	New buildings and additions to buildings on a site subject to the Landscape Protection Controls (Northern Escarpment Area) shown on Precinct Plan 1 that do not comply with Standard Ixxxx.6.5 Landscape Protection Controls (Northern Escarpment).	NC	
(A3)	Development not complying with Standard lxxx6.15 Transportation Infrastructure	D – <u>NC</u>	
(A3A)	Subdivision and development not complying with 1xxx.6.8 Wider Western Link Road	<u>NC</u>	
	Subdivision		
(A4)	Subdivision not complying with Standard Ixxx.6.15.	D _ <u>NC</u>	

Table IXXX.4.3 Residential –Single House Zone

Activity		Activity status	Precinct Sstandards to be complied with
Use			
Developm	ent		
(A1)	Integrated residential development.		Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4 Special Height Limits, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road,

		Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A2)	Supported residential care accommodating greater than 10 people per site inclusive of staff and residents	Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4 Special Height Limits, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible

			open space.
(A3)	New buildings and additions to buildings on a site subject to the Landscape Protection Controls (Eastern Escarpment) shown on Precinct Plan 1 that do not comply with Standard Ixxx.6.6 Landscape Protection Controls (Eastern Escarpment).	NC	
(A4)	Development of a water supply reservoir and associated infrastructure, within the general location shown on Precinct Plan 2.	С	IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.4 Special Height Limits, Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, , Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A4A)	Subdivision and development not complying with 1xxx.6.8 Wider Western Link Road	<u>NC</u>	
(A4B)	Development not complying with Standard Ixxx.6.15 Transportation Infrastructure	<u>NC</u>	
(A4C)	'Development not complying with Standard Ixxx.6.7 Limited Access Restrictions and Pedestrian Connections'	<u>NC</u>	
Subdivision	on		
(A5)	Subdivision not complying with Standard Ixxx.6.7 Limited Access Restrictions and Pedestrian Connections.	NC	
(A6)	Subdivision not complying with Standard Ixxx.6.15 Transportation Infrastructure	<u>NC</u>	

Table IXXX.4.4 Residential - Mixed Housing Urban Zone

Activity		Activity status	Precinct Sstandards to be complied with
Use			
Developm	ent		
(A1)	Integrated residential development.		Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4 Special Height Limits, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure, Ixxxx.6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A2)	Supported residential care accommodating greater than 10 people per site inclusive of staff and residents.		Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4 Special Height Limits, Ixxx.6.5 Landscape Protection Area

			Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxxx.6.15 Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible
(A3)	New buildings and additions to buildings that do not comply with lxxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, lxxx6.3 Special Yard: Bat Flight Corridor, or lxxx6.1.16 Fences on Esplanade Reserve Boundaries	D	open space.
(A4)	Development not complying with Standard Ixxx.6.7 Limited Access Restrictions and Pedestrian Connections.	NC	
(A5)	Development not complying with Standard Ixxx.6.8 Wider Western Link Road.	NC	
(A6)	Restaurants and cafes within the existing former Ransom Vineyard Building (Lot 3 DP 155544).	P <u>D</u>	Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.13

			New Buildings and Additions - High Contaminant Yielding Materials, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A7)	Education facilities within the existing former Ransom Vineyard Building (Lot 3 DP 155544).	₽ <u>D</u>	Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, , Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, , Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A8)	Development not complying with Standard lxxx6.15 Transportation Infrastructure.	D- NC	
Subdivision	on		
(A9)	Subdivision not complying with Standard Ixxx.6.7 Limited Access Restrictions and Pedestrian Connections.	NC	
(A10)	Subdivision not complying with Standard lxxx.6.8 Wider Western Link Road.	NC	
(A11)	Subdivision not complying with Standard Ixxx.6.15.	D NC	

Table IXXX.4.5 Residential – Terrace Housing and Apartment Building

Activity		Activity status	Precinct Sstandards to be complied with
Use			
Developm	ent		
(A1)	Integrated residential development.		Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4

		Special Height Limits, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A2)	Supported residential care accommodating greater than 10 people per site inclusive of staff and residents.	Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4 Special Height Limits, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12

			Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A3)	New buildings and additions to buildings to do not comply with lxxx.6.1 Special Yard: Green Avenue and Wider Western Link Road.	D	
(A4)	Development not complying with Standard Ixxx.6.7 Limited Access Restrictions and Pedestrian Connections.	NC	
(A5)	Development not complying with Standard Ixxx.6.8 Wider Western Link Road.	NC	
(A6)	Development not complying with Standard Ixxx6.15 Transportation Infrastructure.	Ð NC	
Subdivision	on		
(A7)	Any subdivision not complying with Standard IXXX.6.7 Limited Access Restrictions and Pedestrian Connections.	NC	
(A8)	Subdivision not complying with Standard Ixxx.6.8 Wider Western Link Road.	NC	
(A9)	Subdivision not complying with Standard Ixxx.6.15.	Ð <u>NC</u>	

Table IXXX.4.6 Business - Local Centre

Activity	_	Precinct complied v	Sstandards with	to	be
Use					

	Ta a a s		T
(A1)	Operation and maintenance of a	Р	Ixxx.6.1 Special Yard: Green
	public transport interchange		Avenue and Wider Western Link
			Road, Ixxx.6.7 Limited Access
			Restrictions, Pedestrian Connections and Cycle Facilities,
			1xxx.6.8 Wider Western Link Road,
			lxxx.6.9 Wastewater and Potable
			Water Connections, Ixxx.6.10
			Stormwater Management, Ixxx.6.12
			Riparian Yards for Streams and
			Natural Wetlands, Ixxx.6.13 New
			Buildings and Additions - High
			Contaminant Yielding Materials,
			Ixxx.6.14 Greenways – Walking and
			Cycling Infrastructure, Ixxx.6.15
			Transportation Infrastructure,
			Ixxxx6.16 Fences adjoining the front
			yard or vested publicly accessible
			open space.
Developm	l nent		1
			how C.1. Crasial Vandy Crass
(A2)	New buildings		Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link
			Road, IXXX.6.2 Special Yard: Avice
			Miller Reserve, Ixxx.6.3 Special
			Yard: Bat Flight Corridor, Ixxx.6.4
			Special Height Limits, Ixxx.6.5
			Landscape Protection Area
			Controls (Northern Escarpment),
			Ixxx.6.6 Landscape Protection Area
			Controls (Eastern Escarpment),
			Ixxx.6.7 Limited Access
			Restrictions, Pedestrian
			Connections and Cycle Facilities,
			1xxx.6.8 Wider Western Link Road,
			Ixxx.6.9 Wastewater and Potable
			Water Connections, Ixxx.6.10
			Stormwater Management, Ixxx.6.11
			Special Subdivision Control Area in
			the Landscape Protection Area -
			Eastern Escarpment, Ixxx.6.12
			Riparian Yards for Streams and
			Natural Wetlands, Ixxx.6.13 New
			Buildings and Additions - High
			-

			Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A3)	Additions and alterations to buildings not otherwise provided for		Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, IXXX.6.2 Special Yard: Avice Miller Reserve, Ixxx.6.3 Special Yard: Bat Flight Corridor, Ixxx.6.4 Special Height Limits, Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment), Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment), Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxxx.6.15 Transportation Infrastructure, Ixxxx.6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A4)	Development not complying with Standard lxxx.6.7 Limited Access Restrictions and Pedestrian Connections.	NC	
(A5)	Development not complying with Standard lxxx.6.8 Wider Western Link Road.	NC	

(A6)	Development of a public transport interchange and associated facilities of not less than 2500m2.	С	Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road, Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, 1xxx.6.8 Wider Western Link Road, Ixxx.6.9 Wastewater and Potable Water Connections, Ixxx.6.10 Stormwater Management, Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands, Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials, Ixxx.6.14 Greenways – Walking and Cycling Infrastructure, Ixxx.6.15 Transportation Infrastructure, Ixxxx6.16 Fences adjoining the front yard or vested publicly accessible open space.
(A7)	Development not complying with Standard Ixxx6.15 Transportation Infrastructure.	Ð <u>NC</u>	
(A8)	New buildings and additions to buildings on a site subject to the Landscape Protection Controls (Eastern Escarpment) shown on Precinct Plan 1 that do not comply with Standards Ixxx.6.6 Landscape Protection Controls (Eastern Escarpment).		
Subdivisi	ion		
(A9)	Any subdivision not complying with Standard Ixxx.6.7 Limited Access Restrictions and Pedestrian Connections.	NC	
(A10)	Subdivision not complying with Standard lxxx.6.8 Wider Western Link Road.	NC	
(A11)	Subdivision not complying with Standard lxxx.6.15.	Ð <u>NC</u>	

Table IXXX.4.7 Open Space – Conservation

Activity		Activity status	Precinct Sstandards complied with	to	be
Use					
Subdivision					
(A1)	Any subdivision not complying with Standard lxxx.6.7 Limited Access Restrictions and Pedestrian Connections.	NC			

IXXX.5 Notification

- (1) The notification rules of the underlying zone apply in respect of applications for residential activities or for subdivision associated with an application for the construction and use of residential activities.
- (2) Any application for resource consent for any of the following non-complying activities must be publicly notified:
 - (i) 1xxx.6.8 Wider Western Link Road
 - (ii) Ixxx.6.9 Wastewater and Potable Water Connections
 - (iii) lxxx.6.10 Stormwater Management
 - (iv)Ixxx6.15 Transportation Infrastructure
- (3) Any other application for resource consent for an activity listed in Table IX.4.1 Activity table will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (4) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4).

IXXX.6 Standards

- (1) Unless specified in Standard Ixxx.6(2) below, all relevant overlay, Auckland-wide and zone standards apply to all activities listed in Activity Tables Ixxx.4.1 to Ixxx.4.7 above.
- (2) The following Auckland-wide and zone standards do not apply to the activities listed in activity tables above:
 - (a) Activity Table 1xxx4.1 All zones:
 - Activity (A1) (A2) New buildings' and (A3) 'Additions and alterations to buildings not otherwise provided for:H1.6.5, H3.6.8, H5.6.8, H6.6.9 and H11.6.4 as they relate to riparian yards.

- Activity (A8): E38.8.2.3 does not apply to subdivision in Residential Single House
 Zone where land is subject to special subdivision control area <u>Landscape Protection</u>
 <u>Area Eastern Escarpment</u> shown on Precinct Plan 1 and Standard Ixxx.6.11
 applies.
- Activity (A9): E38.8.3.1(3)-(5) does not apply to subdivision in Residential-Single House Zone where land is subject to special subdivision control area <u>Landscape</u> <u>Protection Area – Eastern Escarpment</u> shown on Precinct Plan 1 and Standard lxxx.6.11 applies.
- (b) Activity Table Ixxx.4.3 Residential Single House Zone:
 - Activity (A3): H3.6.6 Building height standard of 8 metres does not apply to that part
 of the site subject to the Landscape Protection Control (Eastern Escarpment) shown
 on the planning maps and where Standard Ixxx.6.6 Landscape Protection Control
 (Eastern Escarpment) applies
- (c) Activity Table Ixxx.4.2 Residential Large Lot Zone:
 - Activity (A2): H6.4.1 Yards. The riparian yard in Table H5.6.8.1 Yards does not apply where:
 - Standard Ixxx6.12 Riparian Yards for Streams and Natural Wetlands applies.
- (d) Activity Table Ixxx.4.3 Residential Single House Zone:
 - Activity (A3): H6.5.1 Yards. The riparian yard in Table H3A.6.9.2 Yards does not apply where:
 - Standard Ixxx6.12 Riparian Yards for Streams and Natural Wetlands applies.
- (e) Activity Table Ixxx.4.4 Residential Mixed Housing Urban Zone:
 - Activity (A3): H5.6.8 Yards. The front yard in Table H5.6.8.1 Yards does not apply where:
 - Standard Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road applies.
 - The rear yard in Table H5.6.8.1 Yards does not apply where:
 - Standard Ixxx.6.3 Special Yard: Bat Flight Corridor applies.
 - The riparian yard in Table H5.6.8.1 Yards does not apply where:
 - Standard Ixxx6.12 Riparian Yards for Streams and Natural Wetlands applies.
- (f) Activity Table Ixxx.4.5 Residential Terrace Housing and Apartment Buildings Zone:

- Activity (A3) H6.6.9 Yards. The relevant yard in Table H6.6.9.1 Yards does not apply where:
 - Standard Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road applies.
- The riparian yard in Table H6.6.9.1 Yards does not apply where:
 - Standard Ixxx6.12 Riparian Yards for Streams and Natural Wetlands applies.
- (g) Activity Table Ixxx.4.6 Business Local Centre:
 - Activity (A1): H6.5.1 Yards. The riparian yard in Table H11.6.4.1 Yards does not apply where:
 - Standard Ixxx6.12 Riparian Yards for Streams and Natural Wetlands applies.
 - Standard H1.6.7 Large Lot Residential Building Coverage as it applies to the Landscape Protection Area Controls (Eastern Escarpment) lxxx.6.6.
- (3) Permitted Activities listed in Activity Tables Ixxx.4.1 to Ixxx.4.7 must comply with Standards Ixxx.6. Activities and buildings containing activities listed in Table H4.4.1 Activity table must comply with the standards listed in the column in Table H4.4.1 called Standards to be complied with.

Ixxx.6.1 Special Yard: Green Avenue and Wider Western Link Road

Purpose:

- to promote the development of the front yards for outdoor use; and
- to promote passive surveillance along the adjoining road.
- (1) A building or parts of a building on sites shown as subject to the Special Yard: Green Avenue or Special Yard: Wider Western Link Road on IXXX.10.1 Precinct Plan 1 must be set back at least 3m from the front boundary.

IXXX.6.2 Special Yard: Avice Miller Reserve

- to provide a buffer adjacent to the Avice Miller Reserve.
- (1) A building or parts of a building must be set back from the legal boundary with Avice Miller Reserve by 6m where sites are subject to the Special Yard: Avice Miller Reserve on

IXXX.10.1 Precinct Plan 1.

- (2) A 3m wide strip of the Special Yard measured from the boundary of the Avice Miller Reserve shall be planted with indigenous vegetation that attain a height of at least 5m 10m when mature, except where a public walking track is constructed within the 3m yard.
- (3) The 3m wide strip of the Special Yard shall be legally protected by a covenant or consent notice providing for the maintenance and protection of the landscaped area, the prevention of dumping of rubbish and garden waste, the management of noxious weeds, and a prohibition on the keeping of domestic cats.
- (4) This yard does not apply to any bulk potable water reservoir. Any bulk water reservoir shall be set back a minimum of 3m from the Avice Miller Reserve boundary.

Ixxx.6.3 Special Yard: Bat Flight Corridor

Purpose:

- to provide an unobstructed flight corridor for Bats.
- (1) No dwellings, accessory buildings or light standards (over 1m high) are to be constructed within the Special Yard: Bat Flight Corridor as shown on Precinct Plan 5.
- (2) Any new landscaping which is established in the Special Yard: Bat Flight Corridor (as shown on Precinct Plan 5) is to have a maximum height at maturity of 2m.
- (3) Lighting shall not exceed 0.3 lux when measured 1m above the ground level at any point within or along the external boundary of the area identified as Special Yard: Bat Flight Corridor as shown on Precinct Plan 5.

Ixxx.6.4 Special Height Limits

Purpose:

- to control the maximum height of buildings on part of or adjacent to the eastern escarpment.
- (1) The maximum height limit in the Residential Single House zone in the area shown as "special height limit 5m single storey building area" on Precinct Plan 1 shall be 5m.
- (2) The maximum height limit in the Residential Single House zone in the area shown as "special height limit 9m building area" on Precinct Plan 1 shall be 9m.

Ixxx.6.5 Landscape Protection Area Controls (Northern Escarpment)

Purpose:

to protect landscape features on key upper portions of the precinct.

- to promote revegetation of the northern escarpment.
- (1) The minimum landscaped area for sites identified on Precinct Plan 1 as Landscape Protection Area Northern Escarpment must be at least 75 per cent of the net site area.
- (2) External finishes on residential dwellings shall be limited to natural stone and/or timber, or finished in a colour with the following limits utilising the BS5252 colour range:
 - (a) Hue (colour) all colours from 00 to 24
 - (b) Reflectance value (RV) and greyness groups: for external walls an RV rating of no more than 60% for greyness groups A and B and no more than 40% for greyness group C. For roofs an RV rating of no more than 40% within greyness groups A, B and C.

Ixxx.6.6 Landscape Protection Area Controls (Eastern Escarpment)

Purpose:

- to protect landscape features on key upper portions of the precinct;
- To promote revegetation of the eastern escarpment; and
- to allow an appropriate level of building coverage in the large lot residentially zoned portion of the eastern escarpment.
- (1) The minimum landscaped area for sites identified on IXXX.10.1 Precinct Plan 1 as Landscape Protection Area Eastern Escarpment must be at least 50 per cent of the net site area.
- (2) Buildings must not exceed 8 metres in height, except that 50% of a building's roof in elevation, measured vertically from the junction between wall and roof, may exceed this height by 1 metre, where the entire roof slopes 15° or more.
- (3) The maximum building coverage must not exceed 20 per cent of the net site area or 600m², whichever is the lesser.
- (4) External finishes on residential dwellings <u>buildings</u> shall be limited to natural stone and/or timber, or finished in a colour with the following limits utilising the BS5252 colour range:
 - (a) Hue (colour) all colours from 00 to 24
 - (b) Reflectance value (RV) and greyness groups: for external walls an RV rating of no more than 60% for greyness groups A and B and no more than 40% for greyness group C. For roofs an RV rating of no more than 40% within greyness groups A, B and C.

Ixxx.6.7 Limited Vehicle Access Restrictions, Pedestrian Connections and Cycle Facilities

- to avoid direct vehicle access from individual sites onto Old State Highway One and the Wider Western Link Road; and
- to have safe and efficient operation of transport infrastructure; and
- to achieve accessible and high-quality pedestrian and cycle connections to individual sites and within the Precinct and including to the Local Centre and any future public transportation interchange that provides positively for the needs to the local community.
- (1) Any new road intersections with Old State Highway One or the Wider Western Link Road servicing the precinct, shall be generally located as identified as "Access Points" on IXXX.10.3 Waimanawa: Precinct Plan 3.
- (2) Sites that front onto the Wider Western Link Road, Green Avenue and Old State Highway One must not have direct vehicle access to the road except where required for the public transport interchange. Sites, other than the public transport interchange, and must be provided with vehicular access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision and with direct pedestrian access to the street. This standard does not apply to any vehicle crossing that exists onto Old State Highway 1 at the time the Precinct is made operative.
- (3) At the time of adjacent land development pedestrian connections, generally as shown in Precinct Plan 3, shall be provided.
- (4) Residential sites that front a collector road other than the 'Green Avenue" as shown on Precinct Plan 3, must not have direct vehicle access to the road and must be provided with access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision.

1xxx.6.8 Wider Western Link Road

- to provide for the transport needs of the precinct while enabling delivery of the Wider Western Link Road through the precinct as shown on Precinct Plan 3 as a strategic transport connection in the network serving the wider Warkworth area.
- (1) Subdivision and development of land adjacent to the Wider Western Link Road shall include the simultaneous construction of the adjacent portion of this road to Collector Road standard (as outlined in Table IXXX.6.15.1) with:
 - (a) a connection to State Highway One; and
 - (b) a location and completed earthwork level at the legal boundaries of all adjacent properties that enables the delivery of the entire road connection, over time, at the grade and cross-section for both Collector Road, and Arterial Road standards.

(c) Construction of intersections along its length in the approximate locations shown on Precinct Plan 3

Note: The landowners will fund the construction of the Collector Road and vest the land required for the Collector Road in Auckland Council. Compensation will be payable for the land required for the future upgrading to an arterial road standard (unless otherwise agreed between all parties).

Ixxx.6.9 Wastewater and Potable Water Connections

Purpose:

- To ensure efficient delivery of wastewater and potable water infrastructure for Waimanawa.
- (1) All lots except for those in Residential Large Lot and Open Space Conservation zones shall connect to a reticulated wastewater network.
- (2) All lots except for those in Residential Large Lot and Open Space Conservation zones shall connect to a reticulated potable water network.
- (3) Prior to the issue of s224(c), the development shall be connected to a functioning water and wastewater network with sufficient capacity to service the proposed development.

Ixxx.6.10 Stormwater Management

- To ensure that stormwater is managed and treated to maintain and enhance the health and ecological values of streams and to avoid exacerbating flood hazards.
- (1) All land use and development and subdivision must be designed and implemented to be consistent with any stormwater management plan approved by the network utility operator, including the application of water sensitive design.
 - (1) Stormwater runoff from all impervious surfaces must be treated with a stormwater management device(s) meeting the following standards:
 - (a) the communal device or system must be sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)'; or
 - (b) where alternative devices are proposed, the device must demonstrate it is designed to achieve an equivalent level of contaminant or sediment removal performance to that of 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)'.

- (2) Development of new impervious areas must provide stormwater detention for 50% AEP (i.e. 2-year ARI) storm events on top of the E10 SMAF 1 requirements.
- (3) Roof runoff must be directed to a tank sized for the minimum of 5mm retention volume for non-potable reuse within the property.

Ixxx.6.11 Special Subdivision Control Area in the Landscape Protection Area - Eastern Escarpment

Purpose:

- To create larger sites in that area identified as the "Eastern Escarpment Area".
- (1) Proposed sites in the area shown as "Eastern Escarpment Area" on Precinct Plan 1 must comply with the minimum net site area of 1,000m².

Ixxx.6.12 Riparian Yards for Streams and Natural Inland Wetlands

- To protect and enhance water quality and ecology of the streams and natural wetlands shown on Precinct Plan 1 while preventing erosion.
 - To integrate the watercourse within the Local Centre.
 - To integrate the section of watercourse along the Wider Western Link Road within a wide road berm or as a separate open space integrated with the road berm.
 - Purpose: Contribute to improvements to water quality, indigenous flora and fauna habitat and biodiversity.
- (1) The riparian yards of retained permanent or intermittent stream must be planted at the time of subdivision or land site development to the minimum width shown on Precinct Plan 1 measured from the top of the stream bank or, where the stream edge cannot be identified by survey, from the centre line of the stream. This standard does not apply to that part of a riparian yard where a road or public walkway crosses over the stream and/or passes through or along within the riparian yard.
- (2) The riparian yards of any natural wetland shown on Precinct Plan 2 must be planted at the time of subdivision or land development to a minimum width of 10m measured from the wetland's fullest extent. This standard does not apply to that part of a riparian yard where a road or consented public walkway crosses over the wetland and associated riparian area, and/or generally passes across a stream and associated riparian area, or along within the riparian yard.
- (3) The planting must:

- (a) Use eco-sourced native vegetation; and
- (b) Be planted at a density that will achieve approximately 10,000 plants per hectare of new and existing plants.
- (4) Planting must be undertaken in accordance with the Special Information Requirement lxxx.9.2
- (1) All existing indigenous riparian or wetland buffer vegetation must be retained.
- (2) All riparian margins of permanent or intermittent streams must be planted at the time of subdivision or land site development either side to a minimum width of 10m measured from the edge of the stream, and a minimum planted buffer width of 10m measured from the wetted edge of a natural wetland, provided that:
 - (a) All pedestrian walkways and cycleways and recreational spaces must not be located within the 10m riparian margin, or a Significant Ecological Area, and not within 10m of a wetland or wetland buffer planting area width.
 - (b) This rule shall not apply to road crossings over streams.
- (3) Riparian and wetland margin/buffer planting areas are offered for vesting in Council or must be protected and maintained in perpetuity by an appropriate legal mechanism.

Ixxx.6.13 New Buildings and Additions - High Contaminant Yielding Materials

Purpose:

- To protect water quality in streams, and the Mahurangi South catchment, by limiting the release of contaminants from building materials.
- (1) New buildings, and additions to buildings must be constructed using inert cladding, roofing and spouting buildings materials.

Ixxx.6.14 Greenways - Walking and Cycling Infrastructure

- To provide for <u>off-road</u> walkways and cycleways which Council wants vested in Council to form part of the public greenway network.
- (1) Walkways and cycleways that are to be vested in the Council (other than those vested as road) shall be provided within the greenways shown on Precinct Plan 1 and:
 - (a) Shall be constructed either to a walking track standard similar to that constructed in Regional Parks if not part of a vested formed road, or in the case where the greenway is part of a vested formed road, constructed to normal footpath standards as appropriate;

- (b) Shall provide connections to greenways on public or private land outside the land subject to resource consent, and are future proofed by constructing track access to the boundary of the application site;
- (c) The width of the track shall have a minimum width of 2m.

Where the off-road greenway is not indicated on Precinct Plan 1 as being adjacent to a stream, and it is intended to be vested; the walkway and cycleway shall be located a minimum of 8m from the stream.

(2) Where the Council does not want or is unable to accept vesting of the walkway/cycleway and associated riparian yard and stream bank, then there is no requirement to provide the walkway.

Ixxx.6.15 Transportation Infrastructure

- To achieve the integration of land use and transportation infrastructure (including walking and cycling).
- To ensure transportation infrastructure is appropriately provided for.
- To provide a pedestrian and cycle connection to the McKinney Road/ northwards along
 Old State Highway One Intersection to the existing urban area.
 - (1) <u>Subdivision and development within the Precinct must not exceed the triggers in Table IXXX.6.15.1 until the identified transport infrastructure upgrades are constructed and operational</u>
- (1) The development of any part of the Precinct shall provide the relevant transport infrastructure, including walking and cycling, as indicated in lxxx10.1 and applying to the development site, in the general location shown on Precinct Plans 1 and 3.
- (2) Subdivision and development (including construction of any new road) must comply with the standards in Table I4XX.6.4.2.1

Table IXXX.6.15.1 Transport Infrastructure Requirements

	Transport Infrastructure Upgrade	Trigger
	Valerie Close/State HighwayOne	In the event of any subdivision with
T1)	Intersection Upgrade to Valerie Close /	frontage along Valerie Close occurring or
1 1)	Old State Highway One intersection to	a new road connection to Valerie Close,
	provide for safe and efficient operation as	an assessment is to be undertaken to
	determined by an assessment of the safe	confirm if any upgrading of the
	and efficient operation of the intersection	intersection is required as part of that
	by a suitably qualified traffic engineer.	subdivision. Any new road connection or
		any subdivision or development with
		direct vehicle access to Valerie Close

T2)	Upgrading of Old State Highway One though where it has frontage to the \text{WW} South Precinct to an urban arterial standard with active mode facilities	As part of the first subdivision for any land within the Business – Local Centre zone, for, for a retirement village or for a residential development creating a cumulative total of more than 3 20 residential lots.
Т3)	Construction of the pedestrian/cycle path on the eastern side of Old State Highway One from the Wider Western Link Road/Old State Highway One Intersection to McKinney Road	As part of the first subdivision for residential development creating more than 3 20 residential lots.
T4)	Construction of the pedestrian/cycle path on the western side of Old State Highway One from the Wider Western Link/Old State Highway One Intersection to the Morrisons Heritage Orchard Entrance	As part of the first subdivision for residential development creating more than 3 20 residential lots.
T5)	Construction of the Wider Western Link Road/Old State Highway One Intersection	As part of the first subdivision for any land within the Business – Local Centre zone, for, for a retirement village or for a residential development creating more than 20 residential lots. 'Any subdivision and/or development: • within the Business - Local Centre zone; • for a retirement village; or • resulting in a cumulative total of 3 20 residential lots or dwellings within the Precinct.'
T6)	Construction of the Wider Western Link Road	Any subdivision or development with frontage to that section of the Wider Western Link Road.
T7)	Construction of the Green Avenue	As part of the first subdivision for residential development within Waimanawa Valley, as shown on Precinct Plan 3, which has vehicle access to Valerie Close, or development with frontage to the Green Avenue.
	Collector Road	Any subdivision or development with
T8)		frontage to that section of the Collector Road.
T9)	Upgrading of Mason Heights 'Upgrading of Mason Heights including filling in any gaps in the existing footpath network to provide a continuous connection between the precinct and the intersection of Mason Heights with Woodcocks Road'	Any subdivision or development with access to frontage to that section of Mason Heights or in the event that Mason Heights is extended or a new road is connected to it within the Waimanawa Precinct.

- (1) The above will be considered to be complied with if the identified upgrade forms part of the same resource consent, or a separate resource consent which is given effect to prior to release of section 224(c) for any subdivision or prior to occupation of any new building(s) for a land use only.
- (2) Any development and/or subdivision must comply with Table Ixxx.6.15.2 Minimum Road Width, Function and Required Design Elements as applicable.

Note: Development relevant to any of the Standards T6, T8 and T9 only apply to the section of the road adjacent to the development or subdivision area.

Table IXXX.6.15.2 Minimum Road Width, Function and Required Design Elements

Name	Role and Function of Road		Total No. of Lanes	Design Speed	Median (Note 2)	Cycle Provision	Pedestrian Provision	Freight or Heavy Vehicle Route	Access Restrictions	Bus Provision Subject to (Note 4)
Old State Highw ay One	Arterial	24m*	2	50 km/h	Yes	Yes (Note 3)	Yes (Note 3)	Yes	Yes	Yes
Wider Weste rn Link Road	Arterial	24m	2	50 km/h	Yes	Yes (Note 5)	Yes	Yes	Yes	Yes
Green Avenu e	Collector	26m	2	50 km/h	Yes	Yes	Yes	No	No (Note 6)	Yes
Collec tor Road	Collector	22m	2	50 km/h	No	Yes	Yes	No	No (Note 6)	Yes
Local Road* *	Local	16m	2	30 km/h	No	No	Yes	No	No	No

^{*} Existing road reserve for Stage Highway One varies

Note 1: Typical minimum width which may need to be varied in specific locations where required to accommodate network utilities. batters, structures, stormwater

^{**} Mason Heights included

- treatment, intersection design, significant constraints, or other localised design requirements.
- Note 2: Flush, solid or raised medians subject to Auckland Transport approval at EPA stage.
- Note 3: [To be updated following clarification from applicant/submitters] The cycle path provision on Old State Highway One for both side of the road within the precinct plan frontage excluding Morrison Orchard area and:
 - A temporary cycling and walking facility will be provided on the eastern side of Old State Highway One from the Wider Western Link Road/Old State Highway One intersection to the McKinney Road/Old State Highway One intersection.
 - 2. A temporary cycling and walking facility will be provided on the western side of Old State Highway One from the Wider Western Link Road/Old State Highway One intersection for approximately 100m to the new entrance to the Morrison Heritage Orchard.
- Note 4: Carriageway and intersection geometry capable of accommodating buses. Bus stop <u>form and locations</u> and bus route shall be determined with Auckland Transport at resource consent and engineering plan approval stage.
- Note 5: Cycle lane will only be provided Bi-directional cycle facility may be appropriate on the northern side of wWider wWestern Link Road in the section where road boundary abutting existing stream riparian yard adjoining the Morrison Orchard Precinct.
- Note 6: No access restriction proposed on collector roads. However, lots fronting collector road are preferred to be designed with rear access.

lxxxx6.16 Fences adjoining the front yard or vested publicly accessible open space

Purpose: To provide for fencing that is constructed along residential front boundaries and site boundaries adjoining vested publicly accessible open spaces as shown on Precinct Plan 4, to a height sufficient to:

- Provide privacy for dwellings while enabling opportunities for passive surveillance of the esplanade reserve and / or vested publicly accessible open space.
- Minimise dominance effects from fencing on the esplanade reserve.
- 1) Fences or walls or a combination of these structures (whether separate or joined together) that adjoin front boundaries or vested publicly accessible open spaces shown on Precinct Plan 4, must not exceed the height specified below, measured from the ground level at the boundary:
- (i) 1.4m in height; or
- (ii) 1.8m in height for no more than 50 per cent of the site frontage and 1.4m for the remainder; or
- (iii) 1.8m in height if the fence is at least 50 per cent visually open as viewed perpendicular to the front boundary.

Ixxx.7 Assessment - controlled activities

Ixxx.7.1 Matters of control

The Council will reserve its control to the following matters when assessing a controlled activity resource consent application, in addition to the matters specified for the relevant controlled activities in the overlay, Auckland wide or zone provisions:

- (1) Provision of safe and efficient access;
- (2) Landscaping and fencing;
- (3) Effects on the use of open space; and
- (4) Effects on health and safety.

Ixxx.7.2 Assessment criteria - Controlled Activities

The Council will consider the relevant assessment criteria for controlled activities from the list below:

- (1) Provision of safe and efficient access:
 - (a) Whether safe and direct access can be provided to the site for access and maintenance.
 - (b) For public transport interchanges, whether safe and efficient vehicle, pedestrian and cyclist access (as relevant) into and within the public transport interchange is achieved.
- (2) Landscaping and fencing
 - (a) The extent to which the visual effects of any buildings or large extents of paving can be softened by landscaping without compromising the functional requirements of a pump station, water reservoir or public transport interchange.
 - (b) The extent to which fencing can be used to minimise potential health and safety hazards.
- (3) Effects on the use of public open space
 - (a) The extent to which interference with public use and enjoyment of open space is minimised where the facility is located in public open space.
- (4) Effects on health and safety
 - (a) Whether there will be any health and safety effects and the extent to which these can be mitigated through measures such as fencing and signage.

Ixxx.8 Assessment - restricted discretionary activities

Ixxx.8.1 Matters of discretion

The Council will restrict its discretion to all of the following matters when assessing a restricted discretionary activity resource consent application, in addition to the matters specified for the relevant restricted discretionary activities in the overlay, Auckland wide or zone provisions:

- (1) Subdivision and new buildings prior to subdivision
 - (a) The matters of discretion listed at E38.12.1(7).
 - (b) Landscaping within the Avice Miller Reserve Yard and the Landscape Protection Control areas.
 - (a) The provision of open space as shown on Precinct plan 1, including public accessibility, function of the open space, and compliance with Crime Prevention Through Environmental Design Principles .
 - (b) Transport including;
 - a. access, walking and cycling infrastructure,
 - b. traffic generation,
 - c. access to public transport and parking.
 - d. <u>location and design of the Wider Western Link Road, collector roads, key local roads and connections with neighbouring sites to achieve and integrated street network and appropriately provide for all modes</u>
 - e. provision of cycling and pedestrian networks and connections
 - f. provision of public transport facilities (bus stops and shelters)
 - g. design and sequencing of upgrades to the transport network.
 - (c) The design and operation of any intersection with the Wider Wester Link Road and Stage Highway 1.
 - (d) Stormwater management.
 - (e) Wastewater connections
 - (f) The extent to which greenway connections are provided.
 - (g) The extent to which riparian yards are provided adjacent to streams and natural wetlands.
 - (h) The effect on recreation and open space
 - (i) The effects of walkways within riparian yards on ecology.

(j) The contribution that such buildings within the Local Centre make to the attractiveness pleasantness and enclosure of the public space, including the watercourse.

Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities

The Council will consider the relevant assessment criteria identified below for restricted discretionary activities, in addition to the assessment criteria specified for assessment of the relevant restricted discretionary activities in the zone, Auckland wide or overlay provisions:

- (1) Subdivision and for new buildings prior to subdivision
 - (a) Design and layout;

The extent to which:

- (i) The proposal contributes to the implementation of policies and in particular lxxx.3(1)-(9).
- (ii) Subdivision and development layout is consistent with Precinct Plans 1 to 4.
- (iii) Public open space and greenway spaces consider the public street network to support legibility, ease of visual access, and Crime Prevention Through Environmental Design Principles.
- (iv) Land is provided for the open space areas identified on Precinct Plan 4, or such other locations that are suitable and agreed to with Auckland Council.
- (v) Land is provided for the Warkworth South wastewater pump stations and water reservoir in the general locations shown on Precinct Plan 2.
- (vi) Any application proposes a condition of consent requiring landscape planting within the Landscape Protection Control areas to be maintained and replaced as necessary to ensure that the landscaping is maintained in perpetuity.
- (b) Streams, natural wetlands, stormwater, and walkways

The extent to which:

- (i) Lots that include streams shown on Precinct Plan 2, have complying practical building platforms clear of identified streams to be retained and any riparian yard requirement.
- (ii) The cumulative effect of the approach to stormwater management is in accordance with a Stormwater Management Plan approved by the network utility operator and achieves a 'treatment train' process based on a ten year attenuation standard which mitigates urban stormwater, quality issues and controls runoff from roads and other impervious surfaces.

- (iii) Connections to greenways on public or private land outside the land subject to resource consent, are future proofed by constructing track access to the boundary of the application site.
- (iv) Any walkways are set back a minimum of 10m from any natural wetland.
- (v) Any walkway is set back a minimum of 5m from the top of the bank of any stream, except any walkway and bridge which crosses the stream.
- (vi) Any walkway within a riparian yard successfully manages potential stream erosion and sedimentation effects and are planted in indigenous vegetation to the edge of the walkway.
- (vii) The treatment of walkway edges, including retaining walls, protects the ecology of the stream and does not unduly detract from the amenity of the stream and walkway.
- (viii) The location and alignment of the walkway addresses any effects on the ecology of the immediate area and existing riparian planting, land contour and the practicality of constructing the walkway and the amenity that would be provided to users of the walkway.

(c) Transport

The extent to which Whether:

- (i) The collector road network and the Wider Western Link Road, are provided generally as shown on Precinct Plan 3 to achieve a connected street layout that integrates with the surrounding transport network and responds to landform.
- (ii) An integrated network of local roads is provided within the precinct that provides a good degree of accessibility and supports a walkable street network.
- (iii) Greenway routes, generally in accordance with Precinct Plan 3, are created to ensure an interconnected neighbourhood.
- (iv) The intersection design of any road intersection with the Wider Western Link Road or Old State Highway One as shown on Precinct Plan 3 is supported by a transport assessment and safety audit demonstrating the intersection will provide a safe, efficient and effective connection to service the expected subdivision and development. This includes safe and convenient provision for pedestrians and cyclists.
- (v) The transport assessment and safety audit required under Rule Ixxx.8.2(1)(c)(iv) demonstrate the design and operation of the proposed intersection will not have adverse effects on the function of the surrounding transport network including Old State Highway One and the Wider Western Link Road.
- (vi) The greenway network crossings of the Wider Western Link Road occurs by atgrade pedestrian and/or cyclist crossing facilities.

(vii) The design of new or upgraded roads accords with the Road Function and Design Elements table.

(d) Stormwater management

- (i) Development is in accordance with the approved Stormwater Management Plan and policies E1.3(1) (14).
- (ii) The design and efficacy of infrastructure and devices with consideration given to the likely effectiveness, ease of access, operation, ongoing viability and maintenance, and integration with the surrounding environment including the road corridor where relevant.
- (e) Wastewater connections.
 - (i) The extent to which the proposal facilitates and enables wastewater servicing for Warkworth South to be provided in an efficient and comprehensive way.
- (f) The effect on recreation and open space:
 - (i) The extent to which reserves and open space are provided and their integration with the surrounding open space network and suitability for the intended function and future requirements of the area;
 - (ii) Refer to Policy IXXX.3 (20).

(2) Assessment criteria for Local Centre:

- (i) The design of the Local Centre shall achieve a connected and functional design that reflects a high quality of architectural design, landscape architecture and best practise urban design principles, including the extent to which a suitable pedestrian and cyclist connection is provided between the Local Centre and any public transport <u>facilities</u> interchange, the land to the west, south and to the pedestrian and cycle crossing at the Wider Western Link Road and Old State Highway One Intersection.
- (ii) The quality of design shall provide a safe useable environment that reflects urban design best practise including Crime Prevention Through Environmental Design principles.
- (iii) Planting and hard landscape elements shall enhance and reflect local character such as the values of the Mahurangi River, riparian corridors and Morrison Heritage Orchard.
- (iv) The extent to which land use activities complement adjoining land uses and assist in maintaining or enhancing connectivity and relationship to adjacent open space areas.

Ixxx.9 Special information requirements

Ixxx.9.1 Transport and safety

An application for subdivision and development that proposes an intersection with the Wider Western Link Road or Old State Highway One must be accompanied by the following information as a minimum:

(1) A transport assessment and safety audit prepared by a suitably qualified person for any proposed intersection with the Wider Western Link Road or Old State Highway One. This transport assessment and safety audit is to be prepared in accordance with any relevant Auckland Transport and NZTA/Waka Kotahi Guidelines.

(2) Transport Design Report

Any proposed new key road intersection or upgrading of existing key road intersections illustrated on the Precinct Plan or otherwise identified in the precinct provisions must be supported by a Transport Design Report and Concept Plans (including forecast transport modelling and land use assumptions), prepared by a suitably qualified transport engineer confirming the location and design of any road and its intersection(s) supports the safe and efficient function of the existing and future (ultimate) transport network and can be accommodated within the proposed or available road reserves. This may be included within a transport assessment supporting land use or subdivision consents.

In addition, where an interim upgrade is proposed, information must be provided, detailing how the design allows for the ultimate upgrade to be efficiently delivered. For the avoidance of doubt, the key road intersections for the purposes of this requirement are identified on Precinct Plan 3 as 'Indicative Access Points onto WWLR' and 'Indicative WWLR / SH1 Intersection'. In addition the Valerie Close / SH1 intersection is a key road intersection.'

Ixxx.9.2 Riparian planting plan

An application for any subdivision or development that requires the provision and planting of an esplanade reserve or riparian yard under Ixxx.6.12 Riparian Yards for Streams and Natural Wetlands must be accompanied by the following information as a minimum:

- (1) A planting plan prepared by a suitably qualified person
- (2) The planting plan must;
 - (i) Identify the location, species, planting bag size and density of the plants;
 - (ii) Confirm detail on the eco-sourcing proposed for the planting; and
 - (iii) Take into consideration the local biodiversity and ecosystem extent.

Ixxx.9.3 Local centre

- (1) An application for new buildings which require resource consent in the Local Centre must be accompanied by:
 - (a) An urban design assessment demonstrating how the development addresses where relevant:
 - (i) the matters stated in Objective 7 and Policy 7; and
 - (ii) Activation of the street frontage along the Wider Western Link Road; and
 - (iii) Open space and access along the watercourse; and
 - (iv) Creation of a landmark building on the corner of Old State Highway One and the Wider Western Link Road; and
 - (v) Its proximity to the Morrison Heritage Orchard.

IXXX.9.4 Northern and Eastern escarpment vegetation and planting (Waimanawa Precinct Plan 1)

All existing indigenous vegetation must be retained, and land with a contour gradient, at the time of any application for subdivision or development, greater than 15° must be planted with indigenous species. The restoration planting must be in accordance with Te Haumanu Taiao. The existing indigenous vegetation and restoration planting must be fenced and protected via legal covenant and maintained in perpetuity, including invasive weed and pest animal control.

Ixxx.9.5 Site Specific Watercourse Assessment

An application for any land modification, subdivision or development which adjoins a permanent or intermittent stream must be accompanied by a Site Specific Watercourse Assessment prepared by a suitably qualified person. The assessment must include a stream reach assessment identifying any erosion hotspots, stream bank erosion and appropriate erosion mitigation measures.

lxxx.9.6 Flood modelling and Assessment

A detailed flood modelling and assessment must be undertaken when subdivision or development requiring resource consent is proposed to be undertaken on land which may be subject to the 1 per cent annual exceedance probability (AEP) floodplain or overland flow paths. Modelling limitation must include but is not limited to:

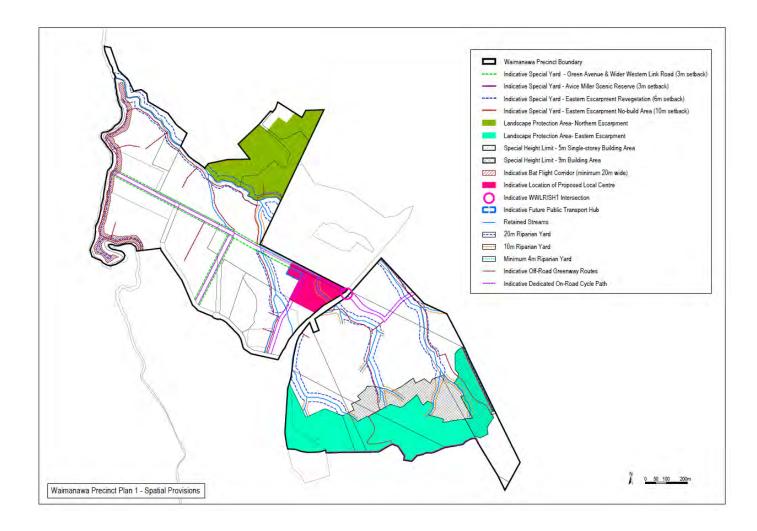
- Modelling boundary condition.
- Aerial Reduction Factor (ARF) used in the modelling.
- Terrain detail for proposed development,
- <u>Unknown factor regarding the post processing of the flood plain results.</u>

Ixxx.10.1 Waimanawa Precinct Plan 1 Spatial provisions

Delete 4m riparian yard and replace with 10m

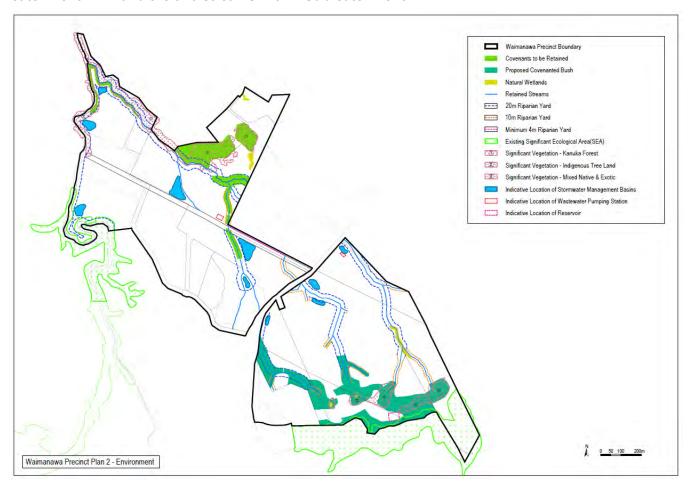
Remove the following information (which already appears on Precinct Plan 3):

- Indicative WWLR / SH1 Intersection
- Indicative Future Public Transport Hub
- Indicative Dedicated On-Road Cycle Path.

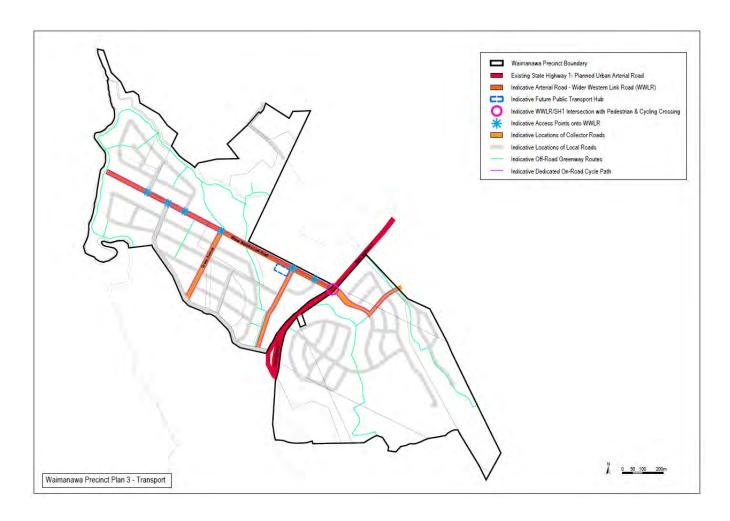


Ixxx.10.2 Waimanawa Precinct Plan 2 Environment

Amended to include a minimum of 10-metre riparian yard along the stream within Subcatchment XXXI and the two streams within Sub-catchment XXVII.



Ixxx.10.3 Waimanawa Precinct Plan 3 Transportation

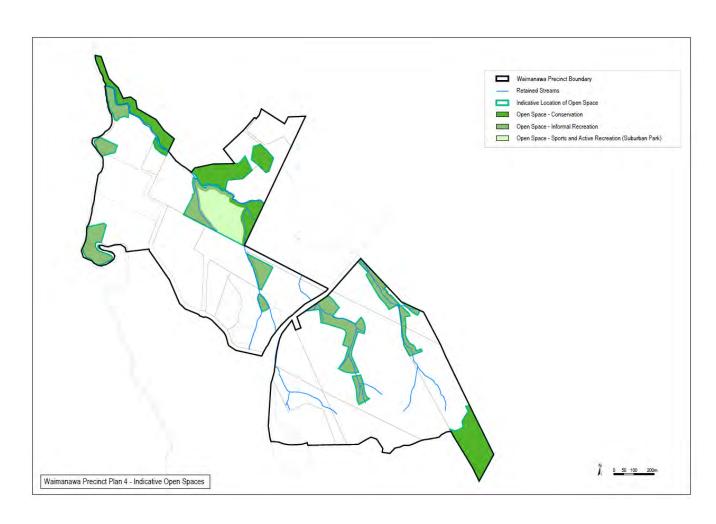


Amend Map 3 - Control: Arterial Roads, so it is clear that its purpose is to identify the Wider Western Link Road as an arterial road in the controls layer of the AUP(OP) map viewer. Delete from Map 3 the annotations for State Highway 1 and the indicative WWLR / SH1 intersection.

Amend the key for Ixxx.9.4 Waimanawa Precinct Plan 3 Transportation, as follows: 'Indicative Future Public Transport Hub Interchange (approximately 2100m2)'

Amend Ixxx.9.4 Waimanawa Precinct Plan 3 Transportation, to show the cycle facilities proposed on State Highway 1

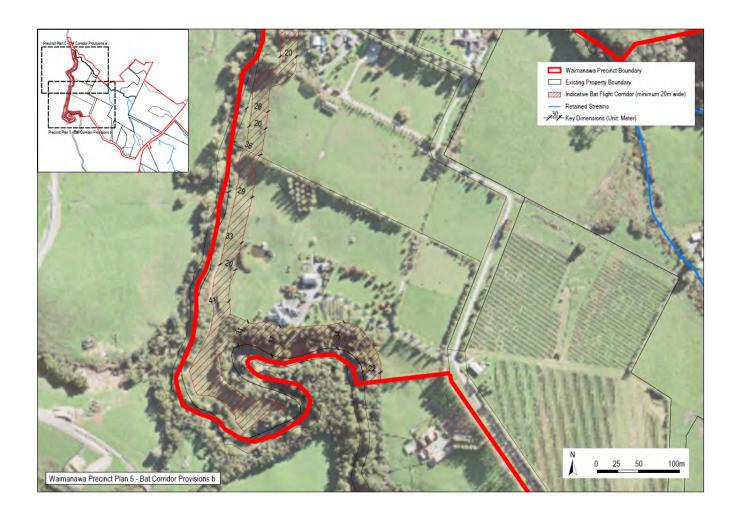
Ixxx.10.4 Waimanawa Precinct Plan 4 Indicative Open Space



Existing Property Boundary Indicative Bat Flight Corridor (minimum 20m wide) Retained Streams Key Dimensions (Unit: Meter)

Ixxx.10.5 Waimanawa Precinct Plan 5 Bat Flight Corridor

Waimanawa Precinct Plan 5 - Bat Corridor Provisions a



XXX.12 Medium Intensity Residential Standards

<u>Density standards from Part 2 of Schedule 3A, RMA, or the objectives and policies in clause 6 of Schedule 3A, RMA.</u>

Except as modified Rule IXXX.6 Standards the following objectives, policies, rules and other provisions apply to and modify the Single House Zone, Residential Mixed Housing Urban and Residential Terrace Housing and Apartment Buildings zoned land within the precinct until Plan Change 78 becomes operative, after which point the following provisions no longer apply.

[Reference number TBC] Additional MDRS Land Use Objectives

Objectives (H5.2)

- (A1) A well-functioning urban environment that enables all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.
- (B1) A relevant residential zone provides for a variety of housing types and sizes that respond to -
 - (a) Housing needs and demand; and
 - (b) The neighbourhood's planned urban built character, including 3-storey buildings.

[Reference number TBC] Additional MDRS Land Use Policies

- (A1) Enable a variety of housing typologies with a mix of densities within the zone, including threestorey attached and detached dwellings, and low-rise apartments.
- (B1) Apply the MDRS across all relevant residential zones in the district plan except in circumstances where a qualifying matter is relevant (including matters of significance such as historic heritage and the relationship of Māori and their culture and traditions with their ancestral lands, water, sites wāhi tapu, and other taonga).
- (C1) Encourage development to achieve attractive and safe streets and public open spaces, including by providing for passive surveillance.
- (D1) Enable housing to be designed to meet the day-to-day needs of residents.
- (E1) Provide for developments not meeting permitted activity status, while encouraging high-quality developments.

[Reference number TBC] Notification

(A1) Any application for resource consent for the following activities will be considered without public or limited notification or the need to obtain the written approval from affected parties unless

the Council decides that special circumstances exist under section 95A(4 9) of the Resource Management Act 1991:

- (A2) Unless the Council decides that special circumstances exist under section 95A(9) of the Resource Management Act 1991, public notification of an application for resource consent is precluded if the application is for the construction and use of 1, 2 or 3 dwellings that do not comply with 1 or more of the following:
 - (i) Standard H5.6.4 Building height;
 - (ii) Standard H5.6.5 Height in relation to boundary;
 - (iii) Standard H5.6.8(1) Yards;
 - (iv) Standard H5.6.10 Building coverage;
 - (v) Standard H5.6.11(3) and (4) Landscaped area;
 - (vi) Standard H5.6.12(A1) Outlook space;
 - (vii) Standard H5.6.14(A1) (B1) Outdoor living space; and
 - (viii) <u>Standard H5.6.18(1) Windows to street and private vehicle and pedestrian accessways.</u>

Note: this rule is adopted from H5.5(4)

[Reference number TBC] Rules

[Reference number TBC] Number of dwellings per site

(1) There must be no more than three dwellings per site.

Note: this rule is adopted from H5.6.3A

[Reference number TBC] Building Height

Purpose: to manage the heigh of buildings to:

- achieve the planned urban built character of predominantly three storeys:
- minimise visual dominance effects;
- maintain a reasonable standard of residential amenity for adjoining sites; and
- provide some flexibility to enable variety in roof forms.; and
- provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites wāhi tapu, and other taonga, where located adjacent to Pukekiwiriki Pā Historic Reserve, Red Hill.

(1) Buildings must not exceed 11m in height, except that 50 per cent of a building's roof in elevation, measured vertically from the junction between wall and roof, may exceed this height by 1m, where the entire roof slopes 15 degrees or more, as shown in Figure H5.6.4.1 Building height in the Residential – Mixed Housing Urban Zone below.

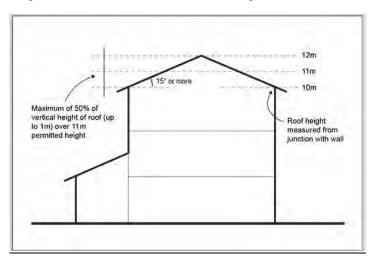


Figure 1 H5.6.4.1 Building Height in the MHUZ

Note: this rule is adopted from H5.6.4 of PC78

[Reference number TBC] Height in Relation to boundary (H5.6.5)

Purpose: to manage the height and bulk of buildings at boundaries to maintain a reasonable level of sunlight access, privacy and minimise adverse visual dominance effects to immediate neighbours.

(1) <u>Buildings must not project beyond a 60 degree recession plane measured from a point 4m vertically above ground level alongside and rear boundaries, as shown in Figure H5.6.5.1 Height in relation to boundary below.</u>

Note: this rule is adopted from H5.6.5 of PC78

[Reference number TBC] Yards

(1) A building or parts of a building must be set back from the relevant boundary by the minimum depth listed in Table H5.6.8.1 Yards below.

Yard	Minimum Depth
<u>Front</u>	<u>1.5m</u>
Side	<u>1m</u>
Rear	<u>1m</u>

Note: this rule is adopted from H5.6.8.1 of PC78

[Reference number TBC] Building Coverage

Purpose: to manage the extent of buildings on a site to achieve the planned urban character of buildings surrounded by open space and to provide for the protection and management of significant ecological areas.

(1) The maximum building coverage must not exceed 50 per cent of the net site area

Note: this rule is adopted from H5.6.10 of PC78

[Reference number TBC] Landscape areas (H5.6.11)

Purpose:

- to provide for quality living environments consistent with the planned urban built character of buildings surrounded by open space vegetation; and
- to create a vegetated urban streetscape character within the zone

Developments containing up to three dwellings must comply with the following:

- (1) A dwelling at ground floor level must have a landscaped area of a minimum of 20 per cent of a developed site with grass or plants, and can include the canopy of trees regardless of the ground treatment below them.
- (2) The landscaped area may be located on any part of the development site, and does not need to be associated with each dwelling

Note: this rule is adopted from H5.6.11 of PC78

[Reference number TBC] Outlook Space (H5.6.12)

Purpose:

- <u>to ensure a reasonable standard of visual privacy between habitable rooms of different buildings, on the same or adjacent sites; and</u>
- <u>in combination with the daylight standard, manage visual dominance effects within a site by</u> ensuring that habitable rooms have an outlook and sense of space.

Development containing up to three dwellings must comply with the following:

- (A1) An outlook space must be provided for each dwelling as specified in this clause.
 - (a) An outlook space must be provided from habitable room windows as shown in Figure H5.6.12.1 Outlook space requirements for development containing up to three dwellings below.

- (b) The minimum dimensions for a required outlook space are as follows and as shown in Figure H5.6.12.1 Outlook space requirements for development containing up to three dwellings below:
 - i. <u>a principal living room must have an outlook space with a minimum dimension</u> of 4 metres in depth and 4 metres in width; and
 - ii. <u>all other habitable rooms must have an outlook space with a minimum dimension of 1 metre in depth and 1 metre in width.</u>
- (c) The width of the outlook space is measured from the centre point of the largest window on the building face to which it applies.
- (d) Outlook spaces may be over driveways and footpaths within the site or over a public street or other public open space.
- (e) Outlook spaces may overlap where they are on the same wall plane in the case of a multi-storey building.
- (f) Outlook spaces may be under or over a balcony.
- (g) Outlook spaces required from different rooms within the same building may overlap.
- (h) Outlook spaces must
 - i. be clear and unobstructed by buildings; and
 - ii. not extend over an outlook space or outdoor living space required by another dwelling

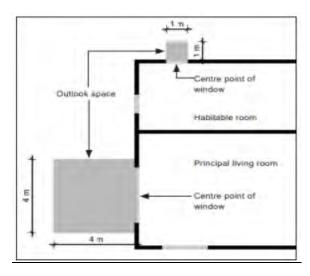


Figure 2 outlook space requirements for development containing up to three dwellings (H5.6.12.A1)

Note: this rule is adopted from H5.6.12 of PC78

[Reference number TBC] Outdoor living space (H5.6.14)

Development containing up to three dwellings must comply with the following:

- (A1) A dwelling at ground floor level must have an outdoor living space that is at least 20m2 and that comprises ground floor, balcony, patio, or roof terrace space that,—
 - (a) where located at ground level, has no dimension less than 3 metres for three or more dwellings; and
 - (b) where provided in the form of a balcony, patio, or roof terrace, is at least 8m2 and has a minimum dimension of 1.8 metres; and
 - (c) is accessible from the dwelling; and
 - (d) <u>may be—</u>
 - i. grouped cumulatively by area in 1 communally accessible location; or
 - ii. located directly adjacent to the unit; and
 - (e) <u>is free of buildings, parking spaces, and servicing and manoeuvring areas.</u>
- (B1) A dwelling located above ground floor level must have an outdoor living space in the form of a balcony, patio, or roof terrace that—
 - (a) <u>is at least 8m2 and has a minimum dimension of 1.8 metres for three or more dwellings; and</u>
 - (b) is accessible from the dwelling; and
 - (c) may be
 - i. grouped cumulatively by area in 1 communally accessible location, in which case it may be located at ground level; or
 - ii. located directly adjacent to the unit

Note: this rule is adopted from H5.6.14 of PC78

[Reference number TBC] Windows to Street and Private Vehicle and pedestrian accessways (H.5.6.18)

Purpose: To provide for passive surveillance while maintaining privacy for residents and users.

Development containing up to three dwellings must comply with the following:

Any dwelling facing the street must have a minimum of 20 per cent of the street facing façade in glazing. This can be in the form of windows or doors.

Note: this rule is adopted from H5.6.18 of PC78

[Reference number TBC] Activity Table – Subdivision in Residential Zones (E.38.4.2)

Activity		Activity Status		
Subdivision for the purpose of the construction or use of dwellings, which are provided for as either permitted or restricted discretionary activities in the Residential – Low Density Residential Zone,				
Residential – Mixed Housing Urban Zone and Residential – Terrace Housing and Apartment Buildings Zone				
Note 1: All Applicants for subdivision consent, including controlled activities A13A and A13B, are subject to section 106 of the RMA.				
(A13A)	Subdivision in accordance with an approved land use resource consent complying with Standard E38.8.1A.1	<u>C</u>		
(A13B)	Subdivision around existing buildings and development complying with Standard E38.8.1A.2.	<u>C</u>		

[Reference number TBC] Notification (E.38.5)

2A) In the Residential - Mixed Housing Urban and Residential - Terrace Housing and Apartment Buildings Zones, any application for subdivision associated with an application for resource consent for the construction and use of one, two or three dwellings that do not comply with 1 or more of the relevant zone standards will be considered without public and limited notification unless the Council decides that special circumstances exist under section 95A(9) of the Resource Management Act 1991.

The standards referenced in clause 2A above include:

- Standards H5.6.4, H5.6.5, H5.6.8(1), H5.6.10, H5.6.11(3) and (4), H5.6.12, H5.6.14 and H5.6.18 in the Residential Mixed Housing Urban Zone.
- Standards H6.6.5(1)(a), H6.6.6(1), (5), (6), (7) and (10), H6.6.9, H6.6.11(1), H6.6.12(1A) and (2A), H6.6.13(A1) (J1), H6.6.15(A1) and (B1), H6.6.19(1) in the Residential Terrace Housing and Apartment Buildings Zone.
- 2B) In the Residential Mixed Housing Urban and Residential Terrace Housing and Apartment Zones, any application for subdivision associated with an application for resource consent for the construction and use of 4 or more dwellings that comply with the relevant zone standards will be considered without public and limited notification unless the Council

<u>decides that special circumstances exist under section 95A(9) of the Resource Management</u> Act 1991.

The standards referenced in clause 2B above include:

Standards H5.6.4, H5.6.5, H5.6.8(1), H5.6.9, H5.6.10, H5.6.11(5), (6) and (7) and H5.6.12 - H5.6.16 and H5.6.18 - H5.6.21 in the Residential - Mixed Housing Urban Zone.

Across the Residential - Terrace Housing and Apartment Buildings Zone

• Standards H6.6.9, H6.6.10, H6.6.11, H6.6.12(1) – (3), H6.6.13(1) - (9), H6.6.14, H6.6.15(1) - (4), H6.6.16, H6.6.17, H6.6.19(2), H6.6.20, H6.6.21 and H6.6.22 in the Terrace Housing and Apartment Buildings zone.

<u>In the Residential - Terrace Housing and Apartment Buildings Zone - additional standards</u> for development outside walkable catchments

- Standards H6.6.5(1)(b) and H6.6.6(2), (5) (7) and (10). In the Residential Terrace
 Housing and Apartment Buildings Zone additional standards for development inside a
 walkable catchment
- Standards H6.6.5(1)(c) and H6.6.6(3) (5), (7) and (10).

PART C IXXX MORRISON HERITAGE ORCHARD PRECINCT

XXX.1. Morrison Heritage Orchard Precinct Description

The Morrison Heritage Orchard Precinct is located to the south of Warkworth on Old State Highway One. The precinct is comprised of approximately 20 hectares and is located adjacent to the Waimanawa Precinct.

The purpose of the Morrison Heritage Orchard Precinct is to enable the ongoing operation and expansion of the existing Morrison Orchard as a heritage rural land use. It permits the ongoing use of the site for both traditional orchard and other rural productive land use activities, and complementary tourist and visitor activities including an orchard shop, a market, restaurant / café as well as playground, wedding venue and similar social activities.

The precinct limits activities to those with a rural orchard and similar rural activities, and tourist and visitor activities based on the Precinct's values for such activities within the wider surrounding urban environment. Although privately owned and operated, the Heritage Orchard Precinct provides an important significant green space for relatively intensive urban development that is planned in Warkworth with few significant non-urbanised areas to offset the resulting adverse effects of extensive built development.

In addition to the above activities, provision is also made for limited Residential - Large Lot Residential subdivision and use, including the option of cluster subdivision and development that responds to both landscape and contour / geotechnical considerations and limitations.

Subdivision in this precinct is also controlled so that the Morrison Orchard continues to be managed and operated largely as a single entity but with provision for limited residential activities and/or long term ownership options such as leases for family members.

The underlying zoning of land within this precinct is Rural - Mixed Rural for Areas A and B, and Residential - Large lot for Area C.

XXX.2. Objectives

- (1) Existing and future orchard and appropriate rural production activities are provided for and enabled by the Precinct.
- (2) A range of tourist, visitor activities and limited residential activities are provided for to enable heritage, social and economic opportunities based on and complementary to the established heritage orchard and rural activities.
- (3) A rural heritage character and appearance of the Morrison Heritage Orchard is maintained.
- (4) <u>Stormwater quality and quantity is managed to maintain the health and well-being of the receiving environment and is enhanced over time in degraded areas.</u>
- (5) <u>Subdivision and development supports the safety and efficiency of the local transport roading</u> network.

The Auckland-wide and zone objectives apply in this Precinct in addition to those specified above.

XXX.3. Policies

- (1) Provide for existing and future orchard and complementary commercial and visitor activities including outdoor rural-based activities, accommodation, weddings and functions, restaurant / café and markets.
- (2) Ensure that residential subdivision and development is enabled in defined areas and at appropriate densities that are consistent with and do not compromise the open space heritage values of the orchard or conflict with associated rural and visitor activities.
- (3) Encourage subdivision, development and land uses that maintain and protect the overall rural character and appearance of the Heritage Orchard Precinct and avoid adverse effects between it and existing and future surrounding residential and other sensitive activities.
- (4) Manage stormwater runoff from all impervious areas in the precinct through a treatment train approach consistent with any approved stormwater management plan which assists in maintaining high water quality and enhances poor water quality within this upper catchment of the Mahurangi River.
- (5) Restrict subdivision, development and land uses within the Precinct to ensure the safety and efficiency off Old State Highway 1.

The Auckland-wide and zone policies apply in this Precinct in addition to those specified above.

XXX.4. Activity table

The provisions in any relevant overlays, zone and the Auckland-wide provisions apply in this precinct unless otherwise specified below.

Table XXX.X.1 Activity table specifies the activity status of land use, development and subdivision activities in the Morrison Heritage Orchard Precinct pursuant to section 9(3) of the Resource Management Act 1991.

Permitted activities are subject to the relevant standards in XXX.6.

Table XXX.X.1 Activity table

Use				
Visitor Activities and Accommodation				
(A1)	A maximum of four dwellings in Activity Area A as of [INSERT OPERATIVE PLAN CHANGE DATE] or a single site comprising Activity Area A.	Р		
(A2)	One dwelling per site in Activity Areas A, <u>B</u> and C other than as permitted in (A1) above and (A12) of this Table.	Р		
(A3)	Camping ground	P RD		
(A4)	Garden centre	₽ <u>RD</u>		
(A5)	Markets	₽ <u>RD</u>		
(A6)	One minor dwelling per principal dwelling <u>excluding dwellings</u> <u>established under (A12) of this Table</u>	Р		
(A7)	Produce sales	₽ <u>RD</u>		
(A8)	Restaurant and café	₽ <u>RD</u>		
(A9)	Rural commercial services	P RD		
(A10)	Rural tourist and visitor activities	P RD		
(A11)	Visitor accommodation	P RD		
(A12)	Workers' accommodation	P RD		
(A13)	Weddings and functions	₽ <u>RD</u>		
(A14)	Activities (A1) to (A13) not complying with the standards in Rule XXX.6 below.	RD		
Developm	Development			

(A15)	New buildings or additions up to 250m ² GFA in all Precinct Activity	P-The same	
	Areas	<u>activity</u>	
		status and	
		<u>standards</u>	
		as applies	
		<u>to</u>	
		the land use	
		activity that	
		the new	
		building or	
		<u>addition</u>	
		to a building	
		<u>is designed</u>	
		<u>to</u>	
		<u>accommoda</u>	
		<u>te</u>	
(A16)	New buildings or additions 250m ² GFA or greater in all Precinct Activity Areas.	RÐ	
(A16A)	Subdivision and development with vehicle access to the Wider Western Link Road	NC	
Subdivision			
(A17)	Subdivision complying with Standard XXX.6.11.	RD	
(A18)	Subdivision not complying with Standard XXX.6.11.	D	

XXX.5. Notification

- (1) An application for resource consent for a restricted discretionary activity listed in Table XXX.X.1 above will be considered without public or limited notification or the need to obtain written approval from affected parties unless the Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.
- (2) The notification rules of the underlying zone apply in respect of applications for residential activities or for subdivision associated with an application for the construction and use of residential activities.
- (3) Any other application for resource consent for an activity listed in Table IX.4.1 Activity table will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.

(4) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4).

XXX.6. Standards

The overlay, zone and Auckland-wide standards apply in this precinct unless otherwise specified below.

All activities listed as permitted, restricted discretionary in (A16) and subdivision in (A17) in **Table XXX.X.1** Activity table must comply with the following standards.

XXX.6.1 General access and traffic generation standard

- (1) 'All activities shall obtain Vehicle access is limited to Old State Highway One in accordance with at the Approved Entry Point (AEP) shown on the Precinct Plan.
- (2) Activities A3 to A13 excluding produce sales (A7), listed in Table XXX.X.1 above do not either singularly or cumulatively exceed a trip generation threshold of 100 v/hr (any hour).
- (3) <u>Subdivision and development that has frontage to the Wider Western Link Road must not be</u> provided with vehicle access to that road.

XXX.6.2. Camping ground within Precinct Plan Areas A and B

- Camping ground for a maximum of 50 sites in either each of Activity Areas A and B.
- (2) Only one camping ground may be established the Precinct.

XXX.6.3. Garden Centre within Precinct Plan Areas A and B

- (1) The maximum area of a garden centre including building and outdoor sales and storage areas is 750m².
- (2) Only one Garden Centre may be established the Precinct

XXX.6.4. Markets

- (1) The location of the Any market shall must be located within Activity Area B only.
- (2) A The market must have no more than maximum of 100 stalls.
- (3) The trading hours of markets are limited to 7.00am until 11.00pm.
- (4) Any other activities associated with the market must not occur between midnight and 6.00am.
- (5) Stalls involved in the markets are limited to the sale of food and beverages or items produced by the stall holder which may include fresh and processed goods, small holding livestock, artwork, crafts and pottery and includes locally made products. This includes shops with an operational function (e.g. cheese making).

(6) Only one Market may be established the Precinct

XXX.6.5. Produce sales

- (1) The location of the Orchard produce sales shop shall must be located within Activity Area B of the Precinct plan.
- (2) A <u>The produce shop shall have a maximum area</u> of 450m² including for the display and sale of produce.
- (3) The type of produce offered for sale on the site must be confined to the following:
 - (a) fruit, vegetables, plants, eggs, flowers, honey, dairy products, meat, beer, wine, juices.
 - (b) produce or products from on-site primary produce manufacturing.
 - (c) produce and handcrafts not grown or produced on the site or on a site in the locality, shall not exceed 10 % of the GFA produce display and sales area.
- (4) Only one Produce Shop may be established the Precinct

XXX.6.6. Restaurant and cafe

- (1) One restaurant and one or café in Activity Area B.
- (2) A restaurant or café shall provide seating for a maximum of 120 people.
- (3) The hours of operation of a restaurant or café are limited to 7.00am to midnight.

XXX.6.7. Rural tourist and visitor activities

(1) Rural tourist and visitor activities for a maximum of 500 people <u>cumulatively</u> in Activity Areas A and B.

XXX.6.8 Visitor accommodation

(1) Visitor accommodation (including manager's accommodation) for a maximum of 25 units or 100 people (whichever is greater) <u>cumulatively</u> within either or both Activity Areas A and B.

XXX.6.9 Weddings and functions

- (1) Wedding and function activities may occur within either or both Activity Areas A and B.
- (2) The activity may include use of an <u>existing</u> restaurant / café on the site and temporary or semipermanent marquees.

XXX.6.10. Workers accommodation

(1) Workers accommodation with a maximum of 10 dwellings <u>in total</u> in either or both Activity Areas A and B complying with the following:

- (a) Dwellings shall comply with all the relevant yard setbacks and height standards for buildings in the Zone.
- (b) Dwellings shall have a maximum floor area of 120m² excluding decks and garaging. The floor area may include a dormitory or individual rooms.
- (c) The accommodation may accommodate seasonal workers.

XXX6.10A Stormwater Management

- (1) Stormwater runoff from all impervious surfaces must be treated with a stormwater management device(s) meeting the following standards:
- (a) the communal device or system must be sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)'; or
- (b) where alternative devices are proposed, the device must demonstrate it is designed to achieve an equivalent level of contaminant or sediment removal performance to that of 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)'.
- (2) Development of new impervious areas must provide stormwater detention for 50% AEP (i.e. 2-year ARI) storm events on top of the E10 SMAF 1 requirements.
- (3) Roof runoff must be directed to a tank sized for the minimum of 5mm retention volume for non-potable reuse within the property.

XXX.6.11. Subdivision

- (1) Minimum and maximum net site areas for a maximum of four sites, excluding the balance site, within Activity Area A:
 - (a) Between 600m² and 4,000m² for sites serviced by a private or public wastewater network.
 - (b) Between 2,500m² and 4,000m² for sites serviced by individual on-site wastewater systems.
- (2) The land comprising each of Activity Areas A and B; being two sites in total.
- (3) Large Lot Residential Activity Area C:
 - (a) Subdivision in Activity Area C is governed by two optional Rules but not both.
 - (b) Option 1 (Simple Subdivision). The minimum net site area for the Residential Large Lot Zone rules in E38.8.
 - (c) Option 2 (Cluster Subdivision)
 - (i) Minimum site area of 300m² for proposed sites serviced by a public or private

- wastewater network or 2,500m² for proposed sites serviced by an on-site wastewater system, and capable of containing a building rectangle complying with Rule E38.8.1.1 (2).
- (ii) The area of household unit sites shall be limited to an area for the household unit and reasonable outdoor use including room for household unit extensions. (Note: houses may be joined together).
- (iii) The total number of sites created must not exceed the number of lots which could be created over the net site area of the parent site at 1 house per 4,000m², other than a balance site.
- (iv) The identified building rectangles of all proposed sites must be located within a single contiguous area not exceeding 30% of Activity Area C.
- (v) The remainder of Activity Area C shall be held either within one of the proposed residential sites or in common as a single balance site and shall have a consent notice included on the title to the satisfaction of the Council preventing additional dwellings being erected on the site and requiring the control of weeds and pests.

IXXX.6.12 Landscape Protection Area Controls (Northern Escarpment)

Purpose:

- To protect landscape features on key upper portions of the precinct.
- To promote revegetation of the northern escarpment.
- (1) The minimum landscaped area for new sites identified on the Morrison Orchard: Precinct Plan as Landscape Protection Area Northern Escarpment must be at least 75 per cent of the net site area. Except that for cluster subdivision provided for by the Morrison Heritage Orchard Precinct Rule XXX.6.11. Subdivision (3) Large Lot Residential Activity Area C: Option 2 (Cluster Subdivision) where the minimum landscaping area is to be 30% of the combined area of the residential sites, land within one of the proposed residential sites or owned in common as a single balance site.
- (2) External finishes on residential dwellings shall be limited to natural stone and/or timber, or finished in a colour with the following limits utilising the BS5252 colour range:
 - (a) Hue (colour) all colours from 00 to 24
 - (b) Reflectance value (RV) and greyness groups: for external walls an RV rating of no more than 60% for greyness groups A and B and no more than 40% for greyness group C. For roofs an RV rating of no more than 40% within greyness groups A, B and C.

XXX.7. Assessment – restricted discretionary activities

XXX.7.1. Matters of discretion

(1) Land use activities

- (2) The Matters of discretion in Rule H19.12.1 apply,
- (3) Traffic generation cap and the safety of access to the Precinct.
- (4) Stormwater
- (5) The stormwater management plan
- (6) Subdivision

The Matters of discretion in Rule E38.12.1 apply,

XXX.7.2. Assessment criteria

(1) Land use activities:

- (i) The <u>assessment</u> criteria in Rule H19.12.2 (1) (b) to (d); (5) and (6) and E27.8.2 (3), (9), (10) and (11) apply.
- (ii) Whether the level of vehicular movements will remain in accordance with XXX.6.1.
- (iii) Whether safe vehicular access is provided to the Precinct and the roading network.

(2) Stormwater

- (iv) Whether development is in accordance with the approved Stormwater Management Plan and policies E1.3(1) (14).
- (v) The design and efficacy of infrastructure and devices with consideration given to the likely effectiveness, ease of access, operation, ongoing viability and maintenance, and integration with the surrounding environment including the road corridor where relevant.

(3) **Subdivision**:

The Assessment criteria in Rule E38.12.2 apply.

XXX.8. Special information requirements

Xxxx8.1 Transportation and Safety

The special information requirements under E27.9 apply. The Council may require applications which affect the transport network to include a transport assessment prepared by a suitably qualified transport planner or traffic engineer.

Any upgrading of existing Old State Highway One access illustrated on the Precinct Plan as the Approved Entrance Point must be supported by a Transport Design Report and Concept Plans (including forecast transport modelling and land use assumptions), prepared by a suitably qualified transport engineer confirming the location and design of any access supports the safe and efficient function of the existing and future (ultimate) transport network and can be accommodated within the proposed or available road reserves. This may be included within a transport assessment supporting land use or subdivision consents.

In addition, where an interim upgrade is proposed, information must be provided, detailing how the

design allows for the ultimate upgrade to be efficiently delivered.

Ixxx.8.2 Site Specific Watercourse Assessment

An application for any land modification, subdivision or development which adjoins a permanent or intermittent stream must be accompanied by a Site Specific Watercourse Assessment prepared by a suitably qualified person. The assessment must include a stream reach assessment identifying any erosion hotspots, stream bank erosion and appropriate erosion mitigation measures.

Ixxx.8.3 Flood modelling and Assessment

A detailed flood modelling and assessment must be undertaken when subdivision or development requiring resource consent is proposed to be undertaken on land which may be subject to the 1 per cent annual exceedance probability (AEP) floodplain or overland flow paths. Modelling limitation must include but is not limited to:

- Modelling boundary condition.
- Aerial Reduction Factor (ARF) used in the modelling.
- Terrain detail for proposed development,
- Unknown factor regarding the post processing of the flood plain results.

XXX.9. Precinct plan

XXX.9.1 Morrison Orchard: Precinct Plan



Amend to;

- 1. Identify and include on the Morrison Orchard Precinct Plan (XXX.9.1) the permanent and intermittent streams and their margins (10m) to be retained and protected and introduce provisions which ensure the long-term protection of the streams from inappropriate subdivision, use and development.
- 2. Identify and include on the Morrison Orchard Precinct Plan (XXX.9.1) the existing shelterbelts along the southern and eastern boundaries to be retained and protected and introduce provisions which ensure the long-term protection of the shelterbelts/vegetation from the effects of inappropriate subdivision, use and development within areas A and B.
- 3. Identify and include on the Morrison Orchard Precinct Plan (XXX.9.1) existing stands of native vegetation along the northern ridgeline to be retained and protected from the effects of inappropriate

subdivision, use and development and introduce provisions which ensure the long-term protection of the vegetation from the effects of inappropriate subdivision, use and development within Area C.

APPENDIX 6 SPECIALIST TECHNICAL MEMOS

PC93 Appendix 6 Table of contents

- 1. PC93 s42A DOP Specialist memo
- 2. DPO attachment 1
- 3. DPO attachment 2
- 4. DPO attachment 3
- 5. DPO attachment 4
- 6. DPO attachment 5
- 7. DPO attachment 6
- 8. PC93 Letter Warkworth South Water and wastewater infrastructure (29-05-24)
- 9. PC93 s42A specialist report Development Engineer
- 10. PC93 s42A specialist report Arboricultural
- 11. PC93 s42A specialist memo Urban Design
- 12. PC93 s42A specialist memo Landscape
- 13. PC93 s42A specialist memo economics
- 14. PC93 s42A specialist report stormwater
- 15. PC93 s42A specialist report Parks Planning
- 16. PC93 s42A specialist report ecology
- 17. PC93 s42A specialist memo geotechnical
- 18. PC93 s42A specialist report transport

Memo 23 July 2024

To: David Wren

cc: Peter Vari

From: lan Kloppers

Subject: PC93 – Warkworth South, S42A Report

1. Context

The PC93 – Warkworth South private plan change aims to rezone of approximately 159 ha of Future Urban, Open Space – Conservation and Rural – Rural Production zoned land on either side of the current State Highway One ("SH1"), south of Warkworth.

This private plan change request includes the creation of two new precincts – "Waimanawa" and "Morrison Heritage Orchard". This plan change and the precinct provisions generally align with the Warkworth Structure Plan including providing for the Wider Western Link Road ("WWLR"). The proposal also includes the introduction of the Stormwater management area Flow 1 (SMAF1) Overlay and an amendment to the Rural Urban Boundary (RUB) to the south of Warkworth.

The Development Programme Office (DPO) has been involved in various collaborated discussion regarding the integrated network of infrastructure required for this private plan change to address the potential cumulative impact of this private plan change and other recently live zoned areas and private plan changes in the area. The focus of DPO was largely to understand the water, wastewater and transport infrastructure requirements and subsequent funding & financing requirements.

From the involvement of the DPO certain documents and minutes were kept and retained. These documents and minutes of meetings were submitted as part of the S42A Report are listed below.

2. Documents submitted

- An extract from the WSL Board meeting detailing the water and wastewater capacity issues in Warkworth, dated 7 May 2024.
- A letter from Crown Infrastructure Partners (CIP) to the PC93 developers in their capacity as administrators of the Infrastructure Funding & Finance Act (IFF).
- Minutes from a meeting held at Watercare with the developers in the room, where the water and wastewater capacity issues, potential investment required and timing were discussed, dated 9 February 2024.
- PC93 Minutes 010324_Final which was a meeting between DPO, Finance, CIP and the developers, dated 1 March 2024.
- PC93 Minutes 180424_Final which was a meeting between DPO, CIP and Watercare.
 Dated 18 April 2024.

• Minutes 300424 which was a meeting between DPO, CIP, Watercare, and the developers, dated 30 April 2024.

&

lan Kloppers

Head of Infrastructure Funding & Development Strategy



Minutes of meeting

Time and date: 9am Friday 9th February 2024

Subject: Watercare Submission to PPC93 - Warkworth South

Attendees:

Watercare: Mark Iszard - Head of Major Developments; Amber Taylor – Development Planning Lead; Lars Fog – Programme Lead for Northern Major

Developments; Logan Fraser-List – Graduate Planner

Auckland Council: Ian Kloppers – Development Programme Office (DPO); Andrew Duncan – Manager of Financial Policy; Paula Vincent – Senior Planning Advisor DPO

Applicant

Ken Ha – Civil Engineer Maven; Glen Bellingham – Civil Engineer Maven; Phillip Nicholson – Development Manager for Classic; David Hay – Planning Consultant for Classic; Ian Smallburn – Planning Consultant for Victor Hao, Stepping Towards Far

Location: Watercare Head Office Newmarket

Minutes

Mark Iszard:

Welcome, introductions & outline of meeting format.

Ian Smallburn:

Seeking the following key information from this meeting:

- Understanding of the growth projection in Warkworth.
- Where Watercare are with any upgrades that are required for the Wastewater Treatment Plant (WWTP) and Water Treatment Plant (WTP) to provide for this growth.

Lars Fog:

Provided an overview of the water and wastewater servicing for Warkworth.

Wastewater

- The existing WWTP is at capacity and cannot accept any new connections.
- Watercare is constructing a new Pump Station (Lucy Moore PS) and sewer network to connect Warkworth to the new Snells WWTP.



- This work is expected to be complete by mid-late 2025.
- A separate project a gravity sewer from the showgrounds to the Lucy Moore PS is in feasibility but is not relevant for servicing the Warkworth South development area.
- In total there are live zoned areas up in the north which could generate 5,000-5,500 dwelling unit equivalents (DUEs).
- This is equivalent to 15,000-17,000 people (at 3 persons per DUE).
- The existing connected Warkworth population is estimated to be 7,500.
- The Northern live zoned areas plus the existing population adds up to ~23,000 25,000 people.
- The Lucy Moore PS is designed with an initial cap of 25,000 people and can be upgraded to 40,000 people.
- The Snells WWTP Stage 1 is constructed with capacity of 18,000 people with a plan to upgrade to 30,000 people by 2040.
- The populations were based on figures that were available at the time of planning and consenting.
- When the Snells WWTP is commissioned, we expect 13,000-14,000 people to be connected immediately.
- Therefore upon commissioning we are anticipating headroom for 3,000-4,000 people.
- We are expecting a Private Plan Change (PPC) to be lodged for the NorthEast of Warkworth. This area is in the FDS for 2035+ - before the South.
- This NorthEast PPC is expected to add another 1,500 dwellings 4,000 people.
- The existing wastewater discharge consent for a maximum of 30,000 people could be reached pretty quickly.
- Initial estimates of \$150m \$200m cost for the upgrade of Snells Beach WWTP (These are very initial estimates that should not be relied upon for any purpose other than a rough quantum of costs, should not be shared with others who may take it out of context).

Water

- Maximum consented water take is 1.2 million cubic meters per year this provides for 15,000 people under Watercare's code of practice numbers.
- This maximum limit will be reached quickly.



- Based on current usage, which over the last 5 years is approx. 300L per person per day, the maximum annual limit would only provide for 11,000 people.
- The consent provides for stepped increases in water take up to the maximum limit. The consent does allow those increases to be brought forward.
- The existing Warkworth population of 7,500 people is currently supplied by the Warkworth Wells WTP.
- A new water source will need to be found to provide water beyond the current abstraction consent limit.
- Current source is groundwater bores in the northwest.
- Water is currently the bigger constraint to growth.
- The WTP has been constructed so that it can be upgraded in stages in line with the consent conditions which provide for the stepped increases.
- Currently the WTP is not planned to be upgraded to the final stage until 2040.

Open Discussion

Items discussed:

- Watercare's population growth forecast
 - This is largely based on observing what recently live zoned areas are now seeking to achieve at resource consent stage.
 - Watercare are seeing higher numbers at resource consent stage versus what was proposed at the time of land rezoning under the PPC.
 - We are working with developers that are currently estimating delivery of 100 homes per year with full build out over the next 20 years.
 - o **ACTION** Watercare will share its population growth forecast.
- Snells WWTP and Discharge Consent
 - Planning for the Snells WWTP is aligned with Council's Structure
 Plan which anticipated an ultimate population of 30,000 people and
 7,500 dwellings across all of the Future Urban Areas.
 - o The Stage 2 WWTP upgrade is currently planned for 2040-2045.
 - The WWTP design is not modular. A second plant at the same site is required to step from 18,000 to 30,000 population.



- Land is designated however there may be a design requirement to increase the footprint of the ultimate WWTP. Acquiring of additional land is not yet in our AMP.
- Private or stand alone treatment plants are not preferred by Watercare.
- o The existing WWTP will not be recommissioned.
- Warkworth Wells WTP and Ground Water Take Consent
 - The WTP was designed to be upgraded in stages, therefore upgrades are going to be relatively straightforward technically speaking.
 - Upgrades to the WTP are on the radar but we are having to reprioritise across the board.
 - o The existing water take consent was granted in 2012.
 - Watercare's technical work for the Council Structure Plan acknowledged that we will need to go back to get more water for the ultimate population.
 - o Usage is high, we may need to implement demand management.
 - At this point we have not done any investigations for further take from the aquifer.
 - We are not looking to go back to river.
 - ACTION Watercare will share the evidence/reporting from the consent hearing relating to the aquifer.
- Southern Water Reservoir
 - The proposed bulk water servicing is very likely to be feasible.
 - However the proposal will need to consider how it impacts the wider scheme required for the entire Warkworth South Future Urban Areas.
- Infrastructure funding
 - Watercare have adjusted its planning according to what Council have planned for and where they are prioritising funding.
 - If the Warkworth population continues to grow Watercare either need to artificially constrain growth or bring forward upgrades.
 However there are a number of big projects required across other areas of Auckland and we cannot make the financial situation any worse for Council.
 - The FDS creates opportunities for funding agreements where infrastructure needs to be brought forward to support an out of sequence plan change.



- However Watercare are resource constrained and can't take people away from the projects they are focussed on and under the LTP we cannot direct any Watercare funds towards an investigation
- In servicing the wider future urban area the developer may have to wear a portion of those wider costs. A mechanism for recovering these costs would need to be agreed.
- Watercare are happy to work with Council and the developer on a funding agreement for bringing the required works forward, this will need to include funding of the investigative works.

Next Steps:

- Funding and financing meeting with Council scheduled.
- Watercare to share population growth forecast.
- Watercare to share groundwater take consent information.



What: Warkworth South (PC93) Infrastructure Funding and Financing Meeting

Why: Follow up to meeting held with Auckland Council, Crown Infrastructure

Partners and Watercare Services Limited on 18/04/24

Where: Rm 6 Level 14 Albert Street

When: 30th April 2024

Who attended: Mark Iszard, Amber Taylor (both Watercare Services Ltd), Phil Nicholson

(Classic Homes), John Duthie (Tattico), Sean Wynne, James Bishop, Gary Lo

(Crown Infrastructure Partners), Ian Kloppers, John Dunshea (Auckland

Council)

Apologies: None

Minute taker: John Dunshea

- 1. JD began the meeting by explaining this was a follow up to meeting on 18 April 2024 between AC, CIP and WSL at which WSL explained the need to bring forward Stage 2 of the Snells Beach Wastewater Treatment Works if enough wastewater capacity was to be provided to support additional growth in Warkworth. Given this, the meeting had discussed the potential for WSL and the developer Classic Homes to work with CIP on funding and financing Stage 2 using the IFFA so as to be able to provide the necessary wastewater infrastructure to support Classic Homes Private Plan Change (PC93) at Warkworth South. The meeting had agreed that a meeting should be arranged with Classic Homes to discuss whether this was something that the developer would be willing to consider.
- 2. ATaylor gave an overview of Stage 2 which would add capacity for an additional 12000 population to the 18000 population enabled by Stage 1. WSL would need to undertake feasibility work to clarify the additional infrastructure required and its cost. In response to a query from JDth, ATaylor advised that this feasibility work would cost circa \$1million. SW clarified that this cost could be financed as part of any IFFA deal, assuming one proceeded. SW enquired the likely number of beneficiaries as this would impact the potential levy charged under the IFFA. The potential to include other developments was discussed, including that by Arvida and also developments being undertaken in Warkworth North.
- 3. In response to a query by JD regarding whether existing population could be regarded as beneficiaries because the network would be improved, ATaylor clarified that Stage 2 was for providing capacity for additional growth and would not be regarded as supporting existing residents or renewals. Further to this ATaylor reminded the meeting that wastewater capacity was allocated on a first come first served basis. As such, if additional density was provided in already live-zoned areas this would use up capacity first. The meeting discussed the possibility of including additional development in live-zoned areas in the beneficiary pool for any levy and it was thought this might be a possibility.

- 4. On the basis of first come first served JDth queried whether the Warkworth South PPC could use triggers as a means of ensuring development did not proceed beyond the available wastewater capacity. JB queried how much capacity remained. ATaylor advised capacity was already limited and there are very little spare for capacity for the next 20 years. Thus, if growth continued this would need to be prevented in some way. Or, new infrastructure would need to be funded and brought forward early. Noting that the timing that was set out in the Future Development Strategy shows Stage 2 being completed in 2040 to provide additional wastewater capacity.
- 5. In addition to wastewater capacity ATaylor also advised that availability of potable water to support growth was also an issue and there would need to be an analysis of this and a feasibility study done for any additional supply required.
- 6. In response to a query from SW MI confirmed that Infrastructure Growth Charges, were charged by WSL on connection of the water meter. Also, that resource consenting assessed whether there was sufficient wastewater capacity to support development. MI also confirmed that IGC's varied across the region but in the metropolitan area there was a standard charge, with variable charges in small outlying communities or towns, where there was more local variation in demand and infrastructure.
- 7. Returning to available capacity ATaylor reiterated that Stage 1 provided capacity for 18000 population and Stage 2 an additional 12000. Current population of 8000 residents in live-zoned land will also use the capacity of the 18000 capacity plant, and in addition there was additional growth anticipated in the Town Centre up to 2040. As such growth appeared to be happening more quickly than foreseen in the Future Development Strategy and as already stated if additional infrastructure was not brought forward growth would need to be slowed or halted.
- 8. SW gave an overview of the IFFA (type) solution provided at Milldale which comprised financing of \$50 million for 4000 HUE's based funded through a \$1000 per HUE levy with 2% pa escalation. SW explained that CIP played the role of a facilitator between developers, asset owners and private financial institutions. They undertake financial analysis based on the costs and beneficiaries, from which they can analyse the potential levy per HUE and whether it is deemed affordable or not. MHUD are involved early in the process and are required to provide final sign-off of the IFFA proposal before sending to Cabinet for final approval. SW confirmed that there was no double dipping between any levy and DC's or IGC's. As an example he said that Tauranga CC have had to repay some of their collected DC's because the infrastructure is now being funded through a levy.
- 9. JB commented that the infrastructure would have to be paid for in some way whether through IGC's or DC's but financing was the crucial issue for AC and WSL and that is where the IFFA legislation could provide a solution. SW also reminded the meeting that it was worth noting progress with the "Local Water Done Well" proposals being developed by the Government as a way forward for upgrading and developing water and wastewater infrastructure.
- 10. MI referred to Appendix 6 of the Future Development Strategy which provided for developers submitting PPC's to fund and finance infrastructure or put forward alternative methods for doing so that do not impact Auckland Council's financial position.
- 11. JB reiterated that this would require CIP to understand the number of beneficiaries and their nature. He enquired how many other beneficiaries there might be outside PC 93. PN advised that PC93 comprised 157 ha and there was the possibility of developers of another 75 ha wanting to join in an IFFA deal. PN stated that Classic already intended

/Users/davidwren/Documents/Work/Stuff/Work/Auckland Council General/Warkworth South/S42 Report/Appendix 6/Minutes_300424.docx

to pay for the bulk infrastructure serving their site comprising a wastewater and water pipes, a pump station, water reservoir and roading improvements. He advised that there would be three stages – the first for 2 months, the second for 12 months and the third for 9 months. He confirmed that if an IFFA deal was approved Classic would be responsible for constructing the Stage 2 infrastructure.

- 12. JDth enquired whether there was the potential for Classic to take some of the existing capacity on the basis they contracted to provide the additional capacity as required. MI said this might be a possibility but would need further investigation around growth and capacity and any pre-conditions plus the provision of infrastructure by Developers pursuant to IFFA being locked in. JD reminded PN that the estimated time from feasibility to completion of Stage 2 was 6 years.
- 13. MI advised that if this was something that WSL was to consider then a Feasibility Study for Stage 2 would need to be funded and undertaken before WSL would remove its opposition to PC93 at a hearing and an IFFA deal would need to be signed up.
- 14. JDth queried whether the developer would have input to the Feasibility Study. MI replied that WSL used its own consultants and would include the developer in discussions around the scope of the Study as well as the programme for the study, any milestone payments and would be willing to provide the developer with updates on progress.
- 15. JDth queried whether Stage 2 could be completed in stages as further capacity was required. MI replied that it would be a case of "all or nothing", although the feasibility study would confirm this. JB queried whether they could do an IFFA deal for the circa \$52 million if infrastructure Classic were already proposing to fund for the development that connects to the existing infrastructure; plus the IGC's for the bulk infrastructure required to the Lucy Moor Pump Station and based on the percentage of Stage 2 capacity that the Classic development takes up and possibly including some of the transport infrastructure. Again, MI reiterated that any discussion about this would depend on the findings of the Feasibility study. This would need to be comprehensive and would take about a year with a high level estimated cost of \$1 million. MI confirmed that the same messaging would be going to other developers in the area. He also confirmed that if it was decided to proceed with bringing forward Stage 2 then developers involved would be shown a copy of the proposal for the Feasability Study.
- 16. Based on the above discussions it was agreed that:
 - WSL would have a similar discussion with Arvida in the next couple of weeks
 - Classic would also discuss potential for IFFA deal with Arvida and other developers that were potential beneficiaries.
 - Assuming it was decided to proceed on that basis WSL would liaise with Classic, Arvida and any other developers on the scope of the Feasibility Study for both waste water and potable water
 - The feasibility study would be undertaken and MI advised it would be safer to allow 18 months for this study.
 - This would be used as the basis for any detailed costing necessary for an IFFA deal. Noting that confirming this detail and getting the developers comfortable with this could take another 9 months.
- 17. SW confirmed that CIP could impose a levy but were unlikely to do so unless this was on a small minority of developers in an area where the majority supported a levy.

/Users/davidwren/Documents/Work/Stuff/Work/Auckland Council General/Warkworth South/S42 Report/Appendix 6/Minutes_300424.docx

18. It was agreed another progress meeting could be useful in late June 2024.				

Next meeting: June 2024 tbc

Distribution List: Attendees plus AC Financial Strategy and CPO



What: Warkworth South PC93 Infrastructure Funding and Financing Meeting

Why: Meeting to discuss infrastructure needs for proposed development and how it

might be funded and financed and provided

Where: Room 5 Level 14 Albert Street

When: 1100 am 1st March 2024

Who attended: John Duthie (Tattico), Phil Nicholson (Classic Homes), Laura Harris, Campbell

Will (both Mafic Partners Ltd), Sean Wynne (Crown Infrastructure

Partners)(On Teams), Andrew Duncan, Ian Kloppers, John Dunshea (all AC)

Apologies: Nil

Minute taker: John Dunshea

- 1. PN began by confirming that Classic were committed to providing pipes, pump station, reservoir and some roading at a cost of circa \$50 million. This was beyond normal developer mitigation. However, as he understood it the there was insufficient capacity in the wastewater system without Stage 2 of the Snells Beach Wastewater Treatment Plant which was not due to be completed until 2040. He enquired what the scale and cost of this plant would be.
- 2. IK advised that WSL had advised the potential cost was \$200-\$300 million. In addition the Future Development Strategy set out transport upgrades that were required in 2020.
- 3. PN enquired what the timing of other Private Plan Changes in the area was? IK advised that there were potentially 3 or 4 other PPC's that could be lodged in the near to medium term. In addition, there was a problem with live zoned land being developed at a greater density than set out in structure plans or plan changes. This additional development was using up existing waste water capacity.
- 4. SW advised that once CIP knew the quantum of housing being developed, the scope of infrastructure required and its cost and timing, then CIP could prepare a work book which enabled them to understand the beneficiaries and the potential cost of a levy. For instance, a levy cost of \$50k a house over 1600 houses would work out approximately as a levy of \$2500 per house/HUE over 30 years.
- 5. IK/JD confirmed Structure Plan for area provided for 7500 households which included those areas live-zoned already. The potential capacity for the area with the current Stage 1 plant is 18000 people. There is a risk around how much development actually happens and when.
- 6. SW advised that CIP would not need to enter into any agreement with Classic. They would just need AC to propose that CIP work with Classic to see if an IFFA levy could be used to fund the necessary infrastructure at a viable cost. The support of other stakeholders such as local developers and landowners was also important. SW also

advised that the smaller existing land owners could defer payment of a levy (with interest) to an agreed later date.

- 7. PN/JD enquired whether any levy could be increased as infrastructure is provided. SW confirmed that a levy payment profile could be designed to increase over time as the development proceeds. The possibility of Classic subsidising the levy so as to keep it to an acceptable levy of say \$1500 per HUE was also raised.
- 8. The meeting discussed that risk around the higher yields evidenced by more 224C's requiring more infrastructure earlier because capacity of existing infrastructure was being used earlier. The assessment of this risk or the risk of development not proceeding as quickly as had been anticipated had to be assessed by the financier. More clarity would be required on development timing, infrastructure requirements, beneficiaries and also the interface between any levy
- 9. and the usual Development Contributions.
- 10. The meeting discussed how many other potential developments there were in the area current or proposed that might benefit from the infrastructure. Also, what other bulk infrastructure requirements there were to serve development in the area. PH advised that he would talk to other developers in the area to see if there was the possibility of them entering into an IFFA deal to pay for the necessary infrastructure for the area.
- 11. In response to a query from PN SW confirmed that the construction risk would lie with the developer.
- 12. The meeting concluded with agreement that AC would like CIP and Classic to investigate further the outline of a IFFA deal for the provision of wastewater and water infrastructure for the area. This would likely involve discussions with WSL. Classic to follow up with CIP and SW advised that this should be Gary Lo at CIP. Once this had been done a further meeting with AC and Watercare could be held

Next meeting: To be confirmed Distribution List: AC attendees



What: Warkworth South PPC and CIP funding and financing of wastewater and

water infrastructure

Why: Exploring potential IFFA solution for water and wastewater to support

Warkworth South PPC (PC93)

Where: Room 2 Level 14 Albert Street

When: 3.00pm – 4:00pm, 18th April 2024

Who attended: Sean Wynne, Gary Lo (both Crown Infrastructure Partners [CIP]), Amber

Taylor, Lars Fog (both Watercare[WSL]), Ian Kloppers, John Dunshea (both

AC)

Decisions and action points

Apologies: Mark Iszard Minute taker: John Dunshea

- 1. Meeting was a follow up to the meeting held on 1st March 2024 and held between Auckland Council, Classic Homes/Tattico, Crown Infrastructure Partners and Mafic Partners Limited.
- 2. IK referenced the Warkworth South PPC, PC 93 and enquired whether WSL had opposed the PC. ATaylor advised that WSL had taken a neutral approach in their submission. Not oppose subject to infrastructure being able to be provided by the developer, based on the WSL understanding of the infrastructure at the time of the submission. The submission indicated, specifically regarding the wastewater capacity, that significant additional bulk wastewater infrastructure would be required, this would require an agreement between the developers and WSL/Council on infrastructure provision being in place prior to the hearing which was only approximately 2 months away.
- 3. JD asked if ATaylor/LF could provide some context to the wastewater and water situation in Warkworth. LF advised that the construction of Stage 1 of the Snells Beach wastewater plant will be completed in mid to late 2025 (the outfall pipe was completed in 2021). This provides wastewater capacity for 18,000 people (note WSL models 3 people per HUE but StatsNZ use 2.8). The approximate cost of Stage 1 will be \$200 million.
- 4. LF advised that Stage 1 does not include capacity for the Warkworth South PC93. Already live-zoned land will take all the stage 1 available capacity. Warkworth South is intended to be serviced by Stage 2 of the Snell Beach wastewater plant which is due to commence circa 2035. Warkworth South development is identified for development in 2040 in the Future Development Strategy following completion of the Stage 2 plant.
- 5. If the Stage 2 was brought forward it would provide capacity for an additional 12000 people and cost in the region of \$100-\$150 million (unescalated). Stage 1 is envisaged to reach capacity in the mid 2030's. However, there is a lot of growth and so it is

Decisions and action points

foreseeable that the capacity could run out earlier. There is a lot of demand from developers in the area and tankering of wastewater is already taking place in the area.

- 6. ATaylor advised that WSL do not have the budget to bring forward Stage 2 any earlier and so will need financing and funding to support this, noting that this will be required to provide wastewater and water infrastructure for PC93. A new water take resource consent, associated upgrades to the existing Water Treatment Plant and the Stage 2 wastewater plant will be required, plus the bulk water and wastewater networks for servicing the Warkworth South future urban area.
- 7. Regarding the latter, PC93 developer (Classic Homes) already discussed with WSL the provision of water and wastewater connections such as pipes, reservoir and pump station (costing circa \$50 million). Noting that this is the normal developer mitigation.
- 8. SW enquired who would be receiving the financing. IK confirmed that this would be to the developer who would be responsible for constructing the Stage 2 infrastructure in accordance with WSL's design and specification. The construction risk would be with the developer.
- 9. ATaylor noted that the timing of development would be important in assessing what beneficiaries would pay an IFFA levy. There were existing developments that might be considered to pay and levy.
- 10. JD enquired whether the provision of Stage 2 could be seen to benefit the wastewater network for Warkworth as a whole and thus whether the beneficiaries could be seen as more than just the current and future developments. JD referenced the Sludge Plant example in Wellington. AT said that whilst the whole network would benefit it was really a growth issue. That is the existing residents had already paid IGC's for their connections. The bringing forward of Stage 2 would therefore be a growth/capacity issue and those that benefited from that should pay.
- 11. GL enquired when work on Stage 2 could commence. LF responded that Stage 1 was due to be completed mid to late 2025 and Stage 2 could start thereafter. This was dependant on whether land was required to be purchased and any negotiations around that. In addition, the usual feasibility study, business case and resource consent process would need to be undertaken. Resource Consent could take 2 years if appealed.
- 12. LF advised that from feasibility to commencing operations at the Stage 2 plant would take 6 years at least. This excluded any delays associated with any land purchases.
- 13. LF noted that PC93 would bring forward the planned timing of Stage 2 considerably from 2035 and given the above time frames the work on Stage 2 would need to begin very soon. It PC93 was live-zoned now there would be a significant problem with water and wastewater until Stage 2 was completed. One possible solution might be triggers preventing development until Stage 2 was complete.
- 14. GL enquired how much capacity PC93 would take up. IK advised that the projected residents was circa 4500 (1433 HUE's). This was in relation to the Stage 2 capacity of 12000residents. There are already other developments lined up. Within the last week the Patersons Farm PPC had been lodged. This has a population forecast of 6000 and would also use Snells Beach Stage 2. So demand is increasing but there are also more beneficiaries. But if growth like this continues it will need to be reflected in the Future Development Strategy.

Decisions and action points

- 15. GL enquired how this was impacting on the Infrastructure Growth Charges charged by WSL and paid on connection? ATaylor advised that cost Stage 2 not currently costed or incorporated in IGC's. GL said would need to understand how an IFFA levy compared with IGC's.
- 16. ATaylor advised that PC93 developers had asked for some costs for Stage 2. However, these can't accurately be provided until a Feasibility Study is done. However, these are costly and currently WSL don't have the budget for the feasibility. As such any funding agreement would need to include the cost of undertaking the Feasibility Study, Business Case and Resource Consent. SW advised that this cost could be included in the financing package for the infrastructure, enabling the developers to pay for the work and for the cost to be recovered as a part of the levy. IK noted that construction costs were currently increasing for infrastructure projects at a rate of 18% pa.
- 17. ATaylor/LF/IK noted that the number of houses actually being built was consistently and noticeably higher than what was indicated in Structure Plans or Plan Changes. This was causing a problem with growth estimates and planning infrastructure requirements. [Note: this has also been confirmed by ATaylor and is a problem across the region].
- 18. GL/SW agreed that this is an infrastructure project that CIP would be willing to look at to see if it could be funded and financed through the IFFA. They advised that they would prepare a "work book" analysing the cost and beneficiaries/no. of houses; the potential levies and get an understanding of whether the levy was viable from a development viability point of view.
- 19. They would then work with the developer and the Banks to devise an acceptable levy.
- 20. IK raised the issue of the AT costs for infrastructure to support housing development in this area. He considered and SW/GL agreed that it would be worth getting a better understanding of these and whether they could be included as part of the IFFA discussions. IK advised the AT costs were circa \$450 million.
- 21. Returning to the PC93 process and timing IK advised that s.42a report was now being drafted. AT advised that WSL's approach had been neutral and subject to a feasible solution to providing the Stage 2 infrastructure. However, in light of the recent Letter of Expectations from the Mayor regarding conformity with the Future Development Strategy WSL would work alongside AC and AT in responding to PC93 which could mean opposing unless a satisfactory infrastructure funding agreement can be reached before the hearing.

Next Steps

- 1. Meeting between AC, WSL, CIP and developers
- 2. Meeting with AT, WSL and CIP to get an understanding of the combined infrastructure requirements
- 3. Given s.42 currently being prepared and continue to work on infrastructure funding up to the hearing

Note: following the meeting Watercare Service Limited made the following additional comments when reviewing the minutes:

Noting that all costs so far discussed are very high level estimates and cannot be confirmed until feasibility studies are complete.

Required infrastructure comprises:

Decisions and action points

- Stage 2 WWTP upgrade
- New water take consent
- WTP upgrades
- Bulk ww networks to connect Warkworth South to the new Lucy Moore WWPS (applicant's proposal is considered acceptable)
- Bulk water networks as per Watercare's bulk water servicing strategy for the wider area (where the Applicant's alternative proposed solution is not proven to be feasible)

Next meeting: 30th April – with AC, WSL, CIP and Classic Homes

Distribution List: Those in attendance.



Crown Infrastructure Partners Ltd
L10 PwC Tower 188 Quay Street
Auckland Central
PO Box 105 321, Auckland 1143
Telephone: +64 9 912 1970
info@crowninfrastructure.govt.nz
www.crowninfrastructure.govt.nz

To Whom it May Concern

Crown Infrastructure Partners Limited (**CIP**) has been in discussions with KA Waimanawa Limited Partnership and Stepping Towards Far Limited on a possible Infrastructure Funding and Financing (**IFF**) solution for their planned development at Warkworth South.

We understand that the infrastructure projects will enable 1,600 dwellings in the area.

Discussions to date have been positive, and we look forward to progressing the following details of a possible IFF solution with the group:

- 1. Understanding the likely timing of the development as this will then enable a proper needs and benefit analysis to be completed;
- 2. Understanding the Council view on the infrastructure required and whether they support the development; and
- 3. A full beneficiary analysis, including the likely quantum and commencement date of an IFF levy.

CIP looks forward to advancing this project with the group. Ultimately the successful completion of any IFF transaction will require the support of key stakeholders, the approval of the CIP board, approval by CIP's Shareholding Ministers and the Minister of Finance and in particular the positive recommendation of Ministry of Housing and Urban Development as Recommender to the IFF Minister, approval by the IFF Minister and the support of Cabinet in enacting the Order in Council for an IFF Project.

Yours sincerely

Sean Wynne

Deputy CEO

Crown Infrastructure Partners Limited



Attachment 1

Warkworth wastewater scheme update and how Watercare is managing new wastewater connections in the area

For information report to the Watercare Board dated 18 April 2024

Te pou whenua tuhinga / Document ownership

Prepared byRecommended and submitted byMark IszardPriyan PereraHead of Major DevelopmentsHead of Strategy and Planning

1. Te tūtohunga / Recommendation

We recommend that the Board **notes** that due to existing wastewater treatment plant capacity constraints in Warkworth, and the continuing growth and development in the Warkworth township, Watercare will adopt the following short to medium term control measures:

- Development with an approved and valid Resource or Building Consent, that was previously supported by Watercare, will continue to be granted approval to connect to the existing Warkworth Wastewater Treatment Plant (**WWTP**).
- New Resource Consent applications will only be supported by Watercare if they include conditions restricting the connection to the network until after the Warkworth Wastewater Scheme has been commissioned and flows into the existing WWTP have been transferred to the new Snells Beach WWTP (due mid to late 2025).
- Planning and operations will continue to identify and implement interim treatment interventions for the existing Warkworth WWTP to mitigate the compliance risk associated with the acceptance of the additional connections that have already been supported by Watercare. The success of these interventions is not certain and will be solely focused on mitigating the impact of the known, additional connections to be granted.
- \(\Sigma\) Anticipated additional connections to the existing Warkworth WWTP, based on Building Consent data, are understood to be in the order of 127 dwellings.
- Notwithstanding the delivery of the Warkworth Wastewater Scheme before the end of 2025, growth in the North of Warkworth will continue to be assessed on a case-by-case basis until the North-west Growth Servicing Pipeline is completed (date not currently known).

Additionally, we recommend that the Board notes:

- That there are significant network constraints scheduled to be addressed through the delivery of new wastewater network assets (the Northwest Growth Servicing Pipeline). A key constraint is the Elizabeth Street Engineered Overflow Point (EOP), which operates/overflows during minor rainfall events (i.e. 35 wet overflows over the last 12 months). These constraints limit Watercare's ability to meet the growth expectations associated with areas to the north of the Mahurangi River.
- The risk associated with possible deferral of the Northwest Growth Servicing Pipeline through the Long-Term Plan reprioritisation this may be required to stay within the currently approved investment profile. This pipeline will connect the live-zoned area north of the river shown as orange in Figure 1 below, through the Warkworth Town Centre to Lucy Moore Wastewater Pump Station (WWPS). This pipeline is required to enable growth of the area north of the Mahurangi River.
- \(\Sigma\) Whilst this report focuses on impacts of the wastewater servicing constraints on the short to medium term growth of Warkworth, for completeness commentary on the drinking water servicing has been included.
- \(\Sigma\) A new water source will need to be identified and consented to support Warkworth if the population growth rate exceeds Watercare's current growth planning, which is aligned to the Auckland Council Growth Scenario.

This report will be shared with key stakeholders and partners, including Auckland Council, the Rodney Local Board, Mana Whenua, the local community, developers, and other key stakeholders. A communications plan has been prepared for this purpose.

2. Whāinga / Purpose

- \(\Sigma\) Provide an update on the wastewater treatment and network capacity constraints that we are currently experiencing in Warkworth.
- Describe Watercare's approach to meeting the short, medium, and long-term future wastewater servicing needs for Warkworth (and Snells Beach/Algies Bay).
- Σ Update on the status and challenges of the Warkworth/Snells-Algies Wastewater Servicing Scheme.
- Σ $\;\;$ Summarise the proposed water and wastewater servicing strategy for the Warkworth area.

3. Ngā korero matua / Key points

- \(\Sigma\) Watercare developed its water and wastewater servicing approach for the Warkworth, Snells Beach and Algies Bay communities based on Auckland Council growth projections established at a point in time. Consents have been sought and granted based on these projections. Since then, the growth projection for Warkworth has increased significantly, exacerbating the complexity of delivering infrastructure to meet consumer demand in these communities.
- ∑ Ongoing changes and updated versions of growth scenario projections for satellite townships such as Warkworth will continue to pose significant challenges to Watercare's ability to consent and deliver significant new and upgraded infrastructure to meet evolving servicing expectations.

- Delays in the delivery of the Warkworth/Snells-Algies Wastewater Scheme, including the Northwest Growth Servicing Pipeline, are significantly impacting proposed development within recently live-zoned land in Warkworth. Investigating and securing a pipeline route through the Warkworth town centre has been underway for several years. There is strong community feedback over disruption concerns in the main shopping street during construction. We are now finalising the optioneering which will identify the best practicable route alignment from Hill Street to Lucy Moore WWPS. We will be meeting with One Mahurangi (a local business and developer community advocacy group) once a full analysis of all options has been completed and a recommendation has been prepared for the Watercare executive on the Best Practicable Option.
- Smaller, infill development from the existing urban area has continued to connect to the existing Warkworth WWTP. This has now reached a point where we are at or exceeding the capacity of the existing Warkworth WWTP to process wastewater to the quality required under our discharge consent.
- Ye use the most up to date population data from Auckland Council (currently Auckland Growth Scenario version 1 (AGSv1)) when carrying out our growth demand planning.
- Private Plan Changes and Resource Consents for developments in Warkworth are proposing much higher yields than anticipated under AGSv1. We are working with Auckland Council to proactively understand the likelihood and impact of these developer growth expectations on our water and wastewater servicing approach.
- \(\Sigma\) If these higher developer yields in Warkworth are realised, wastewater infrastructure capacity will become the significant limiting factor for growth in Warkworth.
- \(\Sigma\) Water supply headworks and groundwater bores, which was planned to service a population of up to 16,000, have been in operation since 2018.
 - A Water Treatment Plant (WTP) process expansion upgrade (scheduled in the Asset Management Plan for between 2026 and 2031) is required to meet the demand associated with a population equivalent of 16,000 in Warkworth.
 - o An additional water source will be required in the future once the population exceeds the capacity of the current abstraction consent.

4. Kōrero pitopito / The details

Current growth situation for Warkworth

Currently, wastewater growth servicing in Warkworth can be considered as three distinct areas based on Unitary Plan zoning and the nature of the existing wastewater constraint. These areas are shown in the map below (Figure 1).



Figure 1: Warkworth wastewater growth projects

Area categories:

Live-zoned area south of the river as shown in lime green

- Σ Current live zoned land that can be developed for urban purposes under the Unitary Plan.
- Σ Development restrictions are linked to the capacity of the existing Warkworth WWTP.
- No new Resource Consents from this area will be supported by Watercare, unless they include conditions that restrict connection to the wastewater network until after the new Snells WWTP is commissioned.

Live-zoned area north of the river as shown in orange

- Σ Current live zoned land that can be developed for urban purposes under the Unitary Plan.
- \(\Sigma\) Development restrictions are linked to the capacity of the existing Warkworth WWTP and the Elizabeth Street EOP.
- No new Resource Consents from this area will be supported by Watercare, without conditions that restrict connection to wastewater network until the new Snells WWTP is commissioned and the Northwest Growth Servicing Pipeline is completed.

Future Urban Zone Land shown in pink (in the east, west and south)

\(\Sigma\) Un-serviced for water and wastewater until rezoned through a Plan Change Process in accordance with Auckland Council's Future Development Strategy.

Development with an approved Resource or Building Consent that is expected to connect to the existing Warkworth Wastewater Treatment Plant

a) Building Consents

Building consent data from Auckland Council, refer <u>Table 1</u> below, indicates there are approximately 147 Building Consents either approved or currently being processed by Council's regulatory team. This 147 includes 20 Building Consents for a development north of the river which has an approved alternative wastewater servicing agreement (tankering) and will therefore not be connected to the existing Warkworth WWTP.

Of the remaining 127 Building Consents, 22 are currently with Council for processing, 23 are approved with construction yet to commence, 61 are under construction, and 21 are completed construction and awaiting a Code Compliance Certificate. Given Building Consent and construction timeframes, it would be reasonable to expect that these 127 Building Consents, equivalent to 127 dwellings, will connect to the existing Warkworth WWTP prior to the commissioning of the new Snells WWTP by mid to late 2025. Connection of these 127 dwellings will increase wastewater flows to the Warkworth WWTP.

Table 1 – Auckland Council Building Consent data

Building Consent Status	Potential number of additional connections to the existing WWTP by end of 2025	Comments
Lodged	22	Lodged with Council and currently being processed
Approved but construction not started	23	Consent approved but first inspection not yet called for
Under construction	61	Active building site
Awaiting CCC (Code Compliance Certificate)	21	Final documents being reviewed by Council before issuing Code Compliance Certificate
Total	127	

The number of Building Consents that have been issued CCC but are yet to apply to Watercare for a connection is currently unknown. Watercare are working with Auckland Council to understand the number of Building Consents at this stage in the development process.

b) Resource consents

The number of dwellings with an approved Resource Consent, which has been supported by Watercare (but which are yet to apply for a Building Consent) is currently unknown. Watercare is working with Auckland Council to better understand the number of Resource Consents at this stage in the development process.

Development dependent on the North-West Growth Servicing Pipe

A large portion of the live-zoned land in the North of Warkworth was live-zoned as part of the Unitary Plan process in 2016 and via subsequent private plan change processes (PC 25 Warkworth North operative in Dec 2023, and PC 40 Warkworth – Clayden Road operative June 2021).

The timing of this land being developed was planned to be aligned with the expected completion of the Warkworth wastewater scheme and the northwest growth servicing pipeline. However, delays to the completion of the northwest growth servicing pipeline have impacted developers' anticipated programmes for the delivery of housing and commercial development.

The northwest growth servicing pipeline will enable the development of approximately 8,000+ dwelling unit equivalents. That is comprised of approximately 6,000 dwellings across the residential areas and approximately 60 ha of commercial activities across the industrial areas. This quantum of development is anticipated over a 30+ year horizon.

Future Growth Forecasting and Planning

Through development of Watercare's Servicing Strategy for Warkworth the following growth forecast has been established and overlaid with the available wastewater treatment plant capacity. Historically, consents have been obtained for bulk water and wastewater infrastructure required to meet the Auckland Council population forecast. Evidence for the consents included population forecasts suitable for the life of the consent. Broadly, the Auckland Region growth rate has been 2.5-3% over the last 10-15 years, and historically Warkworth has been consistent with this average growth rate.

Watercare continues to utilise an adaptive planning framework to allow us to plan for and respond to higher or lower growth numbers than anticipated in the Council's growth scenario. This is necessary due to the higher density of growth that we are seeing in recent private plan changes and resource consents in Warkworth. If this density continues then it is expected that the Warkworth population may reach up to two to three times that anticipated by the AGSv1.

Watercare's approach has been to, where practicable and funded appropriately, enable growth to progress based on known development densities which inform future demand. Should the growth expectations exceed what has been forecast, Watercare has the option to implement connection control measures, i.e. opposing plan changes and/or resource consents.

Growth forecast	Wastewater Servicing	Timing
	The existing Warkworth and Snells-Algies WWTPs combined can service up to 11,000 people. The basic design capacity of these facilities was exceeded in 2018. Minor upgrades and operational interventions are in place to address current risks.	Capacity exceeded in 2018 (Historical Growth)

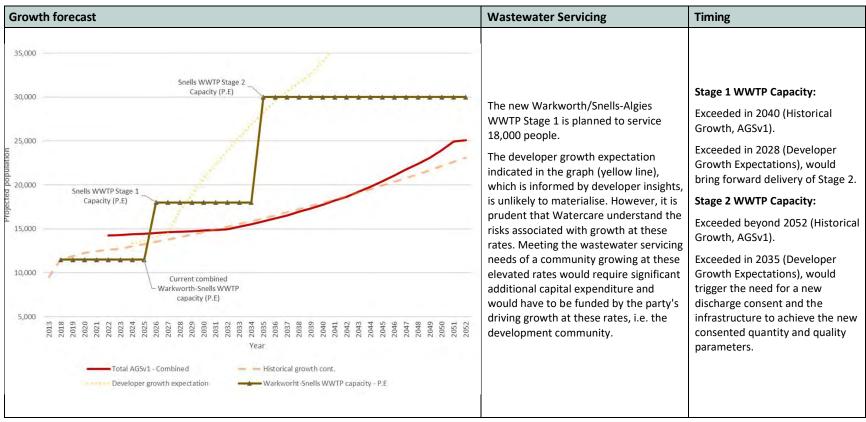


Figure 2:1 Warkworth Growth Forecast and Wastewater Servicing for Warkworth/Snells-Algies

Future development strategy

The Future Development Strategy (FDS) recently released by Auckland Council sets out the anticipated timing for the planned future growth areas in Warkworth as shown in Figure 3 below. The timings for these areas to be developed have considered the necessary infrastructure upgrades needed to support this growth and signals when and where Council wishes to invest in growth across the wider Auckland region. Watercare strongly supports the direction and intent of the FDS and utilises the projected timing for the development of these future areas in our long-term planning to support growth through our Asset Management Plan (AMP) and servicing strategies. Furthermore, through our involvement and submissions to Private Plan Changes

received by Council it is expected that Watercare (and Auckland Transport) should support Auckland Council in rejecting and/or submitting in opposition to Private Plan Changes that do not conform with the FDS.

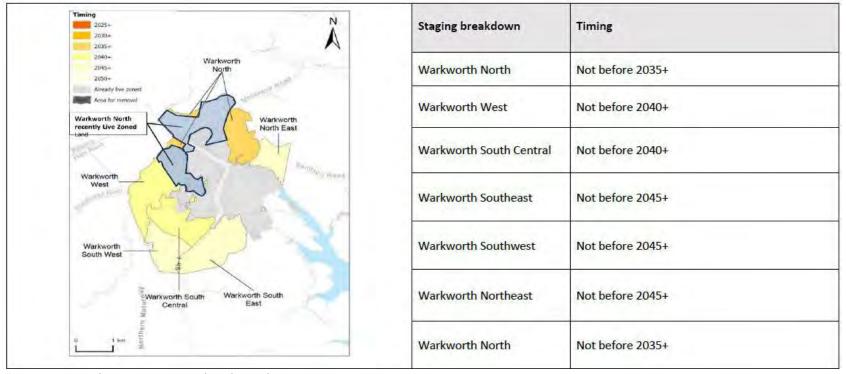


Figure 3: Future Development Strategy - Warkworth Growth

Drinking Water Servicing Approach for Warkworth

Warkworth currently receives drinking water from a new water treatment plant (WTP) and groundwater abstraction bores, which were completed in 2018 to replace the old treatment plant and water take from the Mahurangi River adjacent to SH1 (State Highway 1).

New and upgraded trunk and local networks providing water for the planned growth in Warkworth will be sized to meet the forecast yield and demand from the most recent Auckland Growth Scenario (currently AGSv1).

The below figure 4 describes the current water supply approach to growth. The uncertainty associated with growth forecasts, as with wastewater servicing, poses a future risk.

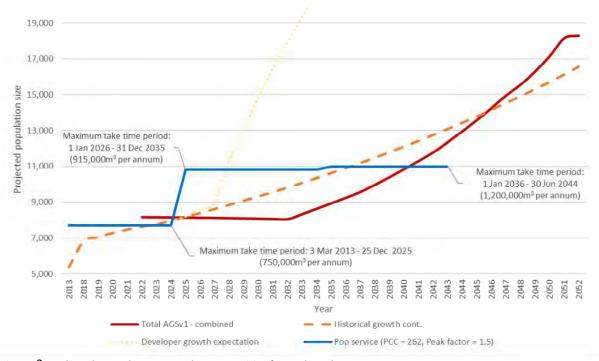


Figure 42 Warkworth Growth Forecast and Water Servicing for Warkworth

Water Headworks

A new WTP at Sanderson Road and an associated groundwater abstraction bore at Hudson Road were consented, completed, and commissioned in late 2018 to support a total population of 16,000 people in Warkworth. The WTP has been planned and designed with provision for future capacity extensions to cater for the anticipated longer-term growth.

Since the time of securing the water take consent, Warkworth's per capita water consumption has increased to 262L/p/d. Allowing for a peaking factor of 1.5, the maximum allowable abstraction of the existing take consent will provide for approximately 11,000 people. At the current AGSv1 forecast, it is anticipated that the consent abstraction limit will not be exceeded until around 2040, if no significant wet industry connected to the public water network develops within the Warkworth area.

An additional groundwater source and abstraction consent will be required before the existing take consent population limit is reached to secure the necessary water take to service the long-term planned growth for Warkworth.

Water Network

Additional reservoir storage will be required to enable the WTP to operate at a consistent throughput and to provide security of supply to customers. Watercare is currently talking to landowners about requirement for the reservoir in the northern zone.

Warkworth/Snells-Algies Wastewater and Water Planning Background

Table 2 below describes the timeline of activities associated with Watercare's approach to delivering water and wastewater services to the Warkworth and Snells-Algies Bay Communities. **Error! Reference source not found.** on page 4 depicts the Warkworth/Snells-Algies Wastewater Servicing Scheme components.

Table 2 Timeline of planning activities

Timing	Population Serviced	Milestone/Action	Delivery Schedule Issues/Impact
2012	16,000 by 2044	Water Take consent granted to abstract ground water from the Warkworth Kawa Aquifer, replacing the former Mahurangi River drinking water source which was known to have significant quantity and quality issues.	None.
2016		The Auckland Unitary Plan Operative in Part 2016 (AUP(OP)) zoned around 1,000ha of rural land around Warkworth as Future Urban. This land is intended to cater for greenfield growth around Warkworth.	
2017	30,000 by 2052	 Warkworth/Snells-Algies Discharge Consent Granted. This consent was based on the following Wastewater Servicing Scheme: ∑ A single discharge location to service the Warkworth and Snell/Algies Beach Communities – the Snells Beach Outfall ∑ A single WWTP at Snells Beach to treat wastewater produced by the Warkworth and Snell/Algies Beach Communities. ∑ A Pump Station (the Lucy Moore Memorial Park Wastewater Pumpstation) to pump wastewater from the Warkworth Community to the Snells WWTP. ∑ A transfer pipeline that would convey wastewater from the Lucy 	None.

Timing	Population Serviced	Milestone/Action	Delivery Schedule Issues/Impact
		Moore Memorial Park Pump Station to the new Snells WWTP. ∑ The decommissioning of the existing Warkworth WWTP and its local discharge to the Mahurangi River by March 2022 (now extended to 2025). ∑ Required the infrastructure to achieve these outcomes by 2022 (now extended to 2025). NB: The WWTP construction was to be staged, with upgrades being completed prior to growth related demand.	
2018	10,000	Warkworth Wells Drinking Water Treatment Plant Commissioned (Stage 1 – 3 million litres per day (MLD) / 750 million litres maximum annual abstraction).	Delivered 12 months behind schedule. Minor Supply Demand Balance impact that was managed through the tankering of water to Warkworth during peak demand periods.
2018		The Auckland Plan 2050 identified Warkworth as one of six spatial priority nodes for growth. The supporting Future Urban Land Supply Strategy 2017 indicated an increase of around 7,600 dwellings within the 30-year time horizon of the plan, equating to an increase in population of around 23,000 people. This was in addition to significant business growth proposed.	
2019		Auckland Council adopted the Warkworth Structure Plan which identifies that Warkworth will grow from a population of around 5,000 to around 25,000-30,000.	
Mar 2021	30,000 by 2052	Snells Outfall completed.	Completed ahead of the other components of the Warkworth/Snells-Algies Wastewater Servicing Scheme.
Sep 2021	28,000	Transfer Pump Station Construction Commences. Construction on the new Lucy Moore Memorial Park Wastewater Pump Station commences.	On schedule, completion June 2024.
2021	30,000 by 2052	Discharge Consent Extension Granted. The design and construction of this scheme was extremely complex, and this complexity was not effectively recognised or accounted for during the initial discharge consenting process. The timeframe for the new discharge quality parameters was extended to March 2025. The continued operation of the Warkworth WWTP was also extended to March 2025. The existing Warkworth WWTP will need to be decommissioned and its local discharge to the Mahurangi River ceased by March 2025.	Extension Granted until March 2025
Dec 2021	18,000	Construction of Stage 1 of the WWTP commenced.	Mid to late 2025
2022	52,000	New Transfer Pipeline Alignment Consent Granted. Due to cost and community concern associated with traffic disruptions with the consented	18 months added to Transfer Pipeline Delivery Schedule.

Timing	Population Serviced	Milestone/Action	Delivery Schedule Issues/Impact
		Transfer Pipeline alignment, Watercare modified the scheme to include a tunnelled pipeline from the Lucy Moore Pump Station to the Snells WWTP.	
Feb 2022		Presentation to local board on the town centre portion of the Growth Servicing pipeline raised questions on local business impact as well as if alternative options had been investigated. The board specifically requested that an option be investigated for feasibility which would run along the riverfront and be covered by a boardwalk. They also suggested engagement with the One Mahurangi business association for local business engagement. Following this feedback a presentation was made to One Mahurangi which raised their serious concerns about impacts on local businesses. This commenced further investigation into alternate options given feedback received of a lack of support if no alternatives were considered. A range of alternatives were then investigated, the boardwalk option quickly ruled out as not feasible due to height requirements of the gravity assets. Feedback was received during this process which continued to emphasise a lack of support for a route through Queen St due to business impact. As feedback from other affected parties was considered, along with other project facets, feasibility was able to be refined, however this took considerable time to ensure all aspects such as environmental impacts, operability and lifetime cost were considered along with community impact.	Further detailed investigations extended the feasibility process resulting in optioneering being completed in May 2024.
Nov 2022	52,000	Transfer Pipeline Construction commenced.	Mid to late 2025
2024		Auckland Council's AGSv1 is released. The new scenario, which aligns with the new land release timing of the FDS, anticipates 18,000 population equivalent for Warkworth by 2052.	

Warkworth/Snells-Algies Wastewater Scheme Current Status

Project	Progress description	
WW0001091 Snells WWTP	The New WWTP is expected to be commissioned mid to late 2025 and will service up to 18,000 people.	
Upgrade	The images to the right show the inlet works of the New Snells WWTP, while the existing Snells WWTP ponds are situated behind it.	
	The Control building, Membrane Bioreactor (MBR), and Activated Sludge Reactor (ASR) process tanks extend to the backleft along the narrow site.	

Project	Progress description	
WW0001047 Warkworth to Snells Transfer Pipeline	The transfer pipeline works are progressing well. Favourable ground conditions are allowing the tunnel-boring machine to operate at rates faster than anticipated. The photograph depicts one of the tunnel-boring machine shaft locations.	
WW0001113 Warkworth Growth Servicing (Northwest Growth Servicing Pipeline)	This project is under considerable time pressure. To improve delivery efficiency the work has been divided into two packages. The northern section of this pipeline is progressing through design and will move to construction ahead of the southern section. Delivery of the southern section of this pipeline is complicated by crossing the Mahurangi River and the potential contruction impacts on the Warkworth Town Centre. Optioneering associated with this portion of the Growth Servicing Project is due to be completed in May 2024.	Warkworth Rorth Branch Sewer Interim Network Upgrade Indicative Warkworth South Branch Sewer

Project	Progress description	
Wastewater System Renewals	In addition to the Warkworth Wastewater Scheme referred to above, Watercare has been implementing the Warkworth Wastewater Rehabilitation Project to help to reduce wastewater overflows and improve water quality in Warkworth.	Planned works 5-mg-pt
	The recently-completed project involved the rehabilitation of 75 manholes and relining of 5.9km of wastewater pipes. This will reduce infiltration into our network and reduce the frequency of wastewater overflows to the environment. Works within the area outlined in the map to the right have been completed.	Nort Road Wantworth School Rul Street Shoesmith Street Shoesmith Street

5. Ā muri ake nei / Next steps

Key next steps include:

- Σ Implement communications plan associated with this course of action.
- \(\Sigma\) Implement growth management measures, namely the inclusion of conditions regarding the fact that no service will be provided until the completion of the Warkworth/Snells-Algies Wastewater Servicing Scheme.
- Σ Ensure absolute alignment with the Future Development Strategy is maintained.
- \(\) Commence conversations regarding funding of growth which is outside of the Future Development Strategy, with Auckland Council and other relevant parties.







29 May 2024

David Wren & Peter Vari Auckland Council

Dear David/Peter

Warkworth South Plan Change - Infrastructure

Thank you for your time last week to talk through the issues regarding Warkworth South.

I appreciate your feedback that the work on preparing the report on Plan Change 93 is advancing. You advised that from the preliminary work, at this stage are not aware of any significant issues other than water and wastewater infrastructure, but you will identify those to us should they arise. This statement acknowledges that there are also a number of refinements that you are likely to be recommending to the plan change as part of your report.

The purpose of this letter is to set out the applicant's position on the one remaining significant issue that you have identified, which is water and wastewater infrastructure.

We hesitate to remind you of your obligations under the RMA to avoid unreasonable delay and to exercise your functions promptly. Matters of the adequacy of infrastructure are matters to be determined at a substantive hearing and cannot delay the setting down of the hearing.

The applicant will comprehensively address water and wastewater infrastructure servicing in the expert evidence to be presented before Independent Hearing Commissioners to demonstrate that there are viable options for servicing the development, and that the plan provisions require infrastructure prior to occupation. There is no reason that this issue, or any other matter, should delay the setting down of a hearing for this application. Accordingly, we request that you contact us as soon as possible to arrange a suitable date for a hearing.

We have set out below the issues to deal with water and wastewater supply in the plan change area.

1. Plan Change provisions

The plan change zones the vast majority of Warkworth South plan change area into Residential Single House, Mixed Housing Urban, or THAB or Business Local Centre zones. There is a small amount of land zoned Residential Large Lot which the plan contemplates as being able to self service in terms of water and wastewater. That is the intention of this plan change. However, all the development land within the Residential Single House, Mixed Housing Urban, THAB and all the Business land requires full infrastructure (including water and wastewater) prior to occupation. This is set out at Rule IXXX .6.9 of the plan change. For the avoidance of doubt, in this statement we are excluding the Morrisons Orchard. This is a heritage orchard retained as such and with different characteristics and infrastructure requirements.

Development which fails to meet this rule is a non-complying activity.

There is no debate that the applicants understand and agree that people cannot live in housing or businesses cannot operate, without a reticulated water and wastewater system. The plan provisions reinforce this.

2. Potable water

Warkworth South currently provides for a water reservoir system sized to fully service the plan change area. As part of the development, the applicant will build the reservoir and the reticulation network. The proposal includes costs to build the trunkline to the reservoir.

Watercare have indicated that they do not believe there is sufficient capacity for water within the current supply and treatment plant. There are therefore two options promoted by the applicant.

- (a) First is that the applicant will seek a water take consent to establish a bore within Warkworth South, treat the water and then pump it to the water reservoir to circulate through a local network as per the current system.
- (b) The second option is to be part of a process to fund Watercare independent of ratepayer funding, to augment the Warkworth water supply network such that Warkworth South can be serviced.

This plan change does not need to determine which option is used. It simply needs to demonstrate that:

- (i) no development is occupied until such time as there is a potable water supply (other than in the Large Lot self-contained lots); and
- (ii) there is at least one viable option to achieve this.

Earthtech have undertaken detailed analysis on behalf of the applicant to determine the capacity within the aquifer. That has identified there is full capacity to extract water for potable water supply to Warkworth South. A water take consent has been applied for and is being worked through. If granted, this will give one definite solution for water supply, with obviously a second alternate option available if the Watercare expansion proceeds.

3. Wastewater

The plan change as notified includes the local reticulation of wastewater to a central pump station with a rising main from that pump station to the top of McKinney Road and then for a gravity feed down into the Warkworth Central pump station. Thereafter it joins the current public system with a rising main to the Snells Beach Wastewater Treatment Plant and through to the ocean outfall.

It is fully agreed by Watercare that all the wider network inground infrastructure and pump stations have been sized and are appropriate for servicing the current Warkworth urban area, plus Warkworth South. The issue is whether there is a lack of capacity at the Snells Beach Wastewater Treatment Plant itself. That treatment plant is able to service 18,000 people which Watercare considers would service the existing developed area, and currently residentially zoned portions of Warkworth; but could not service further.

As for potable water, the applicants agree that, again with the one exception of the Large Lot Residential, houses/businesses cannot be occupied until there is a reticulated wastewater network.

Again, two options exist:

- (a) a fully independent system servicing Warkworth South; or
- (b) an expanded wastewater network at the Watercare plant, but at no financial impact on Auckland Council's rating base.

These options do could include utilisation of underutilised capacity in the plant until such time as the upgrade / alternative capacity is required

The applicants have had work undertaken on the ability to establish a plant to service Warkworth South. This could be an MBR plant or similar high quality technology. That highly treated wastewater would therefore be disposed of to land but obviously eventually flow through wetlands and enter a combination of groundwater and the headwaters of the Mahurangi.

The alternative is to fund Watercare to upgrade their plant.

4. IFF option

The applicant, amongst others, has been in discussions with Auckland Council (Major Developments department) and the Crown Infrastructure Partners (CIP) group, over the option for Infrastructure Financing Fund(IFF) procedures for Warkworth.

Warkworth has the benefit of being a standalone self-contained urban area.

Watercare have given preliminary indications that an upgrade to the Snells Beach Wastewater Treatment Plant so that it can service up to 30,000 population (which would cater for the live zoning of the entire Structure Plan area) is in the order of \$200-300 million. They say the feasibility study is in the order of \$1 million.

Watercare have also stated that in their view there needs to be a single next stage to lift the capacity of the Snells Beach Wastewater Treatment Plant from 18,000 to 30,000; and are not wanting to get a sub-staged approach to lift capacity proportionately, i.e. they are not interested in providing a solution for Warkworth South only, they would want a solution to service all of Warkworth.

Demonstrably the applicants cannot fund a \$200-300 million project nor should it be expected to when that figure is to serve all growth in the area. However, if this is a programme under IFF, which would have a broader base of contributors and the applicant's contribution would be proportionate to the Warkworth South growth relative to the broader area (20-25%), then this does become an option.

CIP have indicated an interest in the project, subject to working through the detail. They have also indicated that they would be looking for a few of the key developers to embrace the programme; but recognise that it does not need to be all parties. The nature of the legislation is that, once imposed, it is effectively operates similar to a special rating district.

The Major Developments team have indicated their preference to talk initially to the other prospective parties in Warkworth. The applicants will also talk to their fellow development colleagues in the Warkworth East and portions of the Warkworth North areas. This could take some time to resolve. In the meantime, our client is entitled to have its plan change heard on the basis of the options above.

The applicant fully understands and accepts the Council's position that its debt ratios are fully maxed out and it does not wish to compromise this by raising further debt. Consequently, the water and wastewater solution needs to have no or minimal impact on the Council's financial position.

Both scenarios outlined above achieve that objective. Both become valid options.

5. Plan Change timing

The applicants believe they have provided all additional information the Council requested to complete the plan change officers report. As stated, it is understood the one remaining issue is water and wastewater. We make the following points in relation to that issue:

(a) No homes can be occupied until such time as there is reticulated water and wastewater system (excluding Large Lot Residential).

- (b) The applicant will demonstrate that there are viable solutions to resolve this.
- (c) Those solutions will be worked through at resource consent stage, but this plan change application is put forward on the basis that there are two viable options (independent water and wastewater treatment or an expanded Watercare system using IFF instruments).
- (d) The plan change is clearly set up so that development cannot proceed until there is a resource consent for the subdivision and/or development. It is at the resource consent stage that the detail is worked through. If the applicant or applicants cannot demonstrate that they have solved infrastructure, then no subdivision resource consent is granted and therefore development cannot proceed. The risk sits with the landowner, not the Council.
- (e) It is fully accepted that these are valid issues that will need to be worked through and tested through the hearing process.
- (f) Wastewater technology such as MBR plants are well proven internationally and in New Zealand. They demonstrably provide a high quality of effluent suitable for land or estuary discharge. They are proven to work at various sizes, including that appropriate to Warkworth South.

Happy to discuss. Otherwise, we look forward to receiving advice of the hearing date.

Yours faithfully

J. Duthre

John Duthie

Tattico

Ian Smallburn

@ Mallbur

Tattico

David Hay

Osbornehay

David Hay

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

Monday, 22 April 2024 (updated 26/6/24)

To: David Wren Policy Planner, Auckland Council

From: Steve Cavanagh Regulatory Engineer

Subject: Private Plan Change – PCxxx xxx– XXXX Assessment

1.0 Introduction

1.1 I have undertaken a review of the private plan change, on behalf of Auckland Council in relation to general engineering and infrastructure effects.

[My qualifications are NZCE (Civil). I have provided Specialist input to the Regulatory department of Auckland Council since 2011 which has included input to four plan changes in the Warkworth area. I have in excess of thirty years' experience in the roading construction and maintenance; stormwater & wastewater design and supervision areas of Engineering.]

- 1.2 In writing this memo the following reports and information were considered as part of the assessment:
 - Infrastructure Report by Maven;
 - Stormwater Management Plan by Maven;
 - Geotechnical assessment by CMW.
 - Geotechnical by LDE.
 - Traffic management report by Traffic Planning Consultants,

Note: The above reports reviewed in brief only as they are covered by other Council appointed Specialists eg:

- Healthy Waters for Flooding and Stormwater quality;
- Geotechnical & Geological Practice Lead, Engineering & Technical Services (Ross Roberts);
- Traffic/Roading Auckland Transport
- Traffic (Council) Martin Peake];
- Plans.

Earthworks:

- Earthworks Management Plan by Maven Associates.
- Geotechnical investigation, report by CMW Geosciences September 2019..

2.0 Key xxxx Issues

[Provide summary the key RMA/AUP-related xxxx issues for the private plan change including the proposed precinct provisions]

3.0 Applicant's assessment

Transport		
Access & Roading infrastructure	The site is to be contoured to accommodate required grades suitable for development. The primary consideration is roading grades – maximum of 1 in 8 – which ensures all other grade requirements (wait platforms, Privateways, pipe works etc.) can be accommodated. Others have covered the details of the roading network in greater detail.	
	It is noted that with the opening of the new SH1 Puhoi to Warkworth section traffic volumes are likely to dramatically decrease on the section of Highway bisecting the Development. It is also noted that series of speed reductions have been implemented over the last year or so. The effects should be less than minor. The Maven report states this is in 2022 – needs to be updated.	
Traffic Effects	(AT). I have no issues wit appointed Traffic Engineer	cess and traffic issues both externally (NZTA state highway) and internally he the report however approval in principle and Auckland Councils r and AT is required. Detailed requests have been raised by Council and e of writing the revocation of the old SH1 is to occur on 1 July 2024.

Earthworks	
Erosion control & Management	Earthworks assessment will be provided by other Specialists.
Geotech,	Geotechnical investigation, report by CMW Geosciences (West) and LDE (East)
Soils & Ground	The CMW report concludes the development is suitable for development. I note it identifies
Stability	groundwater disposal (soakage) is not permissible.
	The LDE report covers issues such as expansivity, Pakiri soils and infrastructure in greater detail – it also concludes that it is suitable for subdivision.
	Both reports base their conclusions on the proposed modification of the land geotechnically where required.
	Frank Havel is Councils Geotechnical Specialist responsible for the Warkworth South Plan change assessment.
Services	Summary of effects – what, where, how
Stormwater and Flooding	There is a complex network of overland flow paths. The analysis and methods for protection of these will be covered by other specialists. It is anticipated there will be various forms of mitigation provided for the proposed roading (by way of (Regulatory) Engineering Approval); and the individual lots (likely by way of Consent notice) to be enacted at time of building consent. Any large infrastructure e.g. ponds or Wetlands created for Stormwater attenuation would be vested in Auckland Council or Auckland Transport. I note there is Flooding downstream as identified on GeoMaps. The applicant is suggesting not to apply extended detention – this needs to be addressed. The Specialists involved have raised the issue of "passing flows forward" (2.6 of S92). The hydrology has been covered by Healthy Waters.
Wastewater	Refer to the letter from Tattico, dated the 29th of May 2024.
	The primary concern is availability of wastewater services - both in capacity in the exiting Warkworth plant and the proposal to pump to Snells Beach and the upgrade required to that plant.
	The applicant proposes to provide the necessary pipe infrastructure to the various pumpstations (Falls Rd, McKinny Rd) they refer to pump stations as far as I can tell as pump station 2.
	Verification of the completion of the Watercare Services limited rising man from Warkworth to Snells Beach (Lucy Moore Park to Hamatana treatment facility) is sought. The current projection is late 2025 (and we have requested information from WSL on this at the time of writing) the Maven report states 2024.
	Subsequent to the above, we now understand the proposed rising main (as above) is set to be completed at the end of 2025. However there is no date for the completion of the Hamatana treatment plant upgrade. Further the actual capacity available on completion is likely to only allow a relatively small increase in the population of Warkworth (2-4k persons?). there are no future plans for upgrade until 2030. The general network as required for subdivision would be constructed under Engineering Approval and as accepted by WSL. From the Warkworth Ridge plan change, the final statement from WSL was: "These works would need to be completed prior to issue of 224c for the subdivision"
	The works being:
	1. The relatively recent Sanderson Rd bore has capacity for the proposed subdivision.
	2. To reticulate the subdivision a reservoir is required further north on Matakana Rd (ETA 2024).
	3. A limited number of new lots can be serviced with existing network.
	In summary my view the Applicant looks to be fully aware of this. It is then up to them to plan their timeframes, e.g. design, RC, tender and construction phases, around this constraint.
	Subsequent to the above other options have been identified such as:
	 On site disposal; Upgraded WSL plant. The Tattico letter provides various options to enable this including the involvement of <i>Crown infrastructure partners</i>.
	The critical factor seems to be the delivery of required services from WSL coinciding with the completion of completed houses, understanding that there are financial limitations in constructing extensive infrastructure without a clear end date for receipt of title. In other words would it be more expedient to delay construction of infrastructure until definite dates for WSL delivery are actually available – they are not presently.

Water Supply

We have recently come to learn that capacity issues also apply to the water supply network.

We are advised that the WSL bore in Sanderson road is close to a population delivery cap and that in fact it is sometimes being exceeded. Part of the issue seems to be the unusually high demand for water by Warkworth residents. Typically 120 litres per person per day is applied however Warkworth figures are given at something like 260 l/p/d.

The applicant I am advised has lodged for a water take consent. I understand the yield is within the capacity of the local aquifer.

Again expansion to the Sanderson Road plant would be required but is not planned (at time of writing) to be 2030.

I note the reservoir is some distance from the Plan Change Area (PCA) and hence the supply capacity needs to be assessed by WSL. A reservoir looks to be proposed with the Development.

The general network as required for subdivision would be constructed under Engineering Approval and would require approval by WSL for it to be able to connect to the Watercare water supply...

Again, provided the Applicant understands and accepts fully the timing of these infrastructure upgrades as being completed prior to any connections made and hence the issue of section 224c. then the subdivision could proceed although producing any titles could be some time away as again there are no definite dates on delivery by WSL provided. Noting however that should the applicant obtain consent to take groundwater and construct a treatment facility to provide water to a potable standard then the comments around delivery dates for WSL are redundant.

Power & Telco

Little has been provided for here – comments such as "To date correspondence with Vector and Chorus has been positive" - as this requires significant infrastructure (I understand including a new substation) and it has been sometime since this report, has anything been progressed?

From their report page 24:

Vector have indicated that there planning is based on the unitary plan zoning, although Vector already have large infrastructure in Warkworth – a existing 11kV reticulation along SH1 alignment. Vector has indicated that a new substation is required to service the PCA. Subsequently, extensions into any subdivision will be detailed as scheme plans are developed in coordination with Vector and North power. Chorus have also preliminarily confirmed that they have infrastructure suitable in the general land area and road networks surrounding the proposed precinct, further detail, indicative lots numbers and staging of the development were requested to further the design and ensure serviceability to and beyond the precinct extents. All power and telecommunication utilities are appropriately addressed through the existing AUPprovisions.

4.0 Conclusions and recommendations

Noting the sections above the applicant has provided in my view satisfactory in terms of Engineering requirements and demonstrates the land could be developed. I specifically reference Wastewater, water supply and power supply/reticulation. The private plan change is consistent with the direction and framework of the AUP, including giving effect to the Regional Policy Statement. This is in line with future growth expectations for Warkworth. Clarification is required around the delivery of power infrastructure – particularly as a substation is likely and considerations such as its situation and any cost sharing applicable.

My overall recommendation is to support the private plan change however with the proviso of clearer direction on the servicing options proposed.

Technical Specialist Memo

To: David Wren, Reporting Planner

From: Rhys Caldwell – Auckland Council Specialist Arborist

Date: 5 March 2024

Subject: Proposed (Private) Plan Change 93 – Warkworth South

Arboricultural Assessment

1.0 Introduction

- 1.1 I have undertaken a review, on behalf of Auckland Council, of the Proposed (Private) Plan Change 93 Warkworth South, in relation to arboricultural effects.
- 1.2 In writing this memo, I have reviewed the following documents:
 - Arboricultural Assessment of The Proposed Plan Change at Waimanawa Warkworth South, dated 9 June 2022 prepared by Craig Webb Consultant Arborist.

Qualifications and Experience

- 1.3 My name is Rhys Edward Caldwell, and I am a Specialist Arborist in the Earth, Stream and Trees Specialist Unit at Auckland Council. My qualifications include a Trade Certificate in Amenity Horticulture (1993) and an Advanced Certificate in Arboricultural (2014).
- 1.4 My current role at Auckland Council is to provide reports and recommendations to Council Planners for land use applications that involve protected trees, peer review and determine resource consent applications that solely concern protected trees, provide specialist advice on major infrastructure projects, outline plans of works, and notices of requirement, and to prepare reports and technical memoranda as an arboricultural expert.

Involvement with Proposed (Private) Plan Change 93 - Warkworth South

1.5 I was engaged by Auckland Council on the 1st September 2022 to provide specialist input on the proposed plan change.

Expert Witness Code of Conduct

1.6 I have read the Code of Conduct for Expert Witnesses, contained in the Environment Court Consolidated Practice Note (2014) and I agree to comply with it. I can confirm that the issues addressed in this Memo are within my area of expertise and that in preparing this Memo I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2.0 Arboricultural Comments

2.1 The arboricultural assessment provided is still shown as a draft, I am assuming that is document is yet to be finalised.

- 2.2 The assessment has undertaken an evaluation of seven trees against the guidelines for nominating notable trees for evaluation. Six trees are located within the Waimanawa Valley area and one with the Waimanawa Hills area.
- 2.3 For a tree to be included as a notable tree it has to be an outstanding specimen in a prominent location. Being a healthy tree that is a typical example of its species is usually not sufficient to meet the scoring required to be included as a notable tree. The seven trees within the subject sites, Totara (No.1 & 9), Gum tree (No.65), Black Poplar tree (No.67), English Oak tree (No.69), Monterey Cypress (No.84) and Kawaka (No.50) are typical examples of their species and do not exhibit any features that make them outstanding. The highest scores achieved were 16 for English Oak tree (No.69) and Kawaka (No.50). A tree must attain a score of at least 20 to meet the threshold to be considered for inclusion as a notable tree. I would agree with the assessment provided that these trees would not meet the threshold to be included as notable trees.
- 2.4 Three of the trees assessed as potential notable trees are located adjacent to the riparian margin and would still be protected under chapter E15.

3.0 Submissions relevant to arboriculture

3.1 There were not submissions relevant to arboriculture.

4.0 Conclusions

4.1 Generally the tree population on site appears to be fairly typical for a rural environment. There have been no significant trees assessed as worthy for inclusion as notable trees. Any existing trees and vegetation located adjacent to the streams or within a Significant Ecological Area will still be protected under the plan change.

Rhys Caldwell

Specialist Advisor – Arborist

Earth, Streams and Trees Specialist Unit

Regulatory Engineering and Resource Consents Department

Auckland Council

5 March 2024

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

28th March 2024

To: David Wren Planning Consultant and Peter Vari North/West Policy Planner, Auckland

Council

From: John Stenberg, Principal Urban Designer, Tamaki Makaurau Design Ope

Subject: Private Plan Change – PC93 Warkworth South – Urban Design Assessment

1.0 Introduction

1.1 I have undertaken a review of the private plan change, on behalf of Auckland Council in relation to urban design effects.

1.2 I have worked in the urban design field for 32 years, including 5 years with Nottingham City Centre Team, 13 years North Shore City Council Strategy and Planning Division as urban design planner and principal urban designer, before joining Auckland Council in 2010 as a principal urban designer. I currently hold the position of Principal Urban Designer within the Design Ope of Auckland Council's Plans and Places Unit. I hold the qualifications of Bachelor Social Science Geography and Economics Waikato University, and Bachelor Planning obtained from University Auckland.

1.3 In writing this memo,

I have familiarised myself with the local area, having already provided urban design commentary relating to Waka Kotahi NZ and Auckland Transports suit of NORs relating to Warkworth, and most recently visited the site on 19th March 2024, and

Reviewed the following as notified documents and their preceding versions.

- Warkworth South Private Plan Change Request prepared by Osborne Hay and Tattico Consultants (North) Limited, dated 24th of August 2023.
- Private Plan Change XX: [Provisions], dated 24th August 2023.
- Warkworth South Planning and Precinct maps dated 24th August 2023.
- Urban Design Report Warkworth South Plan Change Waimanawa prepared by Reset Urban Design & A Studio Architects, dated May 2023.
- Reviewed the summary of Decisions Requested

Further information provided by the applicant in response to urban design Clause 23 Request dated Aril 2023, and June 2023.

1.4 The focus of this report is on those aspects of policy and structure intent on delivering a well-functioning urban area, supported by a safe and connected road, pedestrian/cycle routes and interface provisions, to ensure adverse effects on the public environments can be appropriately managed.

2.0 Key Urban Issues

The key urban design issues which have the ability to undermine a well-functioning urban area relate to

Objective and Policy consistency in relation to the provision of safe public environments.

- Connectivity and efficiency as a key aspect of 'integration' within a well-functioning urban area.
- Frontage conditions relating to Roads and the (wider Western Link Road) WWLR
- Town Centre Development

3.0 Applicant's urban assessment

- 3.1 The overall land-use approach in the urban design report (UDR), by Reset Urban Design and A Studio Architects, is consistent with the Warkworth Structure Plan (WSP) adopted by Council in 2019. The WSP set out the land use and supporting infrastructure for Warkworth's future expansion in line with the Auckland Plan and the Auckland Regional Policy Statement ARPS.
- 3.2 The UDR adopts standard urban design methodology, preparing a vision for the site, informed by the strategic planning context and an analysis of the wider regional context, narrowing to Warkworth environs and the relationship of the roading network and topographical and natural environment constraints and opportunities of the site.

The high-level urban design principles adopted are typically used in urban design to inform and guide design process and outcomes. The UDR principles support the enhancement of the ecosystem and natural landscape, development of a high-quality connected and accessible public realm through the provision of legible network streets, lanes and walking/cycling routes, and the efficient use of land, culminating in a way that will support identity and place. However, the principle seeking 'to create a healthy and sustainable community...' does not sufficiently convey the concept of creating safe environments for all, and that lack of clarity does raise some issues as to what weight was given to safety, other than traffic safety, in the development of the Masterplan.

These principles are applied to a series of topic based spatial strategies centered on ecology, transport, urban form, open space, and identity which translated into a refined road and open space layout, road hierarchy and pedestrian connections designed to support the land use pattern (zonings) which are generally consistent with the WSP.

The UDR supports the key structuring features in the proposed precinct plan and its provisions relating to arterial and collector roads, open space and riparian and yard setbacks important to urban design outcomes. However, some aspects such as park-edge roads being provided in 'practical locations' (UDR 5.6) is without explanation as to what 'practical' considerations overrode other equally important 'practical outcomes', such as the provision of surveillance, guardianship, and wider public visual access and identity.

3.3 The Masterplan implicitly reflects a single evaluation and prioritization of principles, strongly linked to the layered methodology used, with no real discussion where conflict arises between the design principles. The text associated with section five of the UDR reads as descriptive and lists design elements of the Masterplan which proport to support the high-level principles. There is a lack of optioneering, or a discussion of urban design priorities that could have been explored to provide for layouts better suited to a well-functioning urban environment being fitted with Warkworth, rather than attached.

It is however noted that the Masterplan is only 'indicative', and a means to test subdivision layout, networks, and zone boundaries, including local centre size testing, positioning of a transport facility and those elements necessary for structuring the precinct, such as arterials, collector roads, and stream reserves/esplanade reserves.

The urban design principles themselves are very high level and consequently there are some short comings in translating these principles into precinct provisions, key issues are.

- Absence of referencing to safety and efficiency within the precinct policies.
- Meaningful integration of transport infrastructure which in my view has a prerequisite of being safe and efficient.

- Stronger recognition of the role of street-based connections to the north to access employment areas aligned north-south along Manson and Mansel Drives, and Hudson Road.
- Considerations relating to reserve edge roads, and
- Frontage conditions relating to the Wider Western Link Road (WWLR)

4.0 Assessment of urban design effects and management methods

- 4.1 The key areas which needed further work and development relate to provision of safe public environments, cconnectivity and efficiency as a key aspect of 'integration' and frontage conditions relating to roads and the WWLR which are essential prerequisites for managing effects on the environment and delivering a well-functioning urban area.
- 4.2 The National Policy Statement (NPS) on Urban Development identifies the overall need to provide 'well-functioning' environments and through Policy 1 outlines the <u>minimum</u> constituents which includes (c) "good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport". Accessibility for a well-functioning urban environment recognizes the need for active and public transport provision to be applicable to all people (different ages and genders). Good accessibility is a function of permeability, efficient routing, legibility, amenity, and safety, including suitable passive surveillance.

The Auckland Regional Policy Statement (ARPS) reflects the NPS-UD policy position of a well-functioning urban environment within a range of objectives and policies, and specifically those relating to B2.2 Urban growth and form and B3.3 Transport. These policies ensure that the environment enhances opportunities for people's wellbeing by ensuring appropriate provision is made for access and the quality of access provided to support active modes, for all people (all ages and genders) over the active day time hours (6am-10pm).

Safety

4.3 A safe environment is a fundamental human need that should be addressed through the AUP policy framework and precinct plan provisions in any assessment of subdivision proposals. Objective IXXX.2 (2) seeks to ensure the precinct is "subdivided in a manner that achieves an accessible urban area with efficient, safe and integrated vehicle, walking and cycling connections internally and to the wider Warkworth urban area...".

The objectives reference to safety has not followed into the precinct's policies. The management of subdivision and development needs to ensure that safety considerations are worked in to any subsequent designs. This can be achieved by adding safety into IXXX.3 policies (3), (4) (13) and (20.c).

When providing for integrated transport infrastructure, 'integration' is often argued as denoting its provision at the time of subdivision and/or merely connecting to the wider network and landuses. Transport infrastructure to be integrated needs to do so at a number of levels, including the way efficiency and safety are incorporated into the design. This should be made explicit in Ixxx 6.15 Transport Infrastructure purpose.

Connectivity

4.4 A growing concern with recent sub-division patterns in the northern part of Auckland is the avoidance of street connections over streams and ecological corridors which results in pods of connected streets being separated from adjoining pods with limited or no practical and safe onstreet pedestrian routes being provided. Reliance on pedestrian links that are either circuitous, or have limited overlook and lighting, reinforces the need for private vehicle use, which is not the intended outcome of well-functioning urban environments or that envisaged by the ARPS.

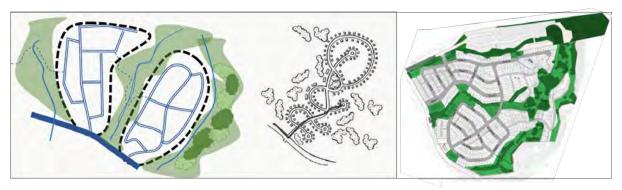


Figure 1: Illustrates they type of subdivision being proposed where streams and ridge lines prevent street-based connections, becoming cul-de-sac pods of connected streets in similar style to the 1950s, as illustrated in the classic diagram shown middle, with the Warkworth South Masterplan natural features, covenant planting and riparian margins far right.

While neighborhoods can be defined by physical edges, such as streams and motorways, these can create barriers, as many of people's community associations and friends will be located more widely and are more often formed around pastime and sporting affiliations, schools, work, and other community activities than the physical confines of there immediate neighbourhood.

Street structure is important to encourage pedestrian use, streets provide an easily and well-organized environment, are highly used by all modes, offering good overlook from passersby, and from development fronting a street which provide good perceived and a real level of safety throughout the day, qualities rarely apparent with pedestrian only paths through reserves or along esplanades over 30m in length.

Currently I have concerns with the way street-based pedestrian/cycle connectivity is provided within this plan precinct and particularly the areas of adjoining future urban zoned land to the north and south. Street-based pedestrian/cycling connectivity is highly supportive of social vitality for all ages, genders, and levels of mobility and needs to be elevated within the precincts policy framework and precinct plan.

Connection to the North

4.5 The most pressing matter is the lack of a street-based connection from the WWLR through to the employment and commercial areas positioned along north-south along Manson and Mansel Drives, and Hudson Road. While esplanade reserves and open space indicated in the Masterplan offer a pedestrian/cycle link to the north it is convoluted, tackling steep terrain and lacks the overlook and safety attributes of a public street, particularly for younger users during evening hours moving between friends' houses or people returning from work, activities.

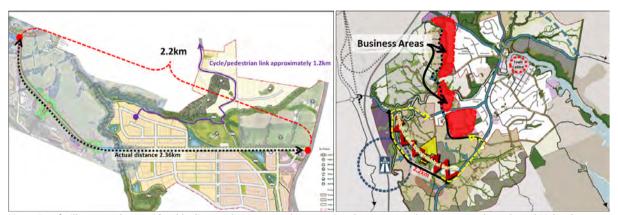


Figure 2: Left, illustrates the considerable distance between roads connecting the structure plan area to Warkworth, and Right, the ecological and topographical challenges to provide a convenient connection north to business areas.

For comparison, the Northshore is bisected by the Motorway that has acted to sever communities, where the largest spacing between road connections crossing the Motorway is 1.3km, with 225m being the smallest, 760m being the average, and 50% lying between 950-1100m. From an urban design perspective, to encourage walking and cycling between home and

work/business destinations a further linkage is required, preferably a road, but if not roads either side should look to get as close to any pedestrian/cycling bridging structure to maintain a useful line of sight along the route.

An indicative road north in the vicinity of the northwest corner of 40 Valerie Close should be incorporated into the Waimanawa Precinct Plan 3 – Transport.

Enabling Street Connections

4.6 Connections to Future Urban Zone areas to the south need to be more explicitly presented in the precinct plan, in particular the potential of the extension to any indicative collector road shown on precinct Plan 3 – Transport and intersecting with Valerie Close. This has the advantage of providing adjoining owners and future residents of the network intentions when land to the south is developed and the expected travel patterns that will develop.



Figure 3: Key indicative street connections

Frontage conditions relating to the Wider Western Link Road (WWLR)

4.7 The relationship between development sites and the WWLR is shaped by Policy IXXXX.3 (16) that seeks to restrict direct vehicle access from the WWLR, the 3m front yard setback to promote outdoor use and passive surveillance (Ixxx.6.1) and the fencing requirements (Ixxx.6.16) which are consistent with those applying in the underlying THAB, MHU and MUS zones.

However, experience has shown that arterial roads where vehicle access is restricted results in residential development either fronting streets behind the arterial or to JOALs with their backs to the arterial. Sites next to these arterial road boundaries often optimise fencing and planting to manage noise and privacy and frontages are devoid of pedestrian entrances and gates which undermine pedestrian convenience and access to the arterial and street network and reduces on street activity which has effects on vibrancy and passive surveillance.

This type of response is shown in the series of photos below relating to Oteha Valley Road, Albany Highway and Greville Road below.

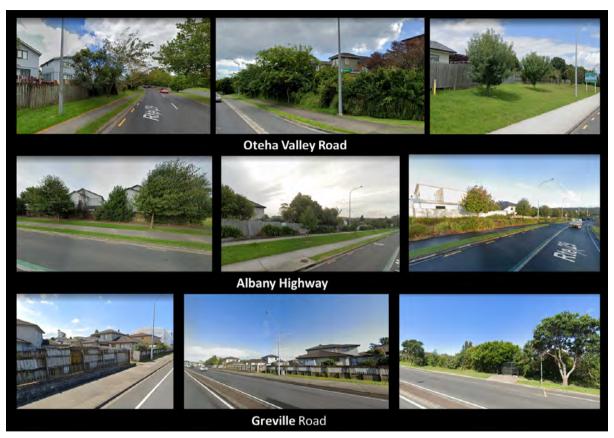


Figure 4: Illustrates the typical response to new arterial designs, Greville Road and Albany Highway do incorporate off carriageway pedestrian and cycle footpaths and no pedestrian entrances to dwellings from the arterials.

The frontage condition relating to the future residential development on the north side of the WWLR is more likely to develop with north oriented outdoor spaces and indoor living areas leaving a less than engaging frontage to the WWLR. The proposed provisions relating to the WWLR frontages are inadequate to provide activation to the street and encourage street address. At subdivision stage matters of discretion and criteria should be incorporated into the precinct plan to ensure provision is made for pedestrian access between dwellings and roads including the WWLR.

Reserve Interface

4.8 The indicative open spaces, apart from the park for sports and recreation, are tied to stream and stormwater functions. I generally support the application Ixxx6.16 fences adjoining the front yard and publicly accessible open space as the provisions balanced privacy and surveillance opportunities next to publicly accessible open space, including esplanade reserves.

Waimanawa Precinct Plan 1 – Spatial Provisions, indicate approximately 4.7km of off-road greenway routes, which provides a significant day time amenity for residents. However, much of that length is located adjacent streams within esplanade reserves and over time overlook to these pedestrian/cycle routes will diminish. The envisaged 1.2km (approximately) route shown by a purple line in Figure 2 above, has very poor oversight, and yet offers a useful connection to the north, albeit at a steep grade.

Subdivision layout provisions should encourage streets adjacent esplanade reserves to support the use of green routes and visual exposure and amenity to the wider community and provide an appropriate level of surveillance, from vehicles and development fronting street over the active par to the day (6am-10pm).

Roads next to streamside and esplanade reserves serve to

enhance the visual width and scale of the open space emphasising the landscape feature,

- extend the 'green' corridors scale and ecological function with the inclusion of street tree plantings,
- provide public access and a sense of stewardship/ownership relating to the wider community, and
- provide a level of activation, street overlook which provides for peoples safe and comfortable use of these spaces by all ages, genders from morning to evening, far in excess of what a pedestrian only path within an esplanade reserve strip could provide.

I do not advocate road reserves next to or within the 20m Bat Flight Corridor or consider that <u>all</u> streamside and esplanade reserves are fronted with street environments. I do however consider that street frontage to portions of the esplanade reserves/streamside reserves relating to Mahurangi River's primary tributary should be shown indicatively on the Waimanawa Precinct Plan 3 – Transport to avoid the current presumption indicated by that plan.

5.0 Submissions

I have reviewed the submissions that relate to urban design and grouped my response as follows.

Additional North South Connection

5.1 Auckland Council submission 17.7 Waimanawa Precinct seeks to add 'an additional indicative north-south connection on Precinct Map 3'. This is supported for the reasons set out in 4.2 and 4.5 above.

Safety and Efficiency

5.2 Auckland Transport submissions 20.9 and 20.14 seek the following.

20.9 Amend Objective 2 and split it into two objectives as follows: '(2) The Warkworth South Precinct is subdivided and developed in a manner that Subdivision and development achieves an accessible urban area with efficient, safe and integrated vehicle, walking and cycle connections internally and to the wider Warkworth urban area. (2A) while Subdivision and development providesing for and supporting the safety and efficiency of the current and future national strategic and local reading transport network.'

20.14 Add a new objective as follows: 'The precinct develops and functions in a way that:

- (a) supports a mode shift to public and active modes of transport
- (b) provides safe and effective movement between the local centre, community facilities, housing, jobs, open spaces and the public transport facilities by active modes.

I am generally support of the proposed changes to Objective 2 but, I considered that adding safety into IXXX.3 policies (3), (4) (13) and (20.c) is required for the reasons set out in 4.2 and 4.3 above.

I support the addition of a new objective which seeks that the precinct is developed to support a modal shift to public and active modes of transport. I consider that this would be consistent with the NPS on Urban Development and recognises the needs of a range of people that do not have access to private vehicles.

Future Public Transport Interchange

5.3 Auckland Transport submissions 20.1, 20.19 and 20.21 are seeking changes to the 'provision of' and 'access to' a public transport interchange (PTI). The provision and positioning of the PTI adjacent the local centre provides access to/from a key community destination and has relatively good accessibility to future residents of the precinct.

Access Restrictions to SH1 and WWLR

5.4 Auckland Transport submissions 20.39, 20.40 and 20.41 seek the following amendments.

Amend the title and purpose statement of Ixxx.6.7 as follows: 'Limited Vehicle Access Restrictions, Pedestrian Connections and Cycle Facilities

Purpose:

- to avoid direct vehicle access from individual sites onto State Highway One, and the Wider Western Link Road, Green Avenue, and collector roads; and
- to promote safe and efficient operation of transport infrastructure; and
- to achieve safe, accessible, and high-quality pedestrian and cycle connections within the Precinct and including to the Local Centre and any future public transportation interchange that provides positively for the needs to the local community.'

Amend Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, (1) to (4) as follows:

- 1) Any new road intersections with State Highway One or the Wider Western Link Road servicing the precinct, shall be generally located as identified as "Access Points" on IXXX.10. Waimanawa Precinct Plan 3
- 2) Sites that front onto the Wider Western Link Road, Green Avenue and State Highway One must not have direct vehicle access to the road <u>except where required for the public transport interchange, and Sites, other than the public transport interchange, must be provided with access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision.</u>
- 3) At the time of adjacent land subdivision and / or development, pedestrian connections, generally as shown in Precinct Plan 3, shall be provided.
- 4) Residential sites that front a collector road other than the 'Green Avenue" as shown on Precinct Plan 3, must not have direct vehicle access to the road and must be provided with access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision.'

Generally the changes proposed are supported as they provide clarification and strengthen the appropriate provision supporting active modes. However, the changes do not address the need to enable and require pedestrian access from residential properties fronting roads and the WWLR and for that reason the following additions (in green) are proposed to be added.

Ixxx.6.7 Purpose bullet point three to read 'to achieve safe, accessible, and high-quality pedestrian, and cycle connections to individual sites and the street and within the Precinct and including to the Local Centre and any future public transportation interchange that provides positively for the needs to the local community.'

Add (5) to Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities '(5) Residential sites fronting all roads will still require adequate pedestrian access to the on-street pedestrian network.'

These changes ensure practicable pedestrian access is enabled for sites fronting the WWLR and other roads to support convenient pedestrian access to the street-based pedestrian network and street activation and surveillance.

5.5 KA Waimanawa Limited submission 24.16 seeks to include in addition to those matters to set out in lxxx.8.1 (matters of discretion) a cross reference to the H11.8.1 (4) matters of discretion relating to the Local Centre zone, with one additional amendment to H11.8.1 (4) (a) (i) to include 'the contribution that such buildings make to the attractiveness pleasantness and enclosure of the public space (including the watercourse)'.

The cross-referencing matters relating to the Business Local Centre Zone already apply, but it would be useful to provide a part (2) to lxxx.8.1 Matters of Discretion to cover 'development' in the local centre needing to consider the contribution of buildings to the attractiveness pleasantness and enclosure of the public space, including the watercourse which passes through the local centre zone.

6.0 Conclusions and recommendations

6.1 As stated in section 3 of this report the plan change proposed places significant weight on the retention of landscape and open space features and their protection to the detriment of the human and urban environment created, and in particular the effects on those seeking to use active transport to conveniently move "between housing, jobs, community services, natural

spaces, and open spaces" as sought through Policy 1 (c) of the NPS on Urban Development and those sentiments imbodied in the ARPS 'quality compact urban environment' and specifically objective B2.2.1. (1).

I acknowledge that other NPS and sections of the ARPS also seek to protect the natural environment, however these need to be balanced against a resulting structure plan which does not provide pedestrian access for the easy, safe, and convenient access for all ages and genders appropriate for use over the active portion of a day (6am - 10pm). The main concern is a lack of connection to the north, and the reliance on convoluted routing of poorly overlooked pedestrian/cycle links.

Having reviewed the plan change and submissions, I consider that these adverse effects of the plan change can be reduced through the inclusions of a number of changes and additions to the precinct provisions, a number having been identified by the submitters. The changes I support include.

- The addition of an indicative northern connection in the vicinity of of the northwest corner of 40 Valerie Close and indicative arrows relating to the intended continuation of collector roads to the south from the edge of the precinct to Waimanawa Precinct Plan 3 Transport as shown below in Figure 5.
- Indicative road layout that illustrates a portion of road located next to the esplanade/stream edge reserve on Waimanawa Precinct Plan 3 Transport as shown below in Figure 5.

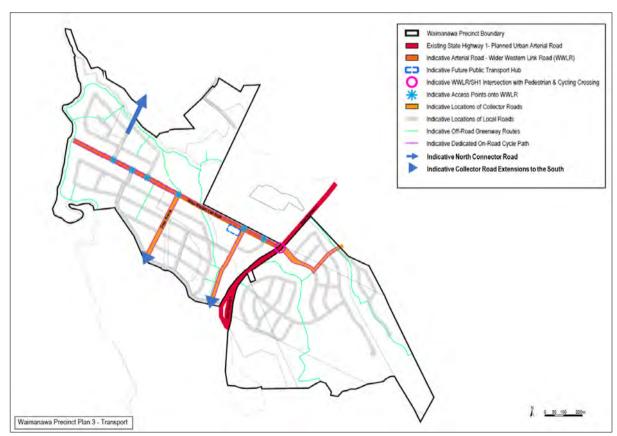


Figure 5: Waimanawa Precinct Plan 3 - Transport.

- Auckland Transport submission 20.9 and 20.14 amendments to Objective 2 and insertion of an additional objective.
- The insertion of safety into IXXX.3 policy (3), "Provide a zoning and <u>safe</u> transport and greenway network..."

- The insertion of safety into IXXX.3 policy (4) "Provide a series of...to enhance the overall amenity, including safety, and liveability..."
- The insertion of safety into IXXX.3 policy (13) "Require subdivision and development to provide for safe walking and cycling networks within..."
- The insertion of safety into IXXX.3 policy (20) "(c)providing for <u>safe</u> pedestrian and/or cycle linkages."
- The inclusion of changes to Ixxx6.7, with my additional changes in green, to amend the title and purpose statement of Ixxx.6.7 as per the Auckland Transport submission 20.39 & 40 with the additional recognition pedestrian/cycle access to individual sites fronting all roads including the WWLR.

'Ixxx6.7 Limited-Vehicle Access Restrictions, Pedestrian Connections and Cycle Facilities' Purpose:

- to avoid direct vehicle access from individual sites onto State Highway One, and the Wider Western Link Road, Green Avenue, and collector roads; and
- to promote safe and efficient operation of transport infrastructure; and
- to achieve safe, accessible, and high-quality pedestrian, and cycle connections to individual sites and the street and within the Precinct and including to the Local Centre and any future public transportation interchange that provides positively for the needs to the local community.'
- Amend Ixxx.6.7 Limited Access Restrictions, Pedestrian Connections and Cycle Facilities, (1) to
 (4) as per the Auckland Transport submission 20.41 to include reference to pedestrian/cycle
 access to individual sites fronting roads and the WWLR by adding a further provision (5)
 - (1) Any new road intersections with State Highway One or the Wider Western Link Road servicing the precinct, shall be generally located as identified as "Access Points" on IXXX.10. Waimanawa Precinct Plan 3.
 - (2) Sites that front onto the Wider Western Link Road, Green Avenue and State Highway One must not have direct vehicle access to the road <u>except where required for the public transport interchange</u>, and <u>Sites</u>, other than the public transport interchange, must be provided with access from <u>a rear driveway</u>, rear lanes (access lots) or side roads at the time of subdivision.
 - (3) At the time of adjacent land subdivision and / or development, pedestrian connections, generally as shown in Precinct Plan 3, shall be provided.
 - (4) Residential sites that front a collector road other than the 'Green Avenue" as shown on Precinct Plan 3, must not have direct vehicle access to the road and must be provided with access from a rear driveway, rear lanes (access lots) or side roads at the time of subdivision.'
 - (5) Residential sites fronting all roads will still require adequate pedestrian access to the on-street pedestrian network.
- I support the intent of KA Waimanawa Limited submission 24.16 and add a further matter of discretion to Ixxx.8.1.
 - '(2) Local Centre Development

'The contribution that such buildings make to the attractiveness pleasantness and enclosure of the public space, including the watercourse.'

Overall I will be able to support the private plan change with modifications to the precinct provisions outlined above.

John STENBERG | Principal Urban Designer Tāmaki Makaurau Design Ope Chief Planning Office

Waea pūkoro / Phone M +64 21 227 3750

Landscape Memo (technical specialist report to contribute towards Council's section 42A hearing report)

22nd March 2024

To: David Wren- Planning Consultant and Peter Vari Auckland Council

From: Gabrielle Howdle, Principal Landscape Architect, Tāmaki Makaurau Design Ope

Subject: Private Plan Change – PC93 Warkworth South – Landscape Assessment

1.0 Introduction

1.1 I have undertaken a review of the private plan change, on behalf of Auckland Council in relation to landscape effects.

- 1.2 I have worked as a Landscape Architect for seven years and have worked at Auckland Council since 2017. I am currently a Principal Landscape Architect in the Tāmaki Makaurau Design Ope, Plans and Places. I hold a Bachelor of Landscape Architecture (*Hons*). Further details of my qualifications and experience are set out in Appendix A.
- 1.3 I am familiar with the local area and site. For the purpose of reviewing the PPC I visited the site and surrounding area and viewpoint locations in December 2022. I visited the site again on 19th of March 2024 following submissions.
- 1.4 In particular, my review will focus on the suitability of the PPC in this location with particular regard to the scheduled Outstanding Natural Landscape (ONL 43 West Mahurangi Harbour) and other intrinsic qualities and physical characteristics of the site and area¹, including the local landform/ ridgelines, Mahurangi River and its tributaries and existing bush and trees as they relate to landscape, including character and visual values.
- 1.5 Overall, much of the PPC is consistent with the Warkworth Structure Plan and will be consistent with the relevant regional policy statement objectives and policies from a landscape perspective. I consider that the PPC has the potential to adversely impact on the landscape values of the Morrisons Heritage Orchard area to at least a moderate-high degree, and a moderate degree on the Waimanawa Precinct area. These effects could be managed if specific provisions were secured within the precinct plan. The body of my review addresses this.
- 1.6 In writing this memo, I have reviewed the following documents: Lodged with the original application.
 - Warkworth South Private Plan Change Request prepared by Osborne Hay (North) Limited, dated 19th of January 2023.
 - Warkworth South Planning Maps and Private Plan Change Precinct, dated 20th of January 2023.
 - Landscape and Visual Effects Assessment (LVEA) prepared by Reset Urban Design, dated 10th
 of January 2023.
 - Urban Design Report Warkworth South Plan Change Waimanawa prepared by Reset Urban Design & A Studio Architects, dated January 2023.

¹ AUP (OP), B2 – Tāhuhu whakaruruhau-ā-taone – Urban growth and form, Objective B2.3 A quality-built environment, B2.3.1 (1) (a) – a quality-built environment where subdivision, use and development do all of the following: respond to the intrinsic qualities and physical characteristics of the site and area, including its setting.

- Baseline Ecology Warkworth South Plan Change prepared by Bioresearches, dated December 2022.
- Arboricultural Assessment prepared by Craig Webb, dated 9th of June 2022.
- Cultural Values Assessment prepared by Manuhiri Kaitiaki Charitable Trust, dated 27th of August 2021.

Submitted as further information in response to Clause 23 request.

- Warkworth South Plan Change Cl23 Request with Table of Responses prepared by Osborne Hay (North) Limited, dated 19th of April 2023.
- Updated Warkworth South Private Plan Change Request prepared by Osborne Hay (North) Limited, dated 14th of April 2023.
- Private Plan Change Precinct dated 20th of April 2023.
- Warkworth South Plan Change Cl23 Request with Table of Responses prepared by Osborne Hay (North) Limited, dated 23rd of June 2023.
- Private Plan Change Precinct dated 28th of June 2023.

2.0 **Key Landscape Issues**

- 2.1 In my view, the key landscape issues that arise from the PPC relate to:
 - The physical and visual integrity of the Outstanding Natural Landscape overlay (Area 43 West Mahurangi Harbour)². (See Appendix C).
 - Whether the precinct provisions will provide for development (including within the Morrison Heritage Orchard Precinct) that responds to the qualities and characteristics of the site and area, including its setting³.
 - Achieving the outcomes of the masterplan as shown within the Urban Design Report, as they relate to future development. Including whether the precinct provisions will achieve those outlined within the applicants' assessments, such as,
 - o Fit in a sympathetic urban form following natural contours and provide for suitable residential uses and density transitions.
 - o Enhance the existing ecosystems and natural landscape features.
 - o Celebrate the unique identity of Warkworth South and create a sense of place.
 - Morrison Heritage Orchard retains its rural character contributing to the local identity.

3.0 Applicant's assessment

Methodology

3.1

- The LVEA assessment by Reset Urban Design is generally consistent with concepts, principals, and approaches within Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines⁴. In assessing the scale of landscape effects, a seven-point scale of effects has been applied. For the purpose of reviewing the landscape effects of the application, I have utilised the same rating scale as utilised within the LVEA, provided in Appendix B below.
- 3.2 I understand that the Masterplan within the Urban Design Report (Reset Urban Design & A Studio Architects, dated January 2023) and as referenced within the Landscape Visual Effects Assessment (Reset Urban Design, dated 10.01.2023) does not form part of the plan change, but is provided to demonstrate the potential infrastructure, development and open space outcomes in the future enabled from this plan change. While this is recognised a number of the

² AIP (OP), B2 Tāhuhu whakaruruhau ā-taone – Urban Growth and form. And B4 Te tiaki taonga tuku iho – Natural Heritage

³ AUP (OP) – B2 – Tāhuhu whakaruruhua ā-taone – Urban Growth and form. Including B2.2.1 (1) & B2.3.1(1)(a)

⁴ Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, 2022

conclusions within the LVEA partially rely on aspects of the masterplan that are not fully incorporated into the precinct plan provisions (e.g., retention of shelterbelts to screen or backdrop views).

Landscape Context

- 3.3 The LVEA provides a description of the local area and site⁵; I generally concur with the landscape context and site description described and specifically note the following features which contribute to the current landscape values of the Warkworth South area.
 - Hill country with a landscape combined of ridges, rivers, and stream valleys, with pockets of native forest.
 - · Complex sequence of landforms, including escarpments, ridgelines, gulleys, and valley floors, incised with streams and rivers (including Te Awa Waihē / Mahurangi River)
 - Interplay between remnant vegetation (e.g., Avice Miller Reserve, Mahurangi River vegetation) and rural pasture and rural production uses (e.g., viticulture).
 - · Vegetated escarpments, maturing shelter belts, exotic and native specimen trees which create green fingers and visual breaks within the landscape.
- 3.4 The applicants landscape architect has also referred to the Warkworth Structure Plan (WSP) and summarises the landscape outcomes / key findings as copied below.
 - Create 'green corridor' across the urban development to provide protection to the existing natural and ecological values, particularly alongside the Mahurangi River and its tributaries.
 - Protect Morrison's Heritage Orchard from subdivision and remains as a rural feature of Warkworth.
 - Protect and enhance existing bush/natural areas and create ecological corridors linking the Future Urban zone to other ecological areas.
 - Provide well located and accessible areas of open space linked by a green network of walking and cycling trails along the streams.
 - Use the Future Urban zone efficiently to protect against the need for further urban expansion into Warkworth's valued rural hinterland.
- 3.5 I agree with this summary in terms of the landscape outcomes intended by the WSP, however I also comment on the zoning of the Warkworth South area within the WSP, which recognises the use of residential - single house zoning and / or large lot within this area, supported by 'areas for further landscape protection controls' to ensure the physical, visual, and ecological landscape values can be maintained and protected.

Applicants Landscape Assessment and Conclusions

- 3.6 The applicants landscape architect undertook an assessment of the landscape effects, separating these into the effects the PPC would have on landscape attributes (physical effects to the land resource), landscape values (aesthetic perception of the biophysical environment such as naturalness, coherence, and memorability) and landscape character (landform, landcover, land use and cultural element which contribute to identity).
- 3.7 In terms of landscape attributes (physical effects) the applicants landscape architect concludes that the proposal will have low-moderate alteration to the landscape, and with the enhancements to the streams and wetlands will have overall low adverse landscape effects. While a number of streams are to be maintained and enhanced, I do not consider the reduction

⁵ LVE, dated 10th January 2023, Paragraphs 3.1 – 4.32

from 10m to 4m along the stream near the local centre appropriate and address this in my assessment below.

- 3.8 The applicants landscape architect identifies the areas of SEA along Mahurangi River and the various values of Avice Miller Scenic Reserve including the indigenous vegetation as elements which contribute to the landscape values of the site. The applicants landscape architect recognises that the proposal will result in a high level of change to the landscape but that the changes will provide for a high-quality built environment with the values natural landscape areas enhancing this. The overall effects are rated as low.
- 3.9 The history and associated social values of the historic Morrisons Heritage Orchard are noted by the applicant's landscape architect as a remaining element that contributes to the unique character of Warkworth, providing a sense of place. The rural character of the orchard, and other natural features of the site, including streams / tributaries, northern ridgeline, existing native and exotic trees, including those within Avice Miller Reserve are also part of the attributes that contribute to the character of the site and local area. Noting that these aspects are to be retained, the applicants landscape architect concludes that the proposal will have low adverse landscape character effects. While the masterplan suggests that the key landscape features will be retained, I consider that the Morrison Heritage Orchard Precinct needs to be strengthened to ensure this outcome.
- 3.10 The visual effects of the proposal are also assessed within the LVEA, comprising of immediate (up to 0.5km) and mid-ground views (0.5km 2km):
 - Motorists and cyclists travelling in both directions along State Highway 1
 - Motorists and pedestrians travelling along Wylie Road, Thompson Road, Valerie Close and Toovey Road
 - Surrounding residential properties and the workers and customers of The Range
- 3.11 Representative viewpoints were provided to illustrate the general location and extent of the PPC. While the future development enabled by the PPC is not depicted, the general area of the PPC is indicated in views with a dashed outline. The applicants landscape architect provides a description of the exiting values of the view, the audience, and their sensitivity before providing an assessment and conclusion of effects resulting from the PPC.
- 3.12 Mid-ground views (VP1 44 Thompson Road, VP2- 16 Thompson Road, VP3 87 Thompson Road, VP4 75 Wyllie Road, VP5 42a Toovey Road) are assessed as having low or moderate-low (Vp5) effects. The applicants landscape architect takes into consideration the nature and size of the audience (e.g., dead end roads), proposed precinct requirements (e.g., reduced heights on slopes), the changing environment (sites in the foreground zoned FUZ), retention of existing stands of trees and revegetation (e.g., riparian corridors) as well as the anticipation that FUZ land will undergo change.
- 3.13 The applicants landscape architect considers the PPC will have low to low-moderate effects on existing immediate audiences / views; represented VP6 1794 Twin Coast Discovery Highway, VP7 1738 Twin Coast Discovery Highway (north corner), VP8 1738 Twin Coast Discovery Highway (entrance), VP9- 1723 Twin Coast Discovery Highway, VP10 1693 Twin Coast Discovery Highway, VP11 3a Valerie Close, VP12 30 Valerie Close, VP13 30 Valerie Close (facing west), VP14- 38 Valerie Close, VP15 73 Valerie Close and VP16 43 Valeries Close. Similar considerations to the mid-ground views were considered in assessing the effects of the PPC from these locations, as well as the objectives of the Morrison Heritage Orchard Precinct '…limits activities to those with a rural orchard and similar rural activities, and tourist and visitor activities based on the Precinct's values for such activities within the wider surrounding urban environment.', the existing tree lined (shelterbelt) and open field nature of the Morrisons site,

architectural form of future development to integrate the site (as outcomes listed within the masterplan), situated within an area of FUZ and future urban context, as well as the transient nature of the viewers.

3.14 While I agree with parts of the assessment in regard to landscape and visual amenity effects, I consider that the applicants landscape architect has relied on outcomes illustrated and explained within the masterplan document, which are not carried through into the precinct plan provisions to ensure that these outcomes are achieved (e.g., Morrisons Heritage Orchard landscape values). It is my strong recommendation that these outcomes need to be better captured and outlined within the precinct plan provisions. I discuss this in more detail in my assessment below.

4.0 Assessment of Landscape effects and management methods

4.1 A level of change and development is generally anticipated within the PPC area due to the current Future Urban zoning under the AUP(OP), which signals land which has been identified as being suitable for urbanisation. The Warkworth Structure Plan also identifies this area of land to be re-zoned for urban use (See Appendix D). As such the transformation from rural to urban is anticipated to occur to some degree within this location. The urban development of the area will subsequently result in a significant level of change to the characteristics of the landscape, as well as the visual amenity values appreciated currently.

Outstanding Natural Landscape

- 4.2 The Regional Policy Statement (RPS) recognises the pressure that inappropriate subdivision, use and development can have on the natural features / landscapes and aspects within the landscape that contribute to Auckland's distinctive character, amenity values and sense of place. B4 Te tiaki taonga tuku iho Natural Heritage aims to protect and maintain landscapes which contribute to landscape values and high amenity values⁶.
- 4.3 The PPC has outlined a number of provisions which will go towards protecting and retaining the physical values and visual integrity values of the ONL, in addition to the lower-density zoning proposed (Residential Large Lot zone and Residential Low Density Residential zone), these include:
 - Proposed Covenant Bush as outlined on the Waimanawa Precinct Plan 2 Environment Plan, which protects strips and pockets of vegetation along the eastern escarpment boundary adjacent to Avice Miller Reserve.
 - Fifty percent of the net site area is to be landscaped within the Eastern Escarpment area (as shown on Precinct Plan 1) (Ixxx.6.6 (1)).
 - Maximum building coverage must not exceed 20% of the net site area or 600m² whichever is the lesser (Ixxx.6.6 (3)).
 - Special Height Limit 5m Single Storey (north-eastern spur).
 - Buildings heights must not exceed 8 metres in height, except that 50% of a building's roof
 in elevation, may exceed this by 1m, where the entire roof slope is 15degrees or more.
 (applies to the Landscape Protection Area Eastern Escarpment where the 5m Single
 Storey height requirement above is not applicable).

⁶ Objective B4.2.1 (1) – Outstanding natural features and landscapes are identified and protected from inappropriate subdivision, use and development. and Policy B4.2.2 (3) and B4.2.2 (8) – Manage outstanding natural landscapes and outstanding natural features in an integrated manner to protect and, where practicable and appropriate, enhance their values.

Objective B2.3.1 (1) (a) — A quality-built environment where subdivision, use and development do all of the following: respond to the intrinsic qualities and physical characteristics of the site and area, including it setting. And Policy B2.3.2 (1) (a) — Manage the form and design of subdivision, use and development so that is does all of the following: supports the planned future environment, including its shape, landform, outlook, location, and relationship to its surroundings, including landscape and heritage.

- 4.4 I am supportive of the lower height limit along the eastern escarpment spur at 5m as this will help to ensure that dwellings are not dominant along this part of the ridge, a similar 5m height control would have been beneficial for the entire eastern escarpment. However, I note that the large lot zoning and lower density residential areas within the Landscape Protection Area Eastern Escarpment will be required to have a minimum lot size of 1,000m², while this is a reduction from the general Large lot subdivision size 4,000m², a special 6m yard setback for houses and 3m planted buffer along Avice Miller Reserve, will help to ensure that houses are not at constructed at the highest point.
- 4.5 It is also recommended that to manage the spread of built form, that accessory buildings within the residential low density residential and large lot zone within the landscape protection area eastern escarpment are assessed as a restricted discretionary activity, to ensure the visual and landform values of the ONL remain to be visually appreciated.

Morrisons Heritage Orchard Precinct (MHOP)

- 4.6 The PPC outlines that the underlying overlays, zone, and Auckland-wide provisions apply to the Morrison Heritage Orchard Precinct; including setbacks from streams as required within the Rural Zone and protection of watercourses under the Auckland-Wide chapter objectives. However noting the number of potential permitted activities that could occur within the MHOP, including a submitter recommending that the workers accommodation be increased from 10 to 20 units, and visitor accommodation capacity increased from 25 units / 100 people to 50units / 200 people, I have concerns that collectively all the proposed permitted uses / activities within the Morrisons Heritage Orchard Precinct could weaken the values of the site and not achieve the heritage rural character which is said to be retained.
- 4.7 While the site is not immediately recognisable as an orchard (with the exception of the sign), noting the presence of the shelterbelts, from the road, it is understood that locally there is a cultural and social connection to the Orchards in terms of contributing to both an area of open space, vegetation as well as a sense of place and identity of Warkworth.
- 4.8 In my view, it appears that there could be an increase in pressure on the open and natural features that contribute to the character and values of the MHOP as a result of the number of permitted activities and limited protection of natural features within the MHOP. The MHOP does not equally express the importance of the streams⁷ and vegetation on site, as has been identified and included within the plans and objectives for the proposed Waimanawa Precinct. This includes the stream that runs generally west-east through the middle of the MHOP site (between area A and B/C), the northern side of the stream identified within the Waimanawa precinct near the proposed local centre, as well as the shelterbelt along the southern side of the property, the planting along the eastern side of the property to old SH1 and the stand of trees along the ridgeline to the north of the property. I note that these features are also identified in the WSP as 'Protection Areas (not for development).'
- 4.9 While the applicants landscape architect has said that they do not only rely on the open space values and trees within the Morrison Heritage Orchard site to manage landscape and visually effects resulting from the proposal, the LVEA does refer to the benefits and mitigating effects of the shelter belt; both in providing a backdrop to retain some rural character⁸ and as a key

⁷ B7.7 Explanation. Freshwater systems are made up of lakes, rivers, streams, and wetlands (including their headwaters, margins, and associated flood plains) and aquifers. They are valued for their ecological and biodiversity values, their natural character, landscape, amenity, and recreational values.

 $^{^8}$ LVE e.g., Viewpoint 11 – 3a Valerie Close paragraph 9.16 and VP13 – 30 Valerie Close paragraph 9.18

landscape feature⁹ including the vegetated northern ridge, orchard shelterbelts and Avice Miller Reserve that will aid in retaining the landscape values of the area.

4.10 The Urban Design report which includes the Indicative Masterplan also illustrates that the some of the existing streams will be retained and will have a vegetated buffer. The MHOP does not reflect this outcome.

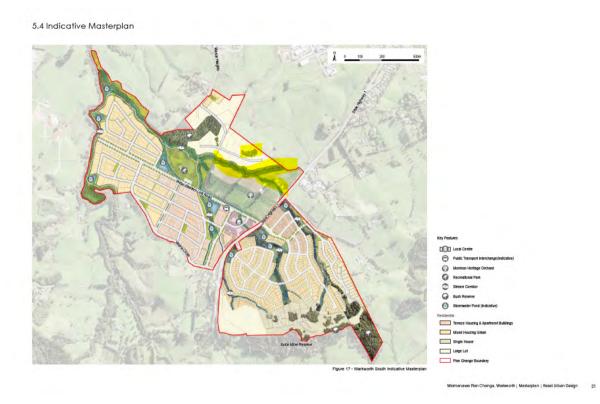


Figure 1: Indicative Masterplan - some streams shown as retained highlighted.

- 4.11 In order to retain the landscape values of the site and local area, as well as the appreciation of these features in term of a sense of place and history for locals, and to ensure the objectives of the PPC can be achieved e.g., "IXXX.2 (3) a rural heritage character and appearance of the Morrison Heritage Orchard is maintained.", these outcomes need to be secured through specific provisions and mapped within the precinct plan.
- 4.12 In my opinion, the following are required:
 - The number of workers accommodation units is retained to ten.
 - The number of visitor accommodation units be retained at 25/100 people.
 - That the existing shelterbelts are protected for retention through identification on the PPC plans and through provisions of the precinct.
 - The stand of vegetation on the northern portion of the site be identified for retention in the PPC and protected through provisions.
 - The streams (perennial and intermittent) are identified within the Morrisons Heritage Orchard precinct on the PPC plans and maintained or enhanced through planting of the stream edges with subdivision or development.
 - Require a minimum 10m yard setback along the stream edges including where it is adjoining the Waimanawa Precinct.

⁹ LVE, 11 Summar of Effects, paragraph 11.8

4.13 The PPC plans to retain the rural – mixed rural zone for the Morrisons Heritage Orchard precinct. While this is quite unusual, as the rural zone will be within the RUB, from a landscape perspective, the site contributes to the local values of the area due to the historic use, ridgeline landform, vegetation, and streams. As such the retention of these values is supported. In regard to the appropriateness of the retention of the rural zone with a precinct overlay within the RUB, I defer to the Council Planner.

Waimanawa Precinct

- 4.14 I retain concerns around the reduction in the setback (and associated riparian / reserve planting) between the Waimanawa Precinct and MHOP, where this has been reduced to 4m, compared to a 10m or 20m riparian setback proposed across the remainder of the PPC. The narrowing of the setback on the one side where it is identified, will impact on the ability of this feature to be retained as both having a nature edge and providing for suitable walking and cycling routes (typically 2m wide). If the 4m wide yard was reflected on the MHOP side, the overall presence of the stream from the west to east would be diminished.
- 4.15 A minimum 10m buffer would ensure that the ecological, physical, and associative values of the streams/rivers and the landscape can be retained, as well as providing for walking and cycling infrastructure.
- 4.16 The proposal includes the rezoning of some pockets of rural rural production within the eastern escarpment area. The pockets of the rural zoning are the south-eastern portions of three properties also subject to the FUZ zone. The extension of the residential large lot and residential low density residential is only taken to the south-east ridgeline / Avice Miller Reserve (not beyond). From a landscape perspective, noting the proposed 5m height control along the eastern spur and a 6m setback build buffer from Avice Miller Reserve, it is not considered that the change of zoning will significantly impact on rural character values of the area to the east.

Visual Amenity Effects

- 4.17 For residents and those visiting along McKinney Road (VP1-VP3), the PPC will result in visual change, shifting the mid-ground views from open fields or vegetated slopes to an urban development. For those viewing the eastern escarpment in the mid ground, the lower density zoning, height controls, recessive colour standards, and landscaped area requirements will help to manage the appearance of the development in the view and allow views through to the hills in the background. It is also important to note that while a large area is proposed to be rezoned, it is likely that the development of the PPC will happen over a period of time, and therefore the shift from a rural landscape to an urban one will happen over time, with the retention of streams, vegetation, public open spaces (conservation zones) alleviating this transition.
- 4.18 A similar, albeit closer view, will be experienced for residents along Toovey Road (VP5). In regard to views captured to the eastern escarpment, the retention of vegetation and requirement for 10-20m riparian edges will help to ensure that landscape features are still evident within the view.
- 4.19 The PPC will impact the appearance and values afforded as seen within the mid-ground and back-ground of the view for residents along Wyllie Road (VP4). Changing from a stretch of pasture with scatterings of large trees that follow stream edges, prominent ridgelines, and relatively undeveloped landscape to an urban area. The planted stream edges will provide some softening in the view, however there will be a shift from a rural to urban outlook. It is important to consider that while the Waimanawa (west end) area is proposed to be rezoned and intensified, that this will likely happen over time, with the retention of vegetate streams, vegetated banks and areas of public open space alleviating this transition to a degree.

- 4.20 From the Twin Coast Discovery Highway / old SH1, travelling north and south (VP6-10), the PPC will change the landscape values from an open valley with scatterings of trees and vegetation following streams, to an urban development with natural features stitched through. However, this change is anticipated to a degree due to the FUZ zoning and Warkworth Structure Plan. To retain the visual values of the Morrisons Heritage Orchard area, as noted above, it is my view that provisions need to be introduced into the PPC to retain the shelterbelts, and open character. Otherwise, the identification and requirement to retain streams and planted buffers including those that cross from the western to eastern side of the site (under the road) will continue to provide elements which contribute to visual amenity values.
- 4.21 From Valerie Close (VP11-16) the hill and valley landscape, with vineyards, open paddocks, vegetation following streams will change significantly. It is recognised that the loss of rural and visual amenity values will happen over time; it is also noted that currently this is a no-exit road, and these properties are within the plan change area, with the lower density zoning on the northern escarpment (large lot) and protection of SEA, and stream buffers identified continuing to contribute to visual amenity, albeit filtered between new roads and development.
- 4.22 From most locations where the PPC takes up the centre of view, or occupies the entirety of the view, the proposal will result in a moderate-high level of change (e.g., VP4, 5, 9, 10, 11), however it is also recognised that the entire PPC is unlikely to be seen in its entirety in one view, will likely develop over time (transition), and for many the experience will be transient. A number of landscape features which contribute to the character and amenity of the area, are proposed to be retained, or are recommended to be retained, will mean that while the proposal will alter several features; including removing the open pastural character and low-scale development, that these landscape features will still visually contribute within the new urban setting.

5.0 Submissions

5.1 I have read the summary of decisions requested provided by Auckland Council and submissions received. Key themes from a landscape perspective include:

Positive feedback on the PPC

- The PPC layout recognises the value of the landscape with creation of open spaces, linkages, riparian edges, off-road greenway routes and movement.
- The generous amount of public open spaces and the amenity this will provide Warkworth.
- Protects the biodiversity in the area.
- Provides a beautiful setting for housing in Warkworth, including the retention of the Morrison Heritage Orchard.
- Provides for community space and recreational facilities, including along the river, the Morrison Heritage Orchards, market area.
- Support for the Residential Large Lot zoning.
- Support for the Landscape Protection area eastern escarpment and the relationship with Avice Miller Scenic Reserve.
- Support for the Landscape Protection area northern escarpment.
- The establishment of the precinct for the Morrison Heritag Orchard is supported. This is part of the history of the Warkworth area and will be a permanent green space focusing on the production of fresh fruit, vegetables, and other local produce.

Negative feedback on the PPC

• The PPC diminishes the values of the natural environment, by crowding development into current farmland / treed area.

- The PPC will take away the 'breathing space' / open farmland / green belt this site(s) provides to Warkworth South.
- Concerns regarding the intensity of use and development within the Morrisons Heritage Orchard precinct and the cumulative effects of the permitted activity on the values.
- Concerns that the current values of the Morrisons Heritage Orchard area are not recognised in the PPC, including the shelterbelt, streams and associated planting which are not identified on the PPC plans.
- The density / intensity is not appropriate.
 - o Terraced housing zone / multiple storeys is inappropriate in this environment.
 - o The area is more suited to large lot and singe family dwelling zone.

Recommended changes to the PPC.

- Removal of the non-complying activity status, and change / retention of the restricted discretionary activity status for infringements to the 6m building setback and 3m vegetated buffer along the eastern escarpment.
- Increase the number of worker accommodation within the Morrisons Heritage Orchard precinct from 10 to 20 in total.
- Increase the number of visitors accommodation within the Morrisons Heritage Orchard Precinct from 25 units / 100 people to 50 units / 200 people in total.
- 5.2 Concentrating on those submissions that raised landscape matters; I am comfortable that the I have addressed the majority of these issues in paragraphs 4.1 4.21. I address the remaining issue(s) below.
- 5.3 One recommendation within the submissions included that the PPC should apply a restricted discretionary activity status, rather than a non-complying status in relation to infringement to the 6m building setback and 3m vegetation buffer as these are too onerous.
- 5.4 From a landscape perspective, the key aspect is that the landscape values of the ONL / Avice Scenic Reserve are maintained or enhanced. The activity status allows the ability for Council to ensure that the values of the ONL, such as the strong vegetated ridgeline and sequence of landforms and vegetation which stretch from Warkworth to Mahurangi, are protected. In my opinion, the standards are not too onerous; and noting the lot sizes that are proposed here are reduced to 1,000m² (compared to standard large lot 4,000m²), a level of protection needs to be in place. I consider that the 6m building setback and 3m planted buffer should be retained.

6.0 Conclusions and recommendations

- 6.1 Overall, the proposal generally follows the proposed zones as introduced within the Warkworth Structure Plan. However, I consider that parts of the proposed plan change (as notified) are inconsistent with the outcomes of the RPS.
- To adequately respond to the outcomes of the RPS in regard to the ONL, I am of the opinion that the 6m building yard and 3m vegetated buffer standards must be retained.
 - B4.2.2 (3) Protect the physical and visual integrity of Auckland's outstanding natural landscapes from inappropriate subdivision, use and development.
 - B4.2.2 (8) Manage outstanding natural landscapes and outstanding natural features in an integrated manner to protect and, where practicable and appropriate enhance their values.
 - B2.4.2 (4) (c) provide for lower residential intensity in area where there are natural and physical resources that have been scheduled in the Unitary Plan in relation to natural

heritage, mana whenua, natural resources, coastal environment, historic heritage, and special character.

- 6.3 To ensure that the PPC and future development is able to respond to the intrinsic qualities, physical characteristics, landscape, and social values of the area, it is considered that the landscape features (streams, tributaries, shelterbelts, stand of trees) within the Morrisons Heritage Orchard precinct need to be identified and introduced into the PPC plans and provisions for retention and protection.
- 6.4 The number of workers and visitor accommodation should not be increased, and the ability to consider the cumulative effects of the activities outlined as permitted within the Morrisons Heritage Orchard should be applied as an assessment criteria / matter of discretion. The full width of the stream buffer (10m) needs to be retained along the stream within the Waimanawa Precinct to the north of the local centre.
 - B2.3.1 (1) (a) A quality-built environment where subdivision, use and development do all of the following: respond to the intrinsic qualities and physical characteristics of the site and area, including its setting.
 - (1) (a) Manage the form and design of subdivision, use and development so that it does all of the following: supports the planned future environment, including its shape, landform, outlook, location, and relationship to its surroundings, including landscape and heritage
- 6.5 Overall, it is my opinion that the proposed plan change (as notified) would result in moderate-high adverse landscape effects in regard to the Morrison Heritage Orchard Precinct, and moderate low adverse effects in regard to the Waimanawa Precinct (as notified not as proposed to be changed within the submissions). The adverse effects of the PPC could be reduced from a landscape perspective through the inclusion of a number of provisions which would better respond to the features valued within the landscape. These are outlined below.
 - Identify and include on the Morrison Orchard Precinct Plan (XXX.9.1) the permanent and intermittent streams and their margins (10m) to be retained and protected.
 - o Introduce provisions which ensure the long-term protection of the streams from inappropriate subdivision, use and development.
 - Identify and include on the Morrison Orchard Precinct Plan (XXX.9.1) the existing shelterbelts along the southern and eastern boundaries to be retained and protected.
 - o Introduce provisions which ensure the long-term protection of the shelterbelts/vegetation from the effects of inappropriate subdivision, use and development within areas A and B
 - Identify and include on the Morrison Orchard Precinct Plan (XXX.9.1) existing stands of native
 vegetation along the northern ridgeline to be retained and protected from the effects of
 inappropriate subdivision, use and development.
 - Introduce provisions which ensure the long-term protection of the vegetation from the effects of inappropriate subdivision, use and development within Area C
 - Require and update Waimanawa Precinct Plan 1 Spatial Provisions and Precinct Plan 2
 Environment (XXX.10.1 and XX.10.2) to provide for a 10m riparian margin along the stream
 edge within Waimanawa Precinct (to the north of the local centre zoning) and within the
 Morrisons Heritage Orchard Precinct.

- Introduce a restricted discretionary activity status for accessory dwellings within the
 residential low density residential and large lor zone within the landscape protection eastern
 escarpment to ensure the location, design and effects of additional built form is appropriate
 and retains the values of the ONL.
- Retain the provisions that require a 6m yard setback from the ONL/ Avice Scenic Reserve and a minimum 3m wide vegetated buffer as outlined within the PPC.
- Retain the maximum of ten workers accommodation units and the 25units/100 people visitor accommodation units within the Morrisons Heritage Orchard Precinct and introduce an assessment criteria / matter of discretion which allows the assessment of cumulative effects of subdivision, development and use within the MHOP to ensure the landscape (including visual and cultural /social) values are retained.

Kind Regards
Gabrielle Howdle
Principal Landscape Architect
Tāmaki Makaurau Design Ope
Auckland Council

Appendix A: Qualifications and experience

Gabrielle Howdle

Principal Landscape Architect

Design Review, Tāmaki Makaurau Design Ope, Plans and Places Department, Auckland Council.

Qualifications and Training

- Bachelor of Landscape Architecture (Hons) (2016), United Institute of Technology, NZ
- Environment Court and Expert Witness Training by DLA Piper (2019)
- Crime Prevention Through Environmental Design, Level 1. International Security Management and Crime Prevention Institute (2018)

Experience:

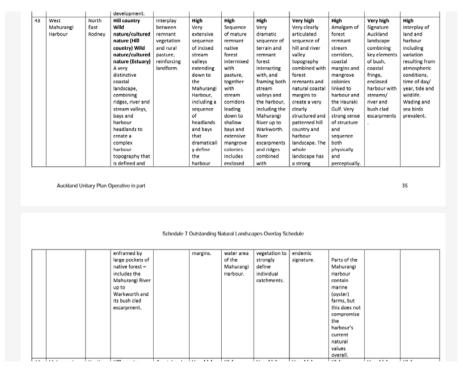
- Principal Landscape Architect, Design Review Team, Tāmaki Makaurau Design Ope, Auckland Council (September 2023 – Current)
- Specialist Landscape Architect, Design Review Team, Auckland Design Office, Auckland -Council (September 2017- September 2023)
- Graduate Landscape Architect, Brown NZ Ltd. (April 2017- July 2017)
- Landscape Intern, Urban Logic (January 2015- February 2015)

I have been with Auckland Council in the design review team since September 2017. I have 7 years industry experience in NZ, primarily within the public sector. In my current role as Principal Landscape Architect, I specialise in design review and the assessment of landscape effects, including character, natural character, and visual amenity for projects of various scales. I am a Graduate Member of New Zealand Institute of Landscape Architects Tuia Pito Ora. I have attended and provided evidence at a variety of council hearings as part of my role and provided input into MfE Fast Track Consenting projects.

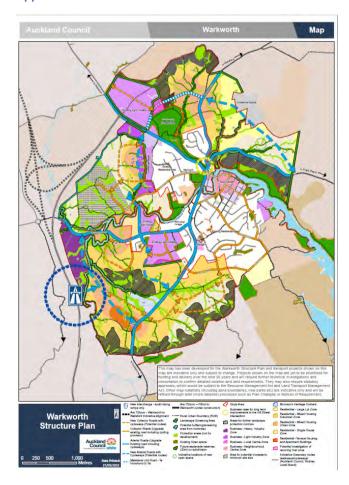
Appendix B: Reset Urban Design LVE – 7-point rating scale.

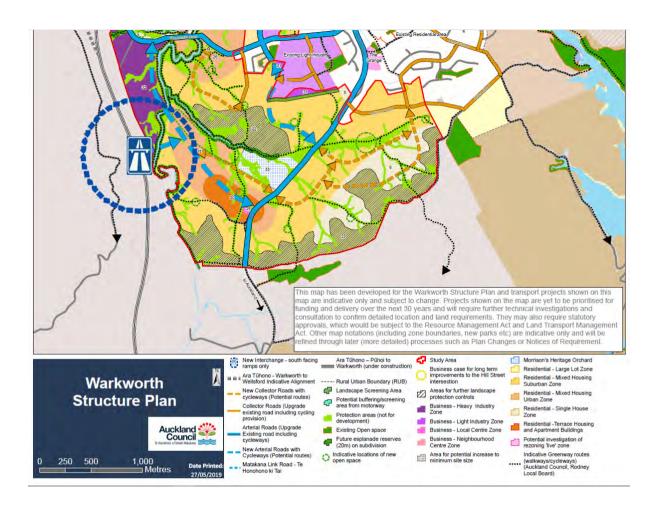
very low	low	low-moderate	moderate	moderate-high	high	very high
,	1			The second secon		,

Appendix C: Outstanding Natural Landscape – Area 43 West Mahurangi Harbour



Appendix D: Warkworth Structure Plan







Memo: Technical specialist report to contribute towards Council's section 42A hearing report

26 March 2024

To: David Wren, Consultant Planner, Plans and Places, Auckland Council

From: Derek Foy, Director, Formative Limited

Subject: Private Plan Change – PC93 Warkworth South – Economic Assessment

1.0 Introduction

- 1.1 I have undertaken a review of the private plan change, on behalf of Auckland Council in relation to economic effects.
- 1.2 I am a Director of Formative, an independent consultancy specialising in social, economic, and urban form issues. Prior to this, I was an Associate Director of Market Economics Limited, a research consultancy for six years, and was employed by Market Economics for 18 years.
- 1.3 I have 24 years consulting and project experience, working for commercial and public sector clients. I specialise in retail analysis, assessment of demand and markets, the form and function of urban economies, the preparation of forecasts, and evaluation of outcomes and effects.
- 1.4 I have applied these specialties in studies throughout New Zealand, across most sectors of the economy, notably assessments of housing, retail, urban form, land demand, commercial and service demand, tourism, and local government. I have been involved in assessments for greenfields developments around Auckland, including in the north-west (Kumeu-Huapai, Redhills and Whenuapai), Warkworth, Silverdale, Waiuku, and Drury.
- 1.5 In writing this memo, I have reviewed the application materials as notified for the Private Plan Change request PC93 Warkworth South ("PC93", or the "PPCR"), and in particular the following documents:
 - "Warkworth South Private Plan Change Assessment of Economic Effects", 23 December 2022, M.E Consulting (the "M.E report") (Appendix 10).
 - "Warkworth South: Private Plan Change Request to Auckland Council", 20 January 2023, Osborne Hay and Tattico (the "planning report").
 - "Proposed Plan Change 93 (Private): Warkworth South Summary Of Decisions Requested", Auckland Council.
 - "Warkworth South Plan Change Waimanawa Urban Design Report", January 2023, Reset Urban Design and A Studio Architects (Appendix 2).

2.0 Key economics issues

2.1 In my opinion the key economic issues associated with the proposal are:

- Demand for and supply of residential dwellings in Auckland generally, and Warkworth in particular.
- The appropriate size of any centre in the PPCR area.
- Consistency of the PPCR with growth expectations for Warkworth, in particular from the Auckland Future Development Strategy ("FDS").

3.0 Applicant's assessment

- 3.1 I accept and adopt the site description provided in the s32 report, including the zoning and description of existing activities.
- 3.2 I generally accept the methodology applied in the applicant's economic assessment (the M.E report) in relation to the demand for and supply of centre-zoned land, and I agree with the M.E report's assessment of:
 - Warkworth's historic growth trends, and projected future growth.¹
 - The importance of Warkworth as a satellite town, and future growth area in northern Auckland.²
 - The general consistency of the PPCR with the development pattern indicated in the Warkworth Structure Plan ("WSP").³
 - The potential challenge for infrastructure planning and management that could arise from bringing development forward from the timing indicated in the Future Urban Land Supply Strategy.⁴
 - That development enabled by the PPCR would generate economic benefits for the local, regional and to a lesser extent national economies, as capital expenditure undertaken flows through the economy.⁵
 - The quantum of floorspace, and hence zoned land that will be supported in all locations by development in the PPCR area, and in the rest of Warkworth South.
- 3.3 There are some aspects of the M.E report's assessment on which I wish to provide further comment, including:
 - The assessment of how much local centre zone ("LCZ") will be required to provide for the needs of future residents in the PPCR area, Warkworth South, and the wider Warkworth township.
 - The zoning proposed in the PPCR area.
 - The implications of being inconsistent with the growth timing indicated in the FDS.
- 3.4 In the rest of this statement I provide only limited expansion on the matters in the application with which I agree, but focus most of my response in the next section on those two matters.

¹ M.E report sections 3.1 and 3.2

² M.E report section 3.1

³ M.E report sections 3.3, 3.4, and 3.5

⁴ M.E report section 3.6

⁵ M.E report section 4.1

4.0 Assessment of economic effects and management methods

- 4.1 In this section I respond to parts of the economic assessment which I consider require some further consideration, and explain the reasons for my position, and the likely effects on the environment of the PPCR. The key matters discussed below are:
 - a. Demand for LCZ space.
 - b. Zoning proposed.
 - c. Timing of development in the PPCR area.

LCZ space

- 4.2 The M.E report uses the PPCR's estimates of future residential capacity of the PPCR area, and the WSP estimates of Warkworth South's dwelling capacity, to assess the amount of centre floorspace that would be required to appropriately accommodate local demand, such as the PPCR's indicated LCZ would provide for.
- 4.3 I agree with the M.E report's assessment of the amount of floorspace that would be sustainable in Warkworth South's centres, at around 5,000-6,000m² (the M.E report assesses 5,560m²).⁶ That is the total gross floor area ("GFA") required for all LCZ and Neighbourhood Centre zone ("NCZ") land.
- In my opinion the M.E report has also appropriately converted that GFA into a land area (1.1ha)⁷ required to accommodate that GFA, although the M.E report applies what I believe to be a slightly conservative (high) average site coverage of 50%.⁸ If a less dense usage of centre zoned land were to eventuate, the land area required to accommodate 5,560m² GFA would be slightly higher:
 - 40% site coverage would require 1.4ha instead of 1.1ha
 - 35% site coverage would require 1.6ha instead of 1.1ha.
- 4.5 Viewed another way, less GFA might establish within 1.1ha that the 5,560m² GFA the M.E report estimates is sustainable.
- 4.6 However, the M.E report does not recommend that the PPCR area's LCZ is limited only to 1.1ha, and provides a rationale for why the larger zoned area requested (stated to be 3.4ha)⁹ is appropriate. The rationale includes that:
 - There could be some provision for commercial office space, transport infrastructure and other retail within the LCZ, which might increase sustainable space by between 50% and 75%, taking total sustainable space to 1.67-1.94ha.¹⁰
 - The PPCR's LCZ meets the LCZ and NCZ demands for all of Warkworth South.
 - There is scope for the centre to capture a higher share of demand, by taking on a higher order role and meeting a range of town centre and potentially higher needs.

⁶ M.E report page 29

⁷ M.E report page 30

⁸ M.E report page 30

⁹ M.E report page 30

¹⁰ M.E report page 30

- 4.7 In response to the M.E report's assessment, I note the following key points.
- 4.8 First, there is no NCZ proposed in the PPCR area. The western parts of the PPCR area furthest from the LCZ would be around 1.2km from the LCZ, slightly more than a typically assumed walkable catchment of around 800m. That may indicate that some future NCZ provision is required to service the NCZ/convenience retail needs of that western extent and neighbouring area outside the PPCR area. I note that the only NCZ indicated in the vicinity is to the north of the PPCR area, and so the PPCR is consistent with the WSP in that regard. I agree that a NCZ is not required in the PPCR area. The typically small size of NCZs (with respect to land area and GFA) means that provision of a NCZ somewhere in Warkworth South but outside the PPCR area would not be precluded by the proposed LCZ in the PPCR area.
- 4.9 Second, the LCZ proposed is larger than the 1.67-1.94ha the M.E report assesses is required. The additional 1.45-1.73ha proposed to be provided in the 3.4ha centre is justified in the M.E report on the grounds that the PPCR LCZ could play a broader role than just being the local centre for Warkworth South. The M.E report states that the Warkworth (town) centre is "relatively constrained", implying that the LCZ could accommodate some centre-type activities that are unable to be accommodate in the Town Centre Zone ("TCZ") due to a lack of space available there.
- 4.10 I agree that the TCZ is supply constrained, although note the surrounding Business Mixed Use Zone ("BMUZ") has some capacity to accommodate centre-type activities, and can function as an expansion zone for the TCZ. Nevertheless, some additional centre capacity in a well-located place within Warkworth would help to avoid adverse effects of a supply constrained commercial land environment.
- 4.11 Those adverse effects might include upwards pressure on rents and land prices, a shortage of tenancies available for rent, and limited location options for commercial (retail, services and office) businesses in Warkworth. All of those outcomes would disincentivise commercial businesses establishing, or perhaps continuing to operate in Warkworth, adversely affecting the way community needs are provided for.
- 4.12 In my opinion Warkworth South is an appropriate place within Warkworth to provide some additional centre space to provide some element of 'overflow' capacity for TCZ-type activities. To place the requested 3.4ha LCZ area in context, it is only slightly larger than both the 3.2ha LCZ that was created as a result of PC25 Warkworth North (west of the Hudson Road industrial area, and in a smaller residential catchment) and the existing 2.6ha 'The Grange' LCZ (north of Warkworth South on the old State Highway 1).
- 4.13 Together these three local centres would, in my opinion, be sufficiently distinct in terms of size from the much larger 11.7ha town centre as to avoid the likelihood of adverse retail distributional effects on the TCZ arising from the development of new LCZ space.
- 4.14 Third, the M.E report does not discuss the possibility that part of the LCZ might be required to be used for a supermarket. At over 4,000 households, Warkworth South will be large enough to support a full-size supermarket of 3,000m²+, and such a store would require close to 1ha of land to accommodate it, including carparking and back of house space. Around half of Auckland's LCZs include a supermarket, and in my opinion the PPCR LCZ would be an appropriate place for a supermarket from an accessibility point of view, and also to collocate with other commercial activities in the centre. The potential to accommodate a supermarket in

the LCZ would be safeguarded by the provision of more zoned land than the <2ha the M.E report assesses.

- 4.15 Fourth, in my opinion the M.E report is slightly conservative as to land requirements, having assumed a relatively high stie coverage of 50%, when often LCZ site coverage in Auckland is closer to 35-40%.
- 4.16 For these reasons I agree that the LCZ proposed is an appropriate activity to have in the PPCR, and that it is appropriately sized to play a local centre role for the Warkworth South catchment.

Zoning proposed

- 4.17 While primarily a planning matter, I next provide some brief opinion on the appropriateness of the residential zones requested in the PPCR from an economics perspective.
- 4.18 In my opinion the residential zones requested are generally appropriate, with higher density enabling zones adjacent to the proposed LCZ, and zones enabling lower dwelling density further from the LCZ.
- 4.19 In my opinion it is appropriate to have the requested Residential Terrace Housing and Apartment Buildings Zone ("THAB") around the LCZ, because the higher density THAB zone will accommodate a large residential population in close proximity to the LCZ. This proximity is consistent with the Unitary Plan's expectations for the THAB, which include that the THAB will:

make efficient use of land and infrastructure, increase the capacity of housing and ensure that residents have, which will provide a convenient access to services, employment, education facilities, retail and entertainment opportunities, public open space and public transport. This will promote walkable neighbourhoods and increase the vitality of centres.¹¹

- 4.20 I note that there is an increasing acceptance and popularity of higher density dwelling typologies in Auckland, and in fact many places around New Zealand, and anticipate that the proposed THAB zone would be an efficient way of increasing dwelling supply in a market where substantial growth is projected.
- 4.21 Beyond the THAB, the decreasing density of residential zones proposed (Residential Mixed Housing Urban, and some Large Lot Zone) is in my opinion also appropriate from an economics perspective, reflecting decreased proximity to the LCZ.

Timing of development in the PPCR area

4.22 The M.E report notes that a key issue of the PPCR is the timing of the potential development in the PPCR area which is earlier that envisaged by the Future Urban Land Supply Strategy ("FULSS"). The M.E report notes that the aim would be to have the first houses in the PPCR area completed by mid-2025, 12 while the FULSS indicates the FUZ in Warkworth South is expected to be development ready from 2028.

-

¹¹ Auckland Unitary Plan H6.1 Zone Description

¹² M.E report, page 1

- 4.23 I note that PC93 was notified on 26 October 2023, before the FDS was adopted in early November 2023, meaning that the application did not have the opportunity to assess against the FDS. It is, however, important to understand consistency of the PPCR with the FDS to assess economics matters.
- 4.24 The M.E report notes that "Attempting to bring the PPC development forward from decade two will have an impact on infrastructure planning and management." I agree, and make some comment below about the economics implications of bringing forward this development. In doing so I note that infrastructure provision and the specifics of funding agreements that might be put in place to advance developer-lead infrastructure development are outside my area of expertise, and accordingly limit the scope of my response below.
- 4.25 First, I note that the difference between the timing that would be enabled by the PPCR is much larger relative to the FDS than it was to the FULSS. If development in the PPCR area might be expected to begin in 2025 as the M.E report states, that is only three years before the 2028 timing of Warkworth South becoming development ready in the FULSS. However, the FDS now anticipates that development-ready timing will be not before 2040, and after 2045 for some parts of the PPCR area, meaning the PPCR would bring forward development by around 20 years. There are substantial challenges that are associated with bringing forward development by that amount.
- 4.26 I understand that the main infrastructure providers in Warkworth and wider Auckland (including Auckland Council, Watercare, Auckland Transport and Waka Kotahi) have finite budgets that enable them to provide for asset management and development. Those budgets have many competing demands, and allocation of budgets to particular assets or locations will limit the ability of the agencies to direct funding to other assets or locations. That is a key reason behind the need for long-term financial planning, and is a reason why future development strategies are required to be prepared by local authorities.
- 4.27 Auckland's FDS sets out an anticipated timing of growth for each future development area, and that timing is used to schedule and plan for future infrastructure provision. Any changes to the timing of infrastructure provision, such as will arise out of a new growth area being proposed when it was not planned for (or being brought forward from when it was anticipated) will result in funding challenges.
- 4.28 I infer that these challenges are recognised by the applicant, and that they are the reason why the applicant has proposed to fund the infrastructure required for the development, rather than relying on public funding. In my opinion that is an appropriate response that should, if the funding agreements are appropriately scoped and structured, avoid the need for diversion of public funding from other projects. I understand that there can be challenges associated with these funding agreements, as is raised in submissions, so the certainty of outcome arising from the funding arrangements made should be of particular concern when assessing the merits of the application and imposing conditions, should the PPCR be accepted.

5.(0	S	ub	m	iss	Sic	ns

¹³ M.E report, page 6

5.1 In this section I identify matters raised in submissions that are relevant to this statement, and provide my opinion on the submission points, in light of the assessment of effects provided above in section 4.0.

Timing of development and infrastructure provision

- 5.2 Several submissions refer to the timing of Warkworth South now indicated in the FDS, and request that the delayed development-ready date identified in the FDS does not delay development of the PPCR area. 14 Some submissions 15 state that the applicants propose to create the necessary infrastructure without the need for any Council funding, and so the FDS timing should not be a reason to not approve the PPCR. One submission requests that infrastructure of major arterial roads, sewerage, etc, should be in place first before any development takes place. 16
- 5.3 Auckland Council as Submitter ("ACS", #17) notes that the anticipated time (per the FDS) for Warkworth South to be live zoned is now not before 2040+, to enable various transport upgrades and implementation of the Warkworth Wastewater Growth Strategy. The ACS submission notes the applicant's undertaking to provide all required infrastructure, but proposes further strengthening of the objectives, policies and rules/standards included in the PPCR.¹⁷ Auckland Transport makes a similar submission point relating to transport infrastructure, ¹⁸ and Watercare in relation to water infrastructure. ¹⁹ Waka Kotahi seeks certainty that all required infrastructure will be in place to service the land being brought forward for development. ²⁰
- 5.4 Watercare (#32) notes that to provide for the out of sequence development proposed by the PPCR would require considerable review and rescheduling of Watercare's asset management planning, which may compromise Watercare's ability to give effect to Auckland Council's Long Term Plan, and identifies challenges with providing the required waters infrastructure to the PPCR area.
- 5.5 Some submissions²¹ request that infrastructure for the PPC93 area needs to be designed and constructed to enable servicing capacity for the FUZ land between the PPCR area and existing urban area of Warkworth, including the Submitter's land. One other submission²² requests that "Auckland Transport, Watercare and Auckland Council need to be aware of the flow on effects of the proposed plan change and make appropriate plans to achieve the effective and efficient integration of the infrastructure and urban development. The flow on effects should not be left with local residents and communities to manage."
- 5.6 In response to these submissions I note that I understand that there can be challenges with establishing robust funding arrangements that achieve sufficient certainty that public funding will not be required to supplement funding shortfalls arising out of unanticipated infrastructure

¹⁴ Hugh Briggs (#1), Stephen Haycock (#7), Warkworth Area Liaison Group and One Mahurangi (#8), Mahurangi Trail Society (#18)

¹⁵ Hugh Briggs (#1), Louisa Gowing (#5), Stephen Haycock (#7), Warkworth Area Liaison Group and One Mahurangi (#8)

¹⁶ Caroline Barrett (#33)

¹⁷ Submission points 17.1-17.6

¹⁸ Submission point 20.1, and various other points

¹⁹ Submission points 32.1-32.7

²⁰ Submission point 31.1

²¹ Mikel Thorogood (#25), Guy Matches (#26), John and Sue Wynyard (#27)

²² Thompson Road Residents (#39)

that comes to be required. Some of the submissions²³ refer to that potential, and to the possibility that changes to infrastructure requirements can occur beyond the boundaries of the PPCR area. It is important that these requirements are understood and, if necessary, that are appropriately captured in the private funding agreements established. It will be very important that any funding agreement entered into appropriately captures a sufficiently broad range of infrastructure funding so as to avoid unintended future public funding liabilities.

5.7 I defer to infrastructure specialists on whether it is appropriate for properties in between the PPCR area and the existing urban area to be serviced by infrastructure designed to service Warkworth South. It may be economically efficient to do so, however if the PPCR infrastructure is to be privately funded, it may be appropriate for any properties outside the PPCR area to also privately fund their infrastructure upgrades, or contribute to the applicant's costs.

Ability of the PPCR area to accommodate growth and provide amenities

- 5.8 Several submissions in support of the PPCR note the positive benefits of the PPCR for accommodating residential growth, providing amenities for the community and supporting the ongoing growth of Warkworth as a satellite town.²⁴ I agree that the ongoing growth of Warkworth as planned will lead to some positive outcomes, with a greater local population able to support a wider range of local services and facilities, and contributing to a critical mass that will make some new businesses viable to locate in the town.
- The proposed provision of a new park (the Endeans Farm Recreational Park) is one example of how new growth areas can provide for their own needs, but also contribute to an increasing range of local facilities for the benefit of the broader community. PPCR residents would also support town centre businesses and organisations, and new commercial businesses elsewhere in the town such as in the General Business Zone around the new Warkworth Pak'n Save.
- 5.10 Two submissions²⁵ state that THAB is not appropriate in Warkworth South, that the LCZ may not be viable, and the existing Warkworth town centre should be the only centre for Warkworth. I disagree that THAB will not be viable in Warkworth South, as I discuss in section 4. I note that apart from the TCZ there are already other zoned centres in Warkworth (The Grange, the PC25 centre), however my opinion is that the Warkworth TCZ should remain the primary centre for Warkworth, and main focal point for commercial activities in the town. As I discuss earlier, I believe the requested LCZ would not be likely to adversely affect that primacy or the role of the Warkworth town centre.

6.0 Conclusions and recommendations

6.1 In my opinion the applicant has adequately assessed the appropriateness of the PPCR area being changed to a residential zoning, and the application provides for an appropriate range of residential zone types and an appropriately sized local centre.

²³ Watercare (#32) and Thompson Road Residents (#39)

²⁴ David Morgan (#2), Dianne Morgan (#3), Dominique Coote (#4), Louisa Gowing (#5), Stanley Coote (#6), Stephen Haycock (#7), Willima Endean (#11), Mark Calvert (#14), Warwick Scown (#15), Mahurangi Trail Society (#18), Bevan Morrison (#35), Red Bluff Investment Ltd (#36)

²⁵ Caroline Barrett (#33), Pete Sinton (#34)

- The zones proposed by the PPCR are very similar to those anticipated by the WSP, and therefore fit well into the broader Warkworth urban fabric. The size of the proposed LCZ is adequate to provide for the needs of the local community without generating adverse retail distribution effects on the town centre, and the LCZ is well located within the PPCR area to provide convenient access to the community.
- 6.3 The development enabled by the PPCR would be enabled earlier than was anticipated by the FULSS, and much earlier than is currently anticipated by the FDS. Assuming that appropriately structured funding arrangements can be imposed on the applicant, and no (or at least minimal) additional funding burden is imposed on public agencies, then in my opinion there is no reason from an economics perspective why that different timing should preclude approval of the PPCR.
- There are positive aspects of the PPCR, such as the additional housing capacity it would provide, assisting housing affordability and choice in Warkworth, and contributing to a critical mass of population in Warkworth to support an increased range of services and facilities in the town.
- Overall I do support the PPCR from an economics perspective because the PPCR area is in an appropriate location, and because the PPCR enables a similar range of activities to those that are anticipated in the WSP, and therefore fit well with holistic plans for Warkworth's future development and urban form.

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

8 April 2024

To: David Wren – Consultant Reporting Planner (on behalf of Auckland Council)

And to: Susan Andrews - Principal Planner, Auckland Council Healthy Waters

From: Amber Tsang – Consultant Planner (on behalf of Auckland Council Healthy Waters)

Kedan Li - Senior Healthy Waters Specialist, Auckland Council Healthy Waters

Subject: Private Plan Change (PPC) 93 – Warkworth South – Stormwater Assessment

1.0 Introduction

This memo has been written between Amber Tsang, Senior Associate Planner at Jacobs and Kedan Li, Senior Healthy Waters Specialist at Auckland Council Healthy Waters.

Amber Tsang has worked as a consultant planner for Healthy Waters since 2016. Ms Tsang holds a Bachelor of Planning (Hons) degree from the University of Auckland and has been a full member of the New Zealand Planning Institute since 2012.

Kedan Li has worked as a Senior Healthy Waters Specialist (Catchment Manager) since 2020. Ms Li holds a Bachelor of Engineering (Hons) degree from the University of Auckland and has been a Chartered Stormwater Engineer since 2022.

We (Ms Tsang and Ms Li) have assessed the Stormwater Management Plan (SMP) submitted as part of PPC 93, on behalf of Auckland Council Healthy Waters, in relation to stormwater effects against the plan change requirements. Comments have also been provided in relation to the Auckland Council Healthy Waters' Regionwide Network Discharge Consent (NDC).

In writing this memo, we have reviewed the following documents:

- Warkworth South Plan Change Stormwater Management Plan by Maven dated 28/07/2023 Rev E.
- Proposed Waimanawa and Morrison Heritage Orchard Precinct Provisions dated 24/08/2023.
- Submissions received raising stormwater related issues.

The following sections are provided to assist the reporting planner's consideration of the plan change proposal in terms of stormwater effects.

The PPC 93 Applicant has indicated that it wishes its stormwater discharges to be covered by the NDC and intends to vest stormwater assets with Auckland Council. The Healthy Waters' NDC authorisation and SMP adoption process will be discussed in this memo.

2.0 Key Stormwater Issues

PPC 93 seeks to rezone approximately 159 hectares of land south of Warkworth (the site) from Future Urban, Rural – Rural Production and Open Space – Conservation zones under the Auckland Unitary Plan – Operative in Part 2016 (AUP(OP)) to a mixture of Residential – Terrace Housing and Apartment Building, Residential –Single House, Residential – Mixed Housing: Urban, Residential – Large Lot, Business – Local Centre, Open Space- Conservation zone and Rural – Mixed Rural zones.

Two new precincts are being proposed as part of PPC 93. The Waimanawa Precinct seeks to provide a new residential neighbourhood in Warkworth. The Morrison Heritage Orchard Precinct seeks to enable the ongoing operation and expansion of the existing Morrison Orchard as a heritage rural land use. Sites within the Morrison Heritage Orchard Precinct are proposed to be zoned Rural – Mixed Rural or Residential – Large Lot.

PPC 93 will enable greenfield development on the site and result in new stormwater discharges and diversions of existing stormwater flows. The primary stormwater management issues associated with PPC 93 are:

- Water quality stormwater runoff from all 38 post-development sub-catchments within the site are proposed to discharge into the Mahurangi River via streams within the site boundary. The Mahurangi River is identified as a Significant Ecological Area (SEA) under the AUP(OP). Appropriate treatment of stormwater is therefore required onsite prior to its discharge in order to avoid and/or mitigate water quality effects.
- Stream hydrology and erosion development increases imperviousness and will
 therefore increase the flow rate and volume of runoff into the stream network while
 reducing ground infiltration unless mitigated. Appropriate mitigation is required to retain
 base flow and reduce the risk of erosion in the watercourses.
- Stormwater devices the feasibility of any proposed stormwater management and devices shall be adequately demonstrated. This is to ensure that adverse effects in relation to stormwater discharges from PPC 93 will practically be able to be mitigated.
- Flood management within PPC 93 both primary and secondary stormwater systems shall be designed as per the Auckland Council Stormwater Code of Practice (SWCoP) and the proposed development lots shall be free from flooding.
- Downstream flooding management flooding risks associated with increased stormwater runoff being discharged from PPC 93 onto the downstream properties and infrastructure (i.e. the Woodcock Road bridge) shall be avoid and/or mitigated.
- Precinct provisions shall be included to ensure the implementation of the stormwater mitigation measures proposed in the SMP.

3.0 Applicant's Assessment

Section 7 of the SMP sets out the stormwater management proposed by the Applicant. The proposed management in relation to water quality and stormwater treatment, hydrological and erosion mitigation, and flooding are summarised below.

3.1 Water quality - stormwater treatment

As proposed in Section 7.2.3 of the SMP, runoff from all public and private impervious areas are to receive a level of treatment consistent with GD01 - Stormwater Management Devices in the Auckland Region December 2017 (GD01) through communal wetlands (for the sub-catchments in Stormwater Management Zone A) and bioretention/proprietary treatment devices (for the sub-catchments in Stormwater Management Zones B, C and D).

3.2 Hydrological and erosion mitigation

The Applicant proposes to provide the equivalent of SMAF1 hydrological mitigation (i.e., E10 of the AUP(OP) by way of introducing the SMAF1 overlay for the plan change area). The AUP(OP) Chapter E8 SMAF1 requirements include stormwater detention and retention (i.e. though infiltration and/or reuse).

As stated in Section 7.2.4.1 of the SMP, detention of stormwater runoffs from public and private impervious areas will be provided by wetland (for the sub-catchments in Stormwater Management Zone A) and bioretention devices/tanks (for the sub-catchments in Stormwater

Management Zones B, C and D). Due to geotechnical constraints and limited infiltration on site, no retention through ground infiltration is being proposed. It is acknowledged in Section 7.2.4 of the SMP that the hydrological mitigation retention volume as per the SMAF1 requirements will need to be added to the detention volume.

Limited information is provided in the SMP in relation to roof water reuse, although it is stated in Section 7.1 of the SMP that Water Sensitive Urban Design, including roof water reuse, is one of the stormwater management principles for PPC 93.

Regarding stream erosion, it was highlighted in the Warkworth South Plan Change Baseline Ecology Report¹ that many of the watercourses across the site have undercut banks and evidence of erosion. This was confirmed by our site visit on 15th March 2024.

Several stream erosion mitigation measures including riparian planting along permanent and intermittent streams are proposed in Section 7.2.4.2 of the SMP. As shown on the Waimanawa Precinct Plan 2 – Environment, riparian yard is proposed for all streams within the site **except for** the stream within Sub-catchment XXXI and the two streams within Sub-catchment XXVII (i.e. near the intersection of Valerie Close and Old State Highway 1). It is unclear if this is an unintended omission.

3.3 Stormwater devices

As indicated in the Post Development Catchment Analysis (i.e. Appendix E of the SMP), a total of nine communal wetlands (i.e. one for each of the post development sub-catchments within Stormwater Management Zone A) are proposed to achieve stormwater quality treatment and detention². These communal wetlands are intended to be vested with Auckland Council.

However, Ms Li has raised a few concerns in relation to the proposed size, shape and location of these communal wetlands:

- The proposed wetlands within Sub-catchments XII and XXXI are significantly undersize. For instance, the wetland for Sub-catchment XXXI would require a surface area of approximately 11000m² which is bigger than the 7210m² as shown in the SMP and on the Waimanawa Precinct Plan 2 Environment.
- The triangular shape of the proposed wetlands within Sub-catchments XXIX and XXXI
 can result in short-circuiting. Short-circuiting happens when flow paths in a wetland are
 not evenly distributed. This can reduce the effectiveness of the wetland's stormwater
 quality treatment function and hence resulting in the wetland being under-perform.
 Short-circuiting should be avoided at the design stage.
- The proposed wetland within Sub-catchment XXVII is located within the proposed 20m riparian yard (as shown on the Waimanawa Precinct Plan 2 Environment). This is not practical due to the restriction of maintenance access.
- The proposed wetlands within Sub-catchments XII, XXIX, XXXV, XXXIV, XXXI are located within the 1% AEP flood plain³.

In addition, the proposed wetland within Sub-catchments XXXI is considered a natural wetland and have significant ecological value based on the assessment of Auckland Council's Ecologist.

_

¹ Warkworth South Plan Change Baseline Ecology Report, Version 4, December 2022, prepared by Bioresearches.

² It is noted that ten stormwater management basins are shown on the Waimanawa Precinct Plan 2 – Environment.

³ As shown on Drawing C465 in Appendix C of the Applicant's Stormwater Modelling Report (Appendix D of the SMP).

Protection of natural wetlands is required under the National Policy Statement for Freshwater Management 2020 (NPS-FM).

At source management devices (i.e. bioretention and/or proprietary devices) are proposed for Stormwater Management Zones B, C and D to achieve stormwater quality treatment and detention. However, limited discussion regarding the type, number and intended ownership of these devices is provided in the SMP. It should be noted that for greenfield development, the use of proprietary devices is not supported by the SWCoP unless the devices will remain privately owned.

For devices that are intended to be vested, the Applicant shall provide information regarding the type and number of any public devices and consult with prospective asset owner(s). This is to ensure that the design, use and ongoing maintenance of the proposed devices will be feasible and practical, and therefore confirm that adverse stormwater effects will practically be able to be mitigated.

Furthermore, the information provided in the SMP is **not considered sufficient** to support that at source management device is the BPO (Best Practical Option) to achieve stormwater quality treatment and detention, particularly for the sub-catchments within Stormwater Management Zone B. Ms Li considers that it would be more suitable for stormwater runoff from Sub-catchments XI, XII, XIV, XVI (part), XVIII (part), XIX, XX (part), XXI (part), XXII, XXIII, XXV, XXVI, and XXVIII within Stormwater Management Zone B to be treated and detained through communal wetlands (i.e. the same approach proposed for Stormwater Management Zone A).

3.4 Onsite flood management

The Applicant's SMP acknowledges that PPC 93 is subject to constraints of major overland flow paths and extensive flood plains within the plan change area. Onsite flood management including the following as in Section 7.2.5.2 of the SMP is therefore proposed:

- All building platforms will be located outside of the flood plain extent in the 100-year ARI MPD with climate change scenario.
- A minimum floor level will be set for each dwelling in accordance with the Building Code and SWCoP.
- Infrastructure to be located outside of the 100-year flood plain area, unless designed to be flood resilient.
- A network of secondary flow paths will be designed to convey future 100-year flows.
- Utilising stream margins as areas of flood storage in the 100-year storm event.

3.5 Downstream flooding management

As discussed in Section 7.2.5.1 of the SMP and in the Stormwater Modelling Report (i.e. Appendix D of the SMP), PPC 93 is in the middle of the Mahurangi Catchment. The time of concentration of the peak flow discharge from PPC 93 would be ahead of the time of concentration of the peak flow generated from the upper Mahurangi Catchment for both 10-year (10% AEP) and 100-year (1% AEP) storm events. Therefore, the Applicant has proposed a passforward flow approach for downstream flooding management. And no flood attenuation within PPC 93 is provided.

4.0 Assessment of Stormwater Effects

Based on the discussion in Section 3 above, the assessment of stormwater effects of PPC 93 are summarised as follows:

4.1 Water quality - stormwater treatment

The stormwater quality treatment proposed in the Applicant's SMP for all impervious areas to receive GD01 level of treatment is considered appropriate. The proposed treatment management should be implemented in order for PPC 93 to avoid or mitigate any actual and potential water quality effects on the sensitive receiving environment (i.e. Mahurangi River being an SEA) and to give effect to the NPS-FM, the Regional Policy Statement (RPS) provisions for water quality⁴ and integrated management objectives and policies in Chapter E1 of the AUP(OP).

For the proposed Waimanawa Precinct, the Applicant has proposed a stormwater policy (Policy IXXX.3.17) and a stormwater management standard (Standard Ixxx.6.10) as part of the proposed precinct provisions. However, the wording and requirement of these provisions are **not considered sufficient** to ensure the implementation of appropriate stormwater quality treatment as well as other stormwater management proposed in the SMP. In addition, no objective in relation to stormwater quality and quantity management has been proposed. Amendments to the proposed precinct provision are therefore recommended (outlined in **Attachment A**) to ensure the stormwater management identified in the SMP will be implemented at the development stage. More discussion on the need for precinct provisions are provided in Section 6 below.

An area within the proposed Morrison Heritage Orchard Precinct is proposed to be rezoned for urban development (i.e. Residential – Large Lot Zone). Urban subdivision and development within the Morrison Heritage Orchard Precinct should be subject to the same stormwater quality treatment requirements.

4.2 Hydrological and erosion mitigation

Ms Li considers that the introduction of the SMAF1 overlay for the plan change area alone will provide **limited** hydrological mitigation. This is because the streams within PPC 93, as well as the Mahurangi River that adjoins PPC 93 and immediate downstream, have a channel evolution (i.e. erosion profile) of Stage III and IV which means that mass erosion/bank failure within these streams is likely to occur in the near future with the absence of appropriate erosion mitigation and/or protection⁵.

Greenfield development enabled by PPC 93 will increase imperviousness and therefore increase the flow rate and volume of runoff into the streams. This will accelerate stream banks erosion, especially for streams that have a Stage III and/or IV channel evolution.

Technical advice provided by the Healthy Waters Waterways Planning has indicated that due to the streams' stages of channel evolution (i.e. deep and vertical banks), they are more vulnerable to high flows (i.e. 50% AEP flows) rather than low flows (i.e. 90–95th percentile flows). And the SMAF1 detention requirements are not considered sufficient to mitigate the likely adverse effects associated with the high flows. Furthermore, as discussed in Section 3.5 above, no flood attenuation is proposed within PPC 93 for the 10-year or 100-year storm events.

On this basis, Ms Li recommends that stormwater detention for 50% AEP (i.e. 2-year ARI) storm events, on top of the AUP(OP) Chapter E10 SMAF1 detention requirements, is required to reduce the risk of erosion in the watercourses within and immediate downstream of the site.

Ms Li also considers that roof water reuse should be required for PPC 93. This is consistent with the hydrological opportunities identified in the Warkworth Structure Plan that are quoted in Section 3.1.3 of the SMP as follows:

 The structure plan area is a greenfield area which provides an opportunity to incorporate integrated stormwater management to maintain pre-development hydrology.

⁴ Chapters B7.3 and B7.4 of the AUP(OP).

⁵ This is based on an onsite assessment undertook by Jackie Zhou, Healthy Waters Waterways Planning Team Manager on 15th March 2024.

 Providing opportunities for water reuse especially for housing and for industrial/commercial activities (depending on water demand).

Therefore, the following standard is recommended to be included as part of the precinct provisions:

Roof runoff must be directed to a tank sized for the minimum of 5mm retention volume for non-potable reuse within the property.

Riparian planting is considered an appropriate stream erosion mitigation measure and should be required along **all streams within the site**. Therefore, it is recommended that the Waimanawa Precinct Plan 2 – Environment is amended to include a minimum of 10-meter riparian yard along the stream within Sub-catchment XXXI and the two streams within Sub-catchment XXVII.

In addition, Ms Li considers that the final stream erosion mitigation should be confirmed by a Site Specific Watercourse Assessment at resource consent stage (i.e. when earthworks and site contour are being determined). Therefore, the following is recommended to be included as a special information requirement as part of the precinct provisions:

An application for any land modification, subdivision or development which adjoins a permanent or intermittent stream must be accompanied by a Site Specific Watercourse Assessment prepared by a suitably qualified person. The assessment must include a stream reach assessment identifying any erosion hotspots, stream bank erosion and appropriate erosion mitigation measures.

4.3 Stormwater devices

There is sufficient space within PPC 93 and hence the provision of appropriately sized, shaped, and located stormwater management devices should be possible. We also acknowledge that the size, shape and location of the wetlands/basins as shown in the plan change documents are indicative only. However, as discussed in Section 3.3 above, the Applicant's SMP has failed to confirm that adverse stormwater effects will practically be able to be mitigated by the stormwater management devices as currently proposed. It is also unclear if the design, use and ongoing maintenance of any public devices will be feasible and practical.

Therefore, we recommend that the Applicant provides clarification and addresses the following matters in their evidence at the hearing:

- Questions raised in relation to the proposed size, shape and location of the communal wetlands as outlined in Section 3.3 above.
- Type and number of any public stormwater devices proposed for Stormwater Management Zones B, C and D.
- Justification to confirm whether at source management device is the BPO to achieve stormwater quality treatment and detention in Stormwater Management Zone B and whether communal wetlands in this zone will be proposed.

We noted that the submission received from Auckland Transport has highlighted the need to ensure appropriate design and use of any communal stormwater devices (e.g. raingardens) proposed to treat road runoff. Auckland Transport's submission is summarised and discussed in Section 7 below.

4.4 Onsite flood management

The onsite flood management proposed in Section 7.2.5.2 of the SMP and outlined in Section 3.4 above is considered appropriate. To ensure the implementation of appropriate onsite flood management (i.e. building platforms outside of flood plains), Ms Li recommends that detailed

flood modelling and assessment at resource consent stage should be required. This is because there are major overland flow paths and extensive flood plains within the plan change area.

Bulk earthworks and large scale of site re-contouring is likely to happen for greenfield development that covers a large area of land. While Chapter E36 of the AUP(OP) will apply and impose restrictions on development and activities within the flood hazard areas (i.e. 1% AEP floodplains and overland flow paths), the extent and location of these flood hazard areas are likely to change following land modification at the development stage.

Ms Li considers that while the flood modelling provided in Appendix D of the SMP is appropriate at a plan change level, its results cannot be used to confirm the extent and location of the latest flood hazard areas due to the limitation of the model (i.e. updated site contour and 3.8-degree climate change factor have not been considered).

Based on the above, the following is recommended to be included as a special information requirement as part of the precinct provisions:

A detailed flood modelling and assessment must be undertaken when subdivision or development requiring resource consent is proposed to be undertaken on land which may be subject to the 1 per cent annual exceedance probability (AEP) floodplain or overland flow paths. Modelling limitation must include but is not limited to:

- Modelling boundary condition.
- ARF used in the modelling.
- <u>Terrain detail for proposed development,</u>
- Unknown factor regarding the post processing of the flood plain results.

4.5 Downstream flooding management

The pass-forward flow approach proposed for the downstream flooding management is considered appropriate. In terms of potential flooding risks on the Woodcocks Road bridge and four existing culverts across the Old State Highway 1, Ms Li provides the following comments.

The Woodcocks Road bridge (i.e. approximately 500m downstream of PPC93) is not considered a holding point, i.e. the potential of backwater effects is considered to be low, as the peak flow discharge from PPC 93 would be ahead of the upper catchment peak flow. However, Ms Li points out that the assessment on the downstream level and freeboard of the Woodcocks Road bridge (i.e. Section 3.8 of the Stormwater Modelling Report) could have overestimated the capacity of the bridge specifics. This is because the Woodcocks Road bridge has been modelled as a free-flow structure rather than a restriction. In addition, the 3.8-degree climate change factor has not been considered.

There are four existing culverts across the Old State Highway 1 within the plan change area. The culvert modelling and assessment are provided in Section 3.9 and Appendix B of the Stormwater Modelling Report. It has indicated that the two northern culverts are under capacity and would overtop for all modelled scenarios. The southern culvert would overtop for the post development 100-year ARI scenario. The southernmost culvert has minimal freeboard. It has also indicated that the overtopping status would be worse for the post-development scenarios when compared with the pre-development scenarios. It is stated in the Stormwater Modelling Report that these culverts will be upgraded as a part of Auckland Transport's proposal to repurpose the Old State Highway 1 to an arterial road.

The submissions received from Auckland Transport and New Zealand Transport Agency Waka Kotahi have raised no issue in relation to flooding, the Woodcocks Road bridge, and culverts across the Old State Highway 1. On this basis, no further information with regard to downstream flooding is considered necessary from the Applicant at the plan change hearing. It is expected that the Applicant will continue to liaise with the asset owners at development stage.

5.0 Network Discharge Consent and Stormwater Management Plan

Auckland Council Healthy Waters holds a region wide NDC for stormwater which commenced on 30 October 2019. Diversions and discharges of stormwater through the public network are permitted by the NDC provided that the discharges and network are authorised by an SMP, and the impervious area is lawfully established. This includes a privately built network that wants to connect to the public stormwater network.

The NDC authorisation applies through the adoption of SMPs into Schedule 10 of the NDC. If an SMP is adopted, then no other discharge consent is needed. If no SMP is adopted or Healthy Waters does not accept developer-built stormwater devices for vesting in Council, then a private discharge consent is required. Necessary approvals to connect to the public stormwater network are still covered by the Stormwater Bylaw 2015 and infrastructure must meet the Stormwater Code of Practice.

The PPC 93 Applicant has indicated that it wishes its stormwater discharges to be covered by the NDC and intends to vest stormwater assets with Auckland Council.

For greenfield developments discharging to an SEA, including PPC 93, it is a requirement of the NDC that an SMP is notified with the plan change documents and meets the NDC's requirements.

The SMP must be consistent with the NDC's Schedule 2 (which sets out the NDC's strategic objectives, outcomes, and targets) and Schedule 4 (the performance requirements).

If an SMP is to be adopted following the approval of a notified plan change, the SMP must have been prepared to support the notified plan change and the plan change must be consistent with the SMP. The requirement that the plan change must be consistent with the SMP is to ensure that the precinct provisions are adequate to implement the management methods and mitigation measures set out in the SMP.

Part of the plan change area will remain rurally zoned. It should be noted that the NDC cannot authorises stormwater diversions and discharge in rural zoned areas⁶. Therefore, any approved SMP will not cover stormwater diversions and discharge in the plan charge area that is rurally zoned. This should be made clear in the Applicant's SMP.

6.0 Need For Precinct Provisions

The NDC is a discharge consent and cannot, on its own, require the implementation of necessary measures identified in an SMP. While SMPs are useful to inform the land development process, they cannot be enforced on their own as they are neither a rule nor a regulation. In addition, the suite of AUP(OP) Auckland-wide rules that relate to stormwater management are not by themselves sufficient for greenfield development. For example, the only rules in the AUP(OP) relating to water quality are in Chapter E9 – Stormwater Quality – High contaminant generating car parks and high use roads.

Therefore, appropriate precinct plan provisions are necessary to ensure the SMP is implemented to manage stormwater discharges and associated effects in subsequent land development processes. The Applicant's SMP proposes a number of stormwater management measures (including stormwater quality treatment of all impervious areas) which need to be supported by precinct plan provisions.

Based on the above, new precinct provisions and recommended amendments to the Applicant's proposed provisions), as outlined in **Attachment A**, are considered necessary to be included as precinct provisions within PPC 93. This is to ensure the implementation of the Applicant's SMP

-

⁶ Advice Note 1 of the NDC outlines a list of stormwater diversions and discharges that are **not** authorised under NDC. The list includes stormwater diversions and discharges in rural zoned area.

and mitigation of stormwater effects on the receiving environment, as well as to achieve the NDC's outcomes via appropriate land development controls.

7.0 Submissions

The submissions received on PPC 93 which raised stormwater related matters are summarised in Table 1 below. Discussion on the matters and our recommendations (in *italic*) are also included in the table.

Sub. No.	Name of Submitter	Relevant stormwater issues raised by the Submitter
19.1	Karen and Stefan Richardson – Owner of Waimanawa Hills (B) which form part of the	Stormwater management is designed so as not to impact the planned development outcomes for Waimanawa Hills(B) and the Submitter's land.
	PPC area	Discussion As discussed in Sections 3.3 and 4.3 above, the Applicant is recommended to provide further information and justification on the type and design of their proposed stormwater management devices. New precinct provisions and amendments to the Applicant's proposed provisions as outlined in Attachment A are recommended to ensure the implementation of appropriate stormwater management and mitigation identified in the SMP.
20.67	Auckland Transport	The assessment criteria for stormwater management need to explicitly consider the whole of life costs and long-term effectiveness of publicly vested stormwater assets. Auckland Transport has a particular concern in ensuring appropriate design and use of any communal devices (such as raingardens) proposed to treat road runoff.
		Amend Ixxx.8.2 Assessment criteria - Restricted Discretionary Activities, (1)(d) Stormwater management, by adding the following:
		'(ii) The design and efficacy of infrastructure and devices with consideration given to the likely effectiveness, ease of access, operation, ongoing viability and maintenance, and integration with the surrounding environment including the road corridor where relevant'.
		<u>Discussion</u> Auckland Transport's proposed assessment criteria is considered appropriate and is recommended to be included as part of the precinct provisions. Detailed discussion in relation to appropriate design and use of public stormwater devices is included in Sections 3.3 and 4.3 above.

8.0 SMP Adoption under the Regionwide NDC

While it is acknowledged that the SMP adoption and NDC authorisation process is a separate process to the plan change process, the SMP must be prepared to support the notified plan change and the plan change must be consistent with the SMP (as discussed in Section 5 above).

The SMP as currently drafted is not acceptable in accordance with Heathy Waters' NDC requirements. Key areas of concern are:

- Feasibility of the proposed communal wetlands.
- Lack of information on the type and number of public stormwater devices within Stormwater Management Zones B, C and D.
- Lack of justification to confirm whether at source management device is the BPO for many sub-catchments in Stormwater Management Zone B for stormwater quality and quantity management.
- The proposed mitigation for stream erosion is not considered sufficient.

The Applicant should submit a revised SMP taking into account the matters outlined above to Healthy Waters for review and consideration.

9.0 Conclusions and Recommendations

The Applicant's proposed precinct provisions, **subject to the recommended amendments as outlined in Attachment A**, will ensure future developments enabled by PPC 93 provide appropriate stormwater quality treatment, hydrological and erosion mitigation, and onsite flood management.

Provided that the outstanding matters with regard to the feasibility of the proposed stormwater management devices are addressed and satisfied at the hearing, PPC 93 is supported from a stormwater and flooding perspective.

Attachment A - Recommended Precinct Provisions:

1. A new objective is recommended for the Waimanawa Precinct and Morrison Heritage Orchard Precinct:

Objective IXXX.2 (NEW)

Stormwater quality and quantity is managed to maintain the health and well-being of the receiving environment and is enhanced over time in degraded areas.

2. The below amendment is recommended to the proposed stormwater management policy for the Waimanawa Precinct. The same policy is recommended for the urban zoned area within the Morrison Heritage Orchard Precinct.

Policy IXXX.3 (17)

Manage stormwater runoff from all impervious areas in the precinct through a treatment train approach <u>consistent</u> with <u>any approved stormwater management plan</u> which assists in maintaining high water quality and enhances poor water quality within this upper catchment of the Mahurangi River.

3. The below amendments and additions are recommended to the proposed stormwater management standard for the Waimanawa Precinct. The same standards (and assessment criteria) are recommended for the urban zoned area within the Morrison Heritage Orchard Precinct

Standard Ixxx.6.10 Stormwater Management

Purpose

- To ensure that stormwater is managed and treated to maintain and enhance the health and ecological values of streams and to avoid exacerbating flood hazards.
- (1) All land use and development and subdivision must be designed and implemented to be consistent with any stormwater management plan approved by the network utility operator, including the application of water sensitive design.
- (1) Stormwater runoff from all impervious surfaces must be treated with a stormwater management device(s) meeting the following standards:
 - (a) the communal device or system must be sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)'; or
 - (b) where alternative devices are proposed, the device must demonstrate it is designed to achieve an equivalent level of contaminant or sediment removal performance to that of 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)'.
- (2) Development of new impervious areas must provide stormwater detention for 50% AEP (i.e. 2-year ARI) storm events on top of the E10 SMAF 1 requirements.
- (3) Roof runoff must be directed to a tank sized for the minimum of 5mm retention volume for non-potable reuse within the property.

4. The below additions are recommended to the proposed assessment criteria:

Ixxx.8.2 Assessment criteria

Stormwater management

- (i) Development is in accordance with the approved Stormwater Management Plan and policies E1.3(1) (14).
- (ii) The design and efficacy of infrastructure and devices with consideration given to the likely effectiveness, ease of access, operation, ongoing viability and maintenance, and integration with the surrounding environment including the road corridor where relevant.
- 5. Two new special information requirements are recommended for the Waimanawa Precinct and Morrison Heritage Orchard Precinct:

Ixxx.9.4 Site Specific Watercourse Assessment

An application for any land modification, subdivision or development which adjoins a permanent or intermittent stream must be accompanied by a Site Specific Watercourse Assessment prepared by a suitably qualified person. The assessment must include a stream reach assessment identifying any erosion hotspots, stream bank erosion and appropriate erosion mitigation measures.

Ixxx.9.5 Flood modelling and Assessment

A detailed flood modelling and assessment must be undertaken when subdivision or development requiring resource consent is proposed to be undertaken on land which may be subject to the 1 per cent annual exceedance probability (AEP) floodplain or overland flow paths. Modelling limitation must include but is not limited to:

- Modelling boundary condition.
- Aerial Reduction Factor (ARF) used in the modelling.
- Terrain detail for proposed development,
- <u>Unknown factor regarding the post processing of the flood plain results.</u>
- 6. The Waimanawa Precinct Plan 2 Environment it is recommended that the Waimanawa Precinct Plan 2 Environment is amended to include a minimum of 10-meter riparian yard along the stream within Sub-catchment XXXI and the two streams within Sub-catchment XXVII.

To: David Wren, Auckland Council Consultant Planner

From: Gerard McCarten, Sentinel Planning Ltd

on behalf of Parks Planning, Parks & Community Facilities

Subject: Private Plan Change 93 (Warkworth South)

Parks Planning Assessment

1.0 Introduction

- 1.1 My name is Gerard McCarten. I hold a Bachelor of Planning (hons) from the University of Auckland. I am a full member of the New Zealand Planning Institute and have held a Making Good Decisions certification with chairing endorsement since 2013. I have 23 years' professional planning experience from both public and private sectors of New Zealand and the United Kingdom. I am currently Planning Manager at Sentinel Planning Limited. I have been providing consultant planning services to the council's Parks Planning team since September 2022.
- 1.2 I have undertaken a review of this private plan change (**PC93**) by KA Waimanawa Limited Partnership and Stepping Towards Far Limited (the **Requestor**) on behalf of Auckland Council's Parks Planning team in relation to open space matters pertinent to the Parks and Community Facilities Department (**PCF**).
- 1.3 I attended a site visit over parts of the plan change area by council staff and consultants in March 2024, prior to preparing my report. I have also relied on aerial photography, my general knowledge of the area and application material to understand the environment at present.
- 1.4 In writing this memo, I have reviewed the following documents provided by the Requestor:
 - Warkworth South Plan Change Report, April 2023 (Section 32 Report)
 - Warkworth South Precinct Provisions, August 2023
 - Plan Change Zoning Maps
 - Urban Design Report, May 2023 (UDR)
 - Clause 23 response 1, April 2023
 - Clause 23 response 2, June 2023
- 1.5 Auckland Council documents I have referred to include:
 - Auckland Unitary Plan Operative in Part, 2016 (**Unitary Plan**)
 - Warkworth Structure Plan, 2019 (WSP)
 - Rodney Greenways Paths and Trails Plan, Puhoi to Pakiri, May 2017 (PTP)
 - Open Space Provision Policy, 2016 (OSPP)
 - Parks and Open Space Acquisition Policy, 2013
 - Future Development Strategy, 2023

1.6 I have consulted with the Community Facilities' Senior Property Provision Specialist and Parks and Places Specialist.

2.0 Council provision policy and expectations

Open Space Provision Policy

- 2.1 The council's Open Space Provision Policy 2016 (**OSPP**) sets out provision targets for different types of recreational and social open space across the region. It is intended to give effect to the council's Parks and Open Spaces Strategic Action Plan, which is referenced in Appendix 1 of the Unitary Plan.
- 2.2 The OSPP sets out its network principles to deliver high quality parks and open spaces across the region. Relevant to PC93 area, these are:
 - Create distinctive places
 - Conserve areas of natural or cultural value
 - Create a green network
 - Link open spaces together
 - Create esplanade reserves
 - Make safe and welcoming places
 - Be considerate of neighbours
 - Create enduring spaces
 - Provide the right size and shape
 - Integrate with green infrastructure
 - Consider resilience
 - Consider resilience
- 2.3 The OSPP sets out the council's hierarchy of, and requirements for, various types of public open spaces to be delivered as part of the network. Relevant to PC93, this includes:
 - Suburb Parks
 - Neighbourhood Parks
 - Connection and Linkage Open Space
 - Pocket Parks
- 2.4 The location, function, size and connectivity of parks combine to deliver a successful public open space network.
- 2.5 The UDR refers to the OSPP as informing the Requestor's designs for open space provision and sets out the overall open space design strategy for the plan change area¹, which is:
 - Create a generously sized suburb park as a key open space for the entire community
 - Establish a series of open spaces along the stream corridors to provide both amenity and infrastructure
 - Provide green links for pedestrians and cyclists across the site and to wider areas

.

¹ UDR, p19

- 2.6 This overall strategy would appear to align withthe OSPP's network principles for creating a green network of linked open spaces However, there also appears to be a concerning lack of alignment, or conflation, with other principles. In particular:
 - Safe and welcoming spaces several open spaces and the esplanade areas are indicated to be to the rear of future lots and away from roads.
 - Providing the right size and shape the indicative location of the Suburb Park means its
 potential size would be constrained, and there is no provision of distinct Neighbourhood
 Park spaces
 - Consider resilience the indicative Suburb Park is located would be in a floodplain
 - Integrating with green infrastructure green infrastructure (stormwater ponds) would double as recreational open space
- 2.7 There are also concerns around whether PC93 creates expectations of council acquiring land.

Warkworth Structure Plan

- 2.8 The WSP sets out expectations for open space provision around Warkworth, which it describes within a broad concept of a Green Network². This is to be achieved through a combination of protected areas and open spaces/parks.
- 2.9 Protected areas are described as including flood plains, streams, wetlands, Significant Ecological Areas (**SEAs**), covenanted bush and historic heritage extent of place areas. These are seen as separate to open spaces and parks, provided in the form of esplanade reserves and a public parks network.
- 2.10 These are all shown indicatively in its Green Network plan³. In relation to the parks network, the WSP indicates the FUZ land to the south of Warkworth as providing a sports field park, a Suburb Park, and nine Neighbourhood Parks. The UDR explains that the open spaces withing the three masterplans for PC93 align with this Green Network⁴.

3.0 Assessment of open space provision by PC93

Suburb Park

Overview and guidelines

3.1 The WSP indicates that both sports fields and a Suburb Park will be needed in Future Urban Zone (**FUZ**) land south of Warkworth. It indicates a broad location for a sports field park within the Waimanawa Valley area of PC93, with the Suburb Park shown to the north of the Waimanawa Hills area (outside the area of PC93). The WSP explains that the indicative sports park location was determined mainly due to the flat topography, while the Suburb Parks were

² WSP, sections 3.3.1, pp. 20-23 and section 3.3.3, pp. 33-40

³ WSP, Figure 2, p. 7

⁴ UDR, Section 5.5, p. 23

- determined based on distance from existing parks. Both are subject to further detailed investigation and consideration of limitations⁵.
- 3.2 The OSPP explains a Suburb Park's function is to provide informal recreation and social experiences for residents from across an entire suburb. They should be located in prominent locations and help form the identity of the suburb. They often accommodate organized sport facilities and include various amenities such as:
 - Walking circuits or trails
 - Multiple kick-around spaces
 - Socializing spaces, including picnic and barbecue facilities
 - Larger and more specialized informal recreation attractions (e.g., large playgrounds, skate parks, hard courts)
 - Beaches and watercraft launching facilities
 - Organized sport facilities
 - Community event space
 - Car parking and toilets
- 3.3 The Open Space Provision Policy (OSPP) sets out requirements for Suburb Parks:
 - They should be within a 1 km walking distance (750 m radial proxy) in high and medium-density residential areas and 1.5 km walk distance (1125 m radial proxy) in low-density residential areas.
 - They are not provided for in rural and residential large zones.
 - They should be located as nodes along open space corridors to provide for a wider range of activities and reduce maintenance costs.
 - They should be outside flood plains.
 - They are typically between 3 and 5 hectares in size for informal recreation or up to 10 hectares for organized sports.

Comment

- 3.4 Precinct Plan 4 of PC93 indicates a Suburb Park located northwest of the Terraced Housing and Apartment Buildings (**THAB**) and business zoning and alongside a stream corridor. The UDR explains this park delivers on the Suburb Park requirement shown in the WSP's Green Network.
- 3.5 I agree that a Suburb Park is necessary with the area of PC93 because this land is proposed to come forward for development ahead of other land in the FUZ and the future population would not have an acceptable level of service otherwise.
- 3.6 But I hold several concerns with the current proposal:
 - 1. Floodplain: the park's location shown in the masterplan and on PC93 maps would place it within a broad 1% Annual Exceedance Probability (AEP) floodplain. This is not supported by Parks Planning as it results in sub-optimal outcomes for service delivery and does not meet PCF's acquisition criteria. The Section 32 Report says specific earthwork design in the vicinity of the active park can be undertaken to avoid flooding within that part of it.⁶ But this

⁶ Section 32 Report, p. 97

⁵ WSP, Appendix 4, Figure 47, p. 159

is not brought through into the text of PC93, nor does the supporting assessment provide any detail as to how this might practically be achieved.

- 2. Extent definition: Precinct Plan 4 purports to provide indicative locations of open space uses, but their extents are made less indicative and are more or less defined by boundaries that align with features in the PC93 supporting masterplans, and the use of shaded areas that match existing open space zones in the Unitary Plan. I consider the level of detail undermines the 'indicative location' moniker for open space.
- 3. Size constraints: the UDR describes the Suburb Park as being generously sized⁷, large⁸, and significant⁹. However, at approximately 3.5 ha, the indicative 'Active Sport and Recreation' proposed park would be at the lower end of the minimum size requirements under the OSPP. Further detailed assessment may determine a much larger Suburb Park is required, especially if (as described in the Section 32 Report¹⁰) it is intended to function as both the playing fields and Suburban Park shown in the WSP. This will only be known later in the land development process, but the indicative area shown in Precinct Plan 4 is physically constrained by retained streams, the indicative wastewater pumping station¹¹, and the Wider Western Link Road meaning that any necessary enlargement would be problematic.
- 4. Conflicting land use: the proposed location sits within areas identified in the WSP's Green Network Map as "Protection Area," which includes SEAs, covenanted bush, and stream buffers. These protection areas are not immediately compatible with the recreational functions of a Suburb Park and there is a risk that conflicting requirements could result in a Suburb Park that does not provide sufficient space for its recreation function.
- 3.7 In my opinion, PC93 and Precinct Plan 4 do not create appropriate expectations and guidance for the provision of a Suburb Park in this area. Despite being indicative, the level of detail shown the Suburb Park's location and extent is too great it creates constraints on its location and size/extent. I recommend Precinct Plan 4 is changed to be clear that the Suburb Park must be outside the floodplain and that its eventual size is not limited by surrounding constraints. In my opinion the indicative location should be more central to the plan change area, enabling it to better provide equitable access and accord with OSPP provision metrics.

Neighbourhood Parks

Overview and quidelines

3.8 A Neighbourhood Park's function is described in the OSPP as providing basic informal recreation and social opportunities within a short walk of surrounding residential areas. These are typically between 0.3 and 0.5 hectares in size and provided within a 400 m walk distance in high and medium density residential areas (centre, mixed use and THAB zones) and 600 m walk distance in low density residential areas (single house and rural & coastal settlement zones). They are not provided outside urban areas and in large-lot residential zones.

⁷ UDR, pp. 19, 32

⁸ UDR, p. 23

⁹ UDR, p. 38

¹⁰ Section 32 Report, pp. 36, 58

¹¹ Precinct Plan 2

3.9 Against the OSPP's provision metrics there is a need for approximately nine Neighbourhood Parks in the FUZ south of Warkworth, and three within the plan change area.

Comment

- 3.10 With a lack of spaces with a specific recreational function, PC93 indicates an under-provision of open space suitable for Neighbourhood Parks.
- 3.11 Precinct Plan 4 shows numerous areas of indicative open space labelled "Open Space Informal Recreation" which generally align with through the plan change area which align with green areas in the indicative masterplans¹². The UDR's overall open space strategy describes these as "a series of smaller open spaces including neighbourhood and pocket parks are provide along the stream corridors" and "indicative locations of open space" ¹³.
- 3.12 However, these spaces are illustrated and described more specifically in the masterplans and as:
 - Riparian Corridor" 14
 - Stormwater Park¹⁵
 - Stormwater Pond and Community Park¹⁶
- 3.13 In addition, all the Informal Recreation spaces in Precinct Plan 4 align with the indicative locations of stormwater management basins shown in Precinct Plan 2 and stormwater ponds shown in the masterplans.
- 3.14 Put simply, these spaces would not provide the necessary recreational function and instead are part the green infrastructure network. They are the "protected areas" described in the WSP, and not the "open spaces/parks".
- 3.15 Integration with green infrastructure is a network principle of the OSPP, but the functions of the spaces should not be conflated. The indicative locations shown would not meet recreational provision requirements for:
 - play space
 - flat, unobstructed, kick-around space for informal games (30 m by 30 m)
 - areas for socialising and respite
- 3.16 The spaces are also shown to be within the 1% AEP floodplain. PCF require Neighbourhood Park functions to be provided outside the floodplain before they would be considered suitable for acquisition.
- 3.17 Precinct Plan 4 should be changed to provide a clear distinction between green infrastructure (such as stormwater ponds) and recreational spaces, and to show indicative locations for three recreational spaces equivalent to Neighbourhood Parks.

¹⁴ UDR, pp. 36, 69, 82

¹² UDR, pp. 21, 34, 56, 58, 59, 78

¹³ UDR, p. 23

¹⁵ UDR, p. 36

¹⁶ UDR, p. 69

Connection and linkage open spaces

- 3.18 Aligned with the principles of the Parks and Open Space Strategic Action Plan, the OSPP seeks to provide a contiguous network of green spaces where open spaces are linked together and integrates with green infrastructure where appropriated. The network would establish recreational, walking, cycling and ecological connections integrated with on-street connections.
- 3.19 The Greenways Plan and WSPP both indicate connections throughout the plan change area as part of the Green Network, and these are reflected in PC93's Precinct Plans 2 (Environment) and 3 (Transport). These plans support the principle of a connected open space network, but I hold several concerns:
 - these connective spaces appear to be doubling as recreational spaces at the expense of proper Neighbourhood Park provision as I have described earlier;
 - the masterplan layouts, and indicative road layout in Waimanawa Precinct Plan 3 Transport indicate that these connective spaces are likely to be to the rear of future residential lots and will lack visibility and surveillance from public roads. OSPP principles and Unitary Plan policy E38.3(18) require open spaces to be prominent and accessible.
 - Precinct Plan 4 shows indicative open spaces on only one side of retained streams at some pinch points.
- 3.20 Decisions on whether connection spaces are vested with the council cannot be made at plan change stage, but their proper function and provision should be clearly indicated in the precinct plans to ensure they are appropriately designed and delivered in future stages of the land development process. In terms of mechanisms, this could involve public right of way easements over private land if it is not acquired.

Pocket parks

- 3.21 The OSPP describes pocket parks as providing 'doorstep' access to small amenity spaces in high density areas (town centre and terraced housing zones) that also provide visual relief. They are generally between 0.1 and 0.15 hectares in size and should be at least 100 m from other spaces and provided in addition to neighbourhood park requirements. They should be on public streets and provided at the council's discretion with no capital cost if vested, or otherwise retained in private ownership.
- 3.22 The open space strategies for each masterplan area indicate potential pocket parks (unmarked spaces coloured in green) throughout the residential areas. Precinct Plan 4 incorporates these into its indicative open spaces where they are contiguous with other forms of open space (e.g. riparian corridors and stormwater ponds) but the stand-alone spaces within the Waimanawa Valley masterplan area are not shown.
- 3.23 Pocket Parks are not adequate substitutes for the under-provision of Neighbourhood Parks, which I have identified earlier.
- 3.24 PCF would be unlikely to accept the vesting of the pocket parks because none are within the Terraced Housing and Apartment zone or the town centre so these would likely need to be provided privately. Their provision is not required or by the text of maps of PC93 and so whether

they are delivered as envisaged in the masterplans will remain to be seen at later land development and subdivisional stages.

Zoning for open space

- 3.25 The Unitary Plan confirms that not all land zoned as open space is vested in the council or owned by the Crown and that it can also be held in privately ownership. Similarly, public access is not a necessary requirement.¹⁷
- 3.26 PC93 proposes four areas of new Open Space Conservation Zone in addition to an esplanade reserve site within the plan change area that already has this zoning. It otherwise relies on Precinct Plan 4 Open Spaces to provide indicative locations for open space and their various types. This would work alongside proposed matters of discretion and assessment criteria for the Precinct, the existing provisions within Chapter E38 Subdivision, and section 230 of the RMA for esplanade reserves, to establish public open spaces. The Section 32 report discusses how option (over explicit zones for parks and other open spaces) has been chosen to provide broad guidance for future development stages where areas these specific areas will be defined 18.
- 3.27 The general approach to zoning for open space being not to live zone most open space is appropriate and supported. As discussed above with respect to the Suburb and Neighbourhood Parks, the locations and extent of these spaces is far from certain. Open space acquisition is not delegated to staff and is subject to political decision-making. Open spaces are also invariably refined in location, extent and shape as development proceeds through land development and subdivision consenting processes. Parks Planning's preference is for open space zoning to occur after its location has been confirmed and established, as part of the council's regular mop-up plan changes for new open space land.
- 3.28 With respect to the proposed areas of Open Space Conservation Zone in PC93, these are generally given heavily vegetated areas and the zoning would align with broader expectations that these areas are protected from development for conservation and landscape purposes. The proposed provisions within PC93 do not imply or create an expectation that this land would be acquired or vested with the council. Therefore I am comfortable with the use of the zone in these instances, with one exception:
 - Lot 4 DP 344489 is an elongated strip of land that with other land parcels form part of the property known of 125 Valerie Close. It is located in northwestern corner of the plan change, and is separated from the remainder of the property by a stream that runs alongside it. It is steeply sloped and covered in bush. Future subdivision will trigger esplanade reserve requirements. However, a 20 m esplanade reserve would not cover all of the land and leave a residual strip the north, separated from the rest of the plan change area, inaccessible other than through adjoining FUZ land to the north and with no obvious utility value. Open Space Conservation zone may be appropriate given its conservation and landscape values, but it may also create a false expectation that the council will acquire the land on the grounds of its zoning, inaccessibility and having no other value.

¹⁷ Unitary Plan, H7.1 Background

¹⁸ Section 32 Report, pp. 145-147

4.0 Assessment against key statutory planning documents

4.1 The regulatory framework for parks and open space assessment is set out below with key points noted:

National Policy Statement on Urban Development 2020

- 4.2 Policy 2.2 of the National Policy Statement Urban Development (NPSUD) 2020 requires urban environments to have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport.
- 4.3 Policy 3.5 requires local authorities to be satisfied that additional infrastructure (including public open space) to service the proposed development capacity will be available.
- 4.4 PC93 has demonstrated in its S32 Report and the WSP that a connected open space network can be provided for the community within the plan change area. However, the indicative location of the Suburb Park will require further consideration in terms of its ability to deliver on functional requirements, and that distinct recreational needs through Neighbourhood Park provision appears to be lacking. There is a risk also that the zoning and precinct plan maps could create false expectations when land is brought forward for subdivision and development, in terms of public open space requirements.

Auckland Regional Policy Statement (ARPS)

4.5 The relevant policies for open space provision are contained in chapter B2.7 Open spaces and recreation facilities. These set out in full here:

B2.7.1. Objectives

- (1) Recreational needs of people and communities are met through the provision of a range of quality open spaces and recreation facilities.
- (2) Public access to and along Auckland's coastline, coastal marine area, lakes, rivers, streams and wetlands is maintained and enhanced.
- (3) Reverse sensitivity effects between open spaces and recreation facilities and neighbouring land uses are avoided, remedied or mitigated.

B2.7.2. Policies

- (1) Enable the development and use of a wide range of open spaces and recreation facilities to provide a variety of activities, experiences and functions.
- (2) Promote the physical connection of open spaces to enable people and wildlife to move around efficiently and safely.
- (3) Provide a range of open spaces and recreation facilities in locations that are accessible to people and communities.
- (4) Provide open spaces and recreation facilities in areas where there is an existing or anticipated deficiency.
- (5) Enable the development and use of existing and new major recreation facilities.
- (6) Encourage major recreation facilities in locations that are convenient and accessible to people and communities by a range of transportation modes.
- (7) Avoid, remedy or mitigate significant adverse effects of land use or development on open spaces and recreation facilities.
- (8) Avoid, remedy or mitigate significant adverse effects from the use of open spaces and recreational facilities on nearby residents and communities.

- (9) Enable public access to lakes, rivers, streams, wetlands and the coastal marine area by enabling public facilities and by seeking agreements with private landowners where appropriate.
- (10) Limit public access to and along the coastal marine area, lakes, rivers, streams and wetlands by esplanade reserves, esplanade strips or other legal mechanisms where necessary for health, safety or security reasons or to protect significant natural or physical resources.
- 4.6 The S32 Report's consideration of the ARPS¹⁹ does not directly address these provisions.
- 4.7 In relation objective B2.2.1(3) (which is about ensuring sufficient development capacity and land supply to accommodate facilities and support growth) the S32 Report notes²⁰ that the provision of a recreational park will complement Warkworth Showgrounds while also servicing the immediate community needs and any future school. I accept PC93 would contribute to this objective, but I find it difficult to go any further than that.
- 4.8 Based on my assessment above, I consider PC93 does not achieve the more specific objective B2.7.1 or accord with its supporting policies at B2.7.2. PC93 might purport to provide for a range of connected open spaces, but when assessed in terms of their functionality and against the council's OSPP in terms of recreational provision they would not meet the needs of the future community.

Auckland Unitary Plan

- 4.9 The S32 Report explains²¹ that the Auckland-wide provisions of the Unitary Plan will apply within the Warkworth South Precinct (although it does erroneously state that these "supersede" zoning and precinct provisions). The proposed text in PC93 will indeed appear to complement the rest of the Unitary Plan provisions, with regular references back to Auckland-wide provisions also applying in the precinct.
- 4.10 The applicable provisions of the Unitary Plan are found in Chapter E38 Subdivision Urban:

Objective E38.2.3

- (2) Land is subdivided in a manner that provides for the long-term needs of the community and minimises adverse effects of future development on the environment.
- (3) Land is vested to provide for esplanades reserves, roads, stormwater, infrastructure and other purposes.

Policy E38.3(18)

- (18) Require subdivision to provide for the recreation and amenity needs of residents by:
 - (a) providing open spaces which are prominent and accessible by pedestrians;
 - (b) providing for the number and size of open spaces in proportion to the future density of the neighbourhood; and
 - (c) providing for pedestrian and/or cycle linkages.

¹⁹ Section 32 Report, pp. 57-62

²⁰ Section 32 Report, p. 58

²¹ Section 32 Report, p. 65

- 4.11 The S32 Report states in comments about urban design effects²² that PC93 would create extensive open space. However, as I have identified, when assessed in more detail those spaces would not be suitable or sufficient for the recreational needs of the future community.
- 4.12 In its section 32 assessment, the S32 Report explains that the precinct provisions make clear how "which are the key open space to be preserved and what is the network to be achieved" and I understand this intended to be primarily through Precinct Plans 3 (Transport) and 4 (Indicative Open Space). I have identified deficiencies in the provision of key open spaces and connections and recommended substantial changes. Without these changes I consider PC93 would not that there is a distinct under-provision of Neighbourhood Parks and poor quality connective spaces.

Esplanade reserves

- 4.13 Sections 229 and 230 of the Resource Management Act 1991 (**RMA**) require the provision of esplanade reserves or strips by qualifying subdivisions for the purposes of:
 - contributing to the protection of conservation values;
 - enabling public access to or along any sea, river, or lake; or
 - enabling public recreational use of esplanade reserves and strips and the adjacent sea, river or lake where it is compatible with conservation values.
- 4.14 PC93 anticipates esplanade provision in accordance with the RMA during the resource consent process. This is supported as it is consistent with esplanade provision across the rest of the region. It appears proposed standard I.7.5(4) is also intended to protect against development that occurs prior to subdivision which may compromise esplanades by preventing buildings from being places within the 20 m setback. As discussed earlier I recommended this is removed.

5.0 Assessment of PC93 content

Maps

- 5.1 I have identified earlier that Precinct Plan 4 requires changes to better accommodate the Suburb Park space and clearly indicate Neighbourhood Park spaces.
- 5.2 I also question the use of Unitary Plan names for different open space zones in the map legend. These conflate what have explained should be future zoning decisions for open space. I consider that the precinct plan legend should use labels that indicate the type and function of the indicative open spaces.

Precinct description

- 5.3 Section IXXX.1 of PC93 provides and extensive description of the precinct. As part of this, it names three key areas of open space²³:
 - The Endeans Farm Recreational Park

_

²² Section 32 Report, p. 86

²³ PC93 text, p.8

- The Waimanawa Wetland Reserve
- The Mahurangi River Esplanade Reserve and Parks
- 5.4 None of these names are used anywhere else in the text pf PC93 and contrary to the text are not identified these names used in Precinct Plan 4. It is not clear what purpose these names served and potentially predetermine or create false expectations of the names of future public parks. I recommend these specific names are removed from the text and that they are more clearly indicated in Precinct Plan 4.
- 5.5 The text also goes on to say that "In addition, a small number of local neighbourhood reserves are proposed". Land may, or may not, be vested as reserve under the Reserves Act. It may also be vested as 'land in lieu of reserves' under the Resource Management Act and managed under the Local Government Act. It would be more appropriate and accurate to describe these as parks, and which would also align with OSPP terminology. I therefore recommend the use of the term 'parks' as this is a more general terma that covers all scenarios.

Objectives and policies

- 5.6 None of PC93's objectives or policies for Warkworth South refer to Precinct Plan 4, which is the primary method used to illustrate an open space network for the precinct. I recommend the policies include reference to Precinct Plan 4 (subject to further changes to that plan) to better illustrate the expectations of the policies.
- 5.7 Policy (20) repeats verbatim policy E38.3.(18) from Chapter E38 Subdivision Urban, which applies to all subdivision development and is a key tool for ensuring public open space is provided in developments. In this regard policy (20) is potentially redundant given that IXXX.3 Policies states immediately underneath:

All relevant overlay, Auckland-wide and zone policies apply in this precinct in addition to those specified above.

5.8 But there would appear to be no harm in restating the policy with the precinct. The policy does specifically apply to subdivision so ensure it also captures potential scenario where development in the precinct were to occur before subdivision, I recommend the wording of policy (20) is amended.

Standards

Standard Ixxx6.14 Greenways – Walking and Cycling Infrastructure

5.9 Standard Ixxx.6.14 provides for walkways and cycleways "that are to be vested in the Council". I consider the phrasing of this standard to be odd and may cause confusion when implemented. The standard applies to all subdivision and development listed in the activities tables for the precinct, but the standard does not state when or how the determination of whether the council 'wants a walkway or cycleway to be vested' should be made. Also, it would be the land and not the walkway or cycleway that is vested. As described above, open space acquisition is a political decision and not one that council offers can make under delegation. It also creates complication if land were to be developed under a live zoning but ahead of subdivision (so ahead of any potential vesting).

- 5.10 The second part of the standard creates a further complication for the council that delivery of a cycleway or walkway is intrinsically linked to land being vested with the council. I do not support this. It also forecloses on other potential options that may be more appropriate such as an easement in gross over private land (for example it might provide a connection between two pieces of public path but does not meet council requirements for full acquisition).
 - Standard Ixxx6.16 Fences adjoining the front yard or vested publicly accessible open space
- 5.11 Standard Ixxx6.16 would set a lower height for fences adjoining vested open space. I strongly support this provision as it would provide a much-improved relationship to public open space compared to the standard zone provisions in the Unitary Plan, which can produce poor outcomes for open spaces, safety and amenity values.
- 5.12 However, the wording of the standard means its application would be very limited and potentially not at all:
 - ...vested publicly accessible open spaces as shown on Precinct Plan 4...
- 5.13 Precinct Plan 4 is indicative only and does not identify land for vesting. The outcome would therefore me the standard rarely applies.
- 5.14 In addition to this technicality, I consider the standard to be too limited in scope overall. For example, land could be identified for vesting but has not been completed the standard would not apply. In my opinion the effects the standard is trying to manage and outcome it is trying to achieve should apply to all publicly accessible open spaces regardless of vesting status, zoning and visibility on indicative Precinct Plan 4. This would include the pocket parks, which as discussed earlier are unlikely to be vested, and any other open space that the council does not accept due to it not meeting acquisition criteria. This would also align with the precinct description, which says key open spaces will not all be vested:

There are several key open space areas which will be a <u>mix of private, community and</u> public areas...

Matters of discretion

- 5.15 The first (a) of Ixxx.8.1(1) refers to matters listed in E38.12.1(7) which normally apply to 'all other subdivision' in E38. I would support this cross reference as it include a relevant matter of discretion for open space provision at (j):
 - (j) the effect on recreation and open space.
 - But this is repeated verbatim later in the list at, lxxx.8.14(1)(h), so is largely redundant.
- 5.16 The second (a) in Ixxx8.1(1) refers to open space being provided in accordance with Precinct Plan 1. In addition to the numbering correction required, I presume this is a cross-referencing error and should refer to Precinct Plan 4.

Assessment criteria

5.17 I support the provisions contained in Ixxx8.2 Assessment criteria – Restricted Discretionary Activities that relate to the provision of open space, being: (1)(a)(iii), (1)(a)(iv) and (1)(f).

5.18 I note that (1)(a)(iv) specifically acknowledges that the locations for open space shown in Precinct Plan 4 can be varied and agreed with the council. I consider this flexibility in provision should be captured in higher order parts of the precinct provisions.

6.0 Submissions

6.1 Responses to submission points that raised parks and open space matters are tabled below.

Sub Point	Submitter	Summary	Response
20.7	Auckland Transport	Amend paragraph 14 of IXXX.1 Precinct	Neutral.
	·	description as follows: ' provision is made for	
		an off-road greenway network providing a	
		network of tracks and walkways through the	
		various open spaces and roads and'	
20.14	Auckland Transport	Add a new objective as follows: 'The precinct	Neutral.
		develops and functions in a way that:	
		(a) supports a mode shift to public and active	
		modes of transport	
		(b) provides safe and effective movement	
		between the local centre, community facilities,	
		housing, jobs, open spaces and the public	
		transport facilities by active modes.'	
20.43	Auckland Transport	Amend Ixxx.6.12 Riparian Yards for Streams and	Neutral.
		Natural Wetlands, by deleting the third bullet	
		point under the purpose statement as follows:	
		'To integrate the section of watercourse along	
		the Wider Western Link Road within a wide road	
		berm or as a separate open space integrated	
		with the road berm.'	
20.44	Auckland Transport	Amend Ixxx.6.14 Greenways - Walking and	Neutral.
		Cycling Infrastructure, as follows: 'Purpose: To	
		provide for off-road walkways and cycleways	
		which Council wants vested in Council to form	
		part of the public greenway network. (1)	
		Walkways and cycleways that are to be vested in	
		the Council (other than those vested as road)	
		shall be provided within the greenways shown	
		on Precinct Plan 1 and: (a) Shall be constructed	
		either to a walking track standard similar to that	
		constructed in Regional Parks if not part of a	
		vested formed road, or in the case where the	
		greenway is part of a vested formed road,	
		constructed to normal footpath standards as	
		appropriate;	
22	Barry Blennerhassett	The 20-metre riparian yard as shown on Precinct	Neutral. Land left over
	and Lorraine Margaret	Plan 1 – Spatial Provisions is also generally	from esplanade liability
	Blennerhassett	supported with the exception that the useability	would be c.20m, covered
	(Blennerhassett family)	and land use opportunities for the land to the	in bush and steeply
		north of the riparian yard in the north-western	sloped. Concern it would
		extent of the plan change area adjacent to the	create an obligation that
		Submitter's land should be addressed. What is	the council would be
		intended for this land? The plan shows proposed	expected to accept land
		Open Space – Conservation. However, if there is	as an acquisition.
		urban development on the portion of land to the	
		west of the riparian yard then dwellings may be	
		close to the Submitter's land. This could lead to	
		reverse sensitivity issues as the Submitter farms	
		their land in keeping with the Future Urban	
		zoning intent for land to be used for rural	
		activities until it is zoned for urban land uses. The	
		Open Space – Conservation zone is therefore	
		supported.	

24.10	KA Waimanawa Limited Partnership and Stepping Towards Far Limited (The Submitters)	Update standard lxxx.6.14(2) with the following wording 'Where the Council does not want or is unable to accept vesting of the walkway/cycleway and associated riparian yard and stream bank, then there is no requirement to provide the walkway/cycleway'.	Do not support. See earlier discussion under heading 'Vesting of land'.
28.3	Department of Conservation	Amend the plan to adequately cover the following issues: • Zone the Bat Flight Corridor as Open Space – Conservation. • Increase the minimum corridor width to one hundred metres. • Require the lighting provisions alongside the bat flight corridor to abide by the Australian Government "National Light Pollution Guidelines for Wildlife". • Require that development in, and adjacent to, the bat flight corridor utilises the Department of Conservation's Protocols for minimising the risk of felling occupied bat roosts (2021). • Require a prohibition in keeping domestic cats within one kilometre of the bat flight corridor.	Neutral. Regarding zoning bat corridor as Open Space – Conservation Zone. Provisions should not create an expectation that the land would be vested or acquired by the council.

7.0 Recommended changes to PPC93 text

- 7.1 Based on the above assessment I recommend the following changes to the open space provisions of PC93:
 - 1. Change Precinct Plan 4 to:
 - a. show the provision of a Suburb Park in a manner that is outside the floodplain and not constrained in terms of its potential size or location;
 - b. show separate provision of open space for Neighbourhood Parks and their indicative locations;
 - c. show separate provision of open space for protected areas and connection spaces, such as SEAs, floodplains, esplanade reserves, riparian margins, stormwater management areas and ponds, and greenway routes;
 - d. provide a legend and labels that reflect the various open space functions rather than conflate with open space zone names.
 - 2. Change the precinct description in IXXX.1 to remove unclear names and correct description of parks to reserves, as follows:

...

There are several key open space areas which will be a mix of private, community and public areas which are identified in Precinct Plan 4. These are:

- The Endeans Farm RA large recreational Ppark
- The Waimanawa WA wetland Rreserve
- The Mahurangi River Esplanade Rreserves and Pparks along the Mahurangi River

These open space areas provide a chain of connected open space areas through the precinct and are to be developed over time to provide for a range of environmental, social and accessibility outcomes.

In addition, a small number of local neighbourhood parksreserves are proposed.

3. Change policies IXXX.2.(2)-(4) to include reference to Precinct Plan 4 and provide for flexibility in their provision as follows:

...

- (2) Provide for social infrastructure, infrastructure, open space uses and a local centre to meet the needs of the community over time through a mix of zonings and public assets.
- (3) Provide a-zoning, and transport, and greenway, and public open space networks that creates a focus of the precinct on a series of connected public open spaces that align with Precinct Plan 4 or as otherwise agreed with the council and is sympathetic to the natural topography of the area.
- (4) Provide a series of open spaces along upper reaches of the Mahurangi River and within the precinct to provide for a range of active and passive opportunities, to promote walkability, and to enhance the overall amenity and liveability of the precinct that aligns with Precinct Plan 4 or as otherwise agreed with the council.
- 4. Change policies IXXX.2.(20) to include reference to development in addition to subdivision:
 - (20) Require subdivision and development to provide for the recreation and amenity needs of residents by: (a) providing open spaces which are prominent and accessible by pedestrians; (b) providing for the number and size of open spaces in proportion to the future density of the neighbourhood; and (c) providing for pedestrian and/or cycle linkages.

. . .

5. Change standard Ixxx6.16 as follows:

Purpose: To provide for fencing that is constructed along residential front boundaries and site boundaries adjoining vested publicly accessible open spaces as shown on Precinct Plan 4, to a height sufficient to:

- Provide privacy for dwellings while enabling opportunities for passive surveillance of the esplanade reserve and / or vested publicly accessible open space.
- Minimise dominance effects from fencing on the esplanade reserve.
- 1) Fences or walls or a combination of these structures (whether separate or joined together) that adjoin front boundaries or vested publicly accessible open spaces shown on Precinct Plan 4, must not exceed the height specified below, measured from the ground level at the boundary:

...

6. Change matter of discretion Ixxx.8.1(1)(a) to include reference to Precinct Plan 4 as follows:

(a)(c) The provision of open space as shown on Precinct plan 44, including public accessibility, function of the open space, and compliance with Crime Prevention Through Environmental Design Principles.

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

23/04/2024

To: David Wren – Planning Consultant for Auckland Council

From: Rue Statham – Senior Ecologist, Auckland Council

Subject: Private Plan Change – PC93 – Wellsford North – Ecological Assessment

1.0 Introduction

- 1.1 I have undertaken a review of the private plan change, on behalf of Auckland Council in relation to ecological effects.
 - 1.1.1 I am a warranted Auckland Council (Council) enforcement officer pursuant to section38 of the Resource Management Act 1991 (RMA).
 - 1.1.2 I hold a Bachelor of Science in Earth and Environmental Sciences (Hons), which I received in the United Kingdom (UK). I also received the British Technical Enterprise Council qualification in Arboriculture.
 - 1.1.3 I have over 25 years' experience working as an ecologist in private and local government sectors.
 - 1.1.4 I have worked at Council for over 18 years. I started work as an Ecological Advisor in January 2006, when it was the Rodney District Council, and through the Auckland Council transition to Ecologist in 2010, I was promoted to Senior Ecologist April 2018.
 - 1.1.5 Prior to attending university I was employed in the agricultural sector notably livestock husbandry and arable crop production. Members of my immediate family have been employed in the agriculture sector and/or continue to farm in the UK.
 - 1.1.6 Since coming to New Zealand I have completed and passed the following courses:
 - RMA training course run by University of Auckland (2008).

Auckland Council Stream Ecological Valuation (SEV) training (2011).

"Making Good Decisions Programme – certification for RMA decision makers" a course run by Ministry for the Environment (certified 2018 and recertified 2021). Aimed at helping "councillors, community board members, and independent commissioners make better decisions under the Resource Management Act 1991 (RMA)"; and

1.1.7 I have previously provided expert evidence at the Environment Court.

- 1.2 In writing this memo, I have reviewed the relevant application material in full. The following documents specifically address ecological matters:
 - pc93 Warkworth South Private Plan Change Report [AEE]
 - pc93 Appendix 1a Warkworth South Plan Change
 - pc93 Appendix 1b Warkworth South Planning Maps
 - pc93 Appendix 9 Baseline Ecology Report [EcIA]
 - pc93 Bioresearches January 2021 Report Freshwater Ecology Classifications –
 Warkworth Plan Change Area
 - Arboricultural Report by Craig Webb, dated 9 June 2022
 - pc93 response to clause 23 request with table of responses 19 April 2023
 - pc93 clause 23 response June 2023
 - I have also reviewed stormwater reports.
- 1.3 I was not involved in the initial Clause 23 assessment, although I did provide support to the Clause 23 ecology request written by my former colleague Micah Madson, Ecologist [since left Council].
- 1.4 Subsequently, I have been brought in to provide ecological input for this s42A ecology report and I have been able to visit the site.

2.0 Key ecological Issues

- 2.1 Absence of all stream and wetland values and extents on Ixxx.10.2 Waimanawa Precinct Plan 2 Environment.
- 2.2 Absence of all indigenous terrestrial values and extents on Ixxx.10.2 Waimanawa Precinct Plan 2 Environment.
- 2.3 Absence of accurate wildlife surveys to inform lxxx.10.1 Waimanawa Precinct Plan 1 Spatial provisions and Precinct Standards, notably the "*Indicative Bat Flight Corridor*".
- 2.4 Absence of Precinct Standards to protect "*Proposed Covenanted Bush*" identified on Ixxx.10.2 Waimanawa Precinct Plan 2 Environment.
- 2.5 Absence of any justifications to remove existing Covenant Protections and/or obligations over some of the protected areas, noting Ixxx.10.2 Waimanawa Precinct Plan 2 Environment does not show all areas of existing protections as "Covenants to be retained", and is outside the scope of a Plan Change being an RMA s221 application.

- 2.6 Absence of appropriate standards for fencing where it does adjoin protected areas in private ownership, for example lxxxx6.16 only refers to fences "adjoining the front yard or vested publicly accessible open space".
- 2.7 Proposed Objectives IX.2. (8) specifically identifies *wetlands* to be protected, restored, maintained, and enhanced. Subsequent polices and standards should reflect the inclusion of wetlands identified across the subject site: Policy IX.3. (10), Standard IX.6.3(1), Matters of discretion IX.8.1. (4), Special information requirements IX.9. (1).
- 2.8 The absence of any objectives, policies, or standards as the relate to the retention, maintenance, and enhancement of biodiversity values, both terrestrial and freshwater, within the Morrison Heritage Orchard Precinct.

3.0 Applicant's assessment

- 3.1 The applicants s32 planning report and ecological impact assessment report discuss the potential effects on the site's ecological values.
- 3.2 Section 12 of the planning report summarises the ecological effects which are discussed in further detail in the ecological impact assessment report.
- 3.3 Section 3 of the ecological impact assessment report describes the ecological context of the site by each ecological component on site, terrestrial ecology vegetation, connectivity and ecological function, pest animals, native fauna (herpetofauna, avifauna, and bats) and freshwater ecology streams, freshwater fauna, wetlands, and receiving environment.
- 3.4 Section 3.2. 3.5 specifically notes and identifies area located across the site. Stream values ranged from low due to moderate-high due to high modification through historic and current agricultural practices but also relatively extensive riparian vegetation and habitat diversity through the main Mahurangi stream channel.
- 3.5 The applicant proposes to incorporate approximately most of the intermittent and permanent streams, to protect and enhance the streams through planting and protection of the 10m and 20m riparian margins. "Riparian margins carry the dual function of enhancing the amenity of an area while providing a stormwater function and addressing flood risk associated with the corridor".
- 3.6 "Significant areas of native vegetation have been identified and are being retained". This includes the established riparian planting along the two arms of the Mahurangi River The applicant proposes to enhance the terrestrial ecological values through the enhancement of the existing native vegetation, indicating that potential plantings will increase the quantity and diversity of native vegetation which will increase in ecological connectivity and terrestrial habitat.

- 3.7 The applicant proposes to protect natural wetlands on the site through avoidance of direct impacts and seeks to incorporate natural wetlands into the public ecological and open space areas.
- 3.8 The applicant proposes to protect and enhance ecological values (terrestrial, streams and wetlands) across the site, increasing the overall ecological value of the site.

4.0 Assessment of ecological effects and management methods

Wetlands

- 4.1 Both National Policy for Freshwater and National Policy for Indigenous Biodiversity promotes the retention, protection, and restoration of natural inland wetlands. The National Policy Statement for Freshwater Management (2020) (NPS-FM), NES-F 2023, NPS-IB and AUP: OP Chapter B7 contain strong directives requiring any more than minor adverse effects on freshwater, and on any ecosystem associated with freshwater to be avoided and that freshwater systems are maintained or enhanced.
- 4.2 There is some debate on the wetlands identified across site as meeting the natural wetland definition under the NPS-FM. Some wetlands have been incorrectly excluded as pasture or suggested to be entirely artificial / constructed. The NPS-FM pasture exclusion clause does not apply in situations such as changes in land use, e.g. for urban development or other land uses. "The purpose of the NPS-FM pasture exclusion clause is to support the continuing use of pasture for grazing purposes. The exclusion is not targeted at pasture being converted for urban development or for other land uses". As later discussed, the largest wetland has not been demonstrated to be artificial and/or constructed (for a specific purpose)
- 4.3 No wetland delineation field results have been provided nor any indication of where survey plots were undertaken across a gradient/transect to determine wetland extents.
- 4.4 I am unable to confirm that all wetland areas of have been accurately represented in the Ecology Report. Furthermore, natural wetlands have not been accurately mapped on Ixxx.10.2 Waimanawa Precinct Plan 2 Environment. I believe that at least one significant wetland area (and smaller wetlands) do exist on site.
- 4.5 Notably, a natural inland wetland meeting SEA Factors (Factor 2(d)) is located where an indicative stormwater management basin is proposed and may be partially within the footprint of the proposed Western Link Road. The applicant has failed to demonstrate that the wetland was constructed in its entirety and subsequently maintained for a specified purpose. Evidence pointing to the contrary (clearly identifiable on the 1966 aerial photograph ECIA Figure 3, 1970 /1973 & 1992 historic aerials), and/or that adverse effects, including full or partial reclamation, of this feature cannot be avoided.

-

¹ Ministry for the Environment. 2022. *Pasture exclusion assessment methodology*. Wellington: Ministry for the Environment.

- 4.6 A small pond was constructed sometime after 1996, the exact date is not evident, however given all application evidence to the contrary, a degraded wetland has existed in this location since before 1966, even if attempts to 'drain' the area have been ongoing for decades. Notwithstanding, the open water and construction of a 'amenity pond' has not caused the wetland to form throughout its fullest extent, rather the pond has been amalgamated and is now constituent part of a wetland restoration dating back to 2006 [when I was first invited to the property to review the planting].
- 4.7 The 'pond' could be considered a constructed waterbody; however, the rest of the wetland is not. Conservation planting has been a permitted activity in successive Planning documents dating back well before 2006 when the wetland was restored for the purposes of a rural subdivision (SUB80071910). The subdivision application did not go to fulfilment with s221 survey lodged, however s224(c) was not applied for.
 - 4.7.1 Please refer to Appendix 1 images showing locations of existing covenant areas, or areas that were significant for rural subdivision.
- 4.8 The wetland has not deceased in size, excepting that there have been some losses of buffer planting, most likely due to hydrological issues and saturate soils due to a high-water table. I note that the surrounding maize crop has also been subject to plant failures in areas where it is clear there is a high-water table and water-logged soils.
- 4.9 The wetland feature was identified as a natural wetland in the rural subdivision application dated 2009 and successive peer review dated 06/2009, the Warkworth Structure Plan 2019, and Warkworth Future Urban Zone Watercourse Assessment dated May 2019.
- 4.10 The EcIA has not provided assessment against Policy B7.2.2(1) for this and other ecological features, irrespective of this particular feature being natural or 'constructed2'. @para 4.5 the wetland meets at least one SEA Factor criteria confirming this to be a Significant Ecological Area.
- 4.11 As noted above, none of the indigenous wetlands have been assess against SEA Factors @para 4.5, they would all meet SEA Factor 2(d). For example wetland W10. Likewise, for indigenous vegetation adjacent to existing protected areas or SEA's that too would likely meet SEA Factors, e.g. 4(b) or 4(b)(i).

Streams

4.12 I am unable to confirm that all streams have been accurately represented on the Precinct Plan. With reference to the below catchment overlay, there is the possibility that not all streams have been accurately identified and mapped as I observed at least two unreported and unidentified watercourses on my site visit.

² The Significant Ecological Overlay provides for many examples of fully or partially constructed wetlands / waterbodies identified as SEA's. For example SEA_T_5287 Waiatarua Reserve wetland, or SEA_T_6974 Silver Hill Road, Wellsford

- 4.13 At the confluence of the main Mahurangi stream and the main tributary the riparian margin is identified as a Significant Ecological Area, is protected by legal covenant (SUB80069797), and Natural Stream Management Area. The latter as set out in the policy framework of provisions in D4 Natural Stream Management Areas Overlay of the Unitary Plan. I defer to Healthy Waters with regards to Policy D4.4 (5) where a functional or operational need exists and there is no practicable alternative to locate infrastructure in that location, where currently some are proposed. I note that the EcIA and AEE are both silent on these matters. Chapter E26 is also silent on D4 matters.
- 4.14 There remains doubt that the 'drains' identified in the EclA report are anything other and part of the natural drainage patterns. As discussed above, the low-lying ground is subject to highwater table and saturated soils. Drains have been cut to increase the runoff of improve productivity.
- 4.15 The Unitary Plan defines a river or stream as:

River or stream

A continually or intermittently flowing body of fresh water, excluding ephemeral streams, and includes a stream or modified watercourse; but does not include any artificial watercourse (including an irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal except where it is a modified element of a natural drainage system). [emphasis added].

- 4.16 Many of these 'drains' flow directly downslope hill into larger (some channelised and straightened) water courses. Watercourse that have been identified as 'natural' in the EclA. The EclA has not provided factual evidence as to how a straighten watercourse can be classified natural, whereas a drain connecting with same stream is not, and yet is a constituent part of the natural drainage system, including where these drains dissect and flow through wetland.
- 4.17 I was not present at the "onsite meeting... specifically looking at the Wider Western Link Road in the Waimanawa Valley Block". I am unable to provide any feedback as to why a 4m riparian margin was deemed acceptable, or who was present giving ecological advice to support Auckland Council and reach agreement. I note that Auckland Transport do not wish to take ownership of this limited setback (see submission 20.43) and that they have stated, "the width of the riparian margin adjoining the road will be determined by Auckland Council" (email dated 20 July 2022, Katherine Dorofaeff).
- 4.18 The intersection of old SH1 and the Western Link Road is only shown as indicative on Waimanawa Precinct Plan 1.

Planting and restoration

4.19 TP148 is an old and now obsolete technical publication, that for the purpose of the EcIA has been selectively quoted and is providing advocacy for amenity and a location of a Western

- Link Road that has not been designed to avoid adverse effects on terrestrial / aquatic values. I am aware of a recent Supreme Court decision regarding roading infrastructure (East West Link) that cast doubt on measures to avoid sensitive environments and habitats.
- 4.20 ARC Technical publication TP350, "Review of information on riparian buffer widths necessary to support sustainable vegetation and meet aquatic functions", stated that buffer widths of "c. 5 m are unlikely to be self-sustaining and weed control may be a significant problem. A buffer width of 10 20 m on either side of the stream has been recommended from this report to support sustainable native forest vegetation, and this width should protect most aquatic functions." The applicant is wanting Council to take ownership of the riparian areas, notably along transport connections, which with reference to be above places significant maintenance issue on Auckland Council where riparian planting is not as sustainable and resilient as guidance documents would support.
- 4.21 Te Haumanu Taioa³ is the most up to date restoration publication available (published 2023) and, "created in partnership with Ngā Iwi Mana Whenua o Tāmaki Makaurau and includes their perspectives on restoration including kaitiakitanga, prioritising the practices of local tribal authorities to uphold 'Te Mana o te Taiao' and guidance on engaging with mana whenua". Te Haumanu Taiao recommends a minimum of at least 20m of planting either side of the stream to achieve freshwater and terrestrial biodiversity outcomes. Refer to Section 5.1.3 How wide should a riparian restoration area be?
- 4.22 Of notable concern is the lack within the EcIA of any regard to the increase in stormwater flows resulting from the development and the future resilience of the stream and riparian margin to increased flows. Healthy Waters in their s42A report section 4.2 states, "Greenfield development enabled by PPC 93 will increase imperviousness and therefore increase the flow rate and volume of runoff into the streams. This will accelerate stream banks erosion, especially for streams that have a Stage III and/or IV channel evolution." Whilst most streams are afforded a minimum of 10m of riparian planting the significant concern is for the substantially reduced 4m riparian width adjacent to the Western Link Road.
- 4.23 Several research papers have all recommended that wider riparian planting widths are necessary to support terrestrial and aquatic functions, these include:
 - Hansen B., Reich P., Lake P. S., Cavagnaro T. 2010. Minimum width requirements for riparian zones to protect flowing waters and to conserve biodiversity: a review and recommendations - With application to the State of Victoria.
 - 2016. Landcare Research Manaaki Whenua. Policy Brief No. 15; ISSN: 2357-1713.
 - Andrew Fenemor, Oshadhi Samarasinghe. Riparian setback distances from water bodies for high-risk land uses and activities. 2020. Envirolink Grant: 2057-TSDC167.

-

³ https://www.tiakitamakimakaurau.nz/protect-and-restore-our-environment/te-haumanu-taiao/

- 4.24 Whilst neither Te Haumanu Taiao, TP148 or TP350 are referenced in the Unitary Plan, the most up to date guidance should take precedence.
- 4.25 I suggest that all existing indigenous vegetation that is within 20m of streams and wetlands be retained, especially on the eastern side of Old State Highway 1 where some streams have existing vegetated habitat wider than 10m from the wetted edge of the stream and provide for habitat *nodes* in the context of ecological corridors. Additional planting can link these nodes where planting is established to a width of no less than 10m is recommended for all streams. The retention of existing indigenous vegetation enables and provides a more stable and resilient outcome for terrestrial fauna and flora and connectivity, with wider riparian areas being able to support a more diverse range of species. I agree where important ecological corridors, or esplanades, are proposed then planting should be increased to a width of between 15 20m (depending on green networks requirements)
- 4.26 My recommendations are supported by published research:
 - Colin D. Meurk and Graeme M. J. Hall. 2006. Options for enhancing forest biodiversity across New Zealand's managed landscapes based on ecosystem modelling and spatial design.
 - Greenep H K. 2009. Urban Ecology in Christchurch: a Reconciliation Ecology Approach to Enhancing Native Biodiversity on Urban Greyfields.
 - Maria Ignatieva, Glenn H. Stewart, Colin Meurk. 2010. Planning and design of ecological networks in urban areas.
- 4.27 Walkways should be sensitively located adjacent these wider pockets of vegetation, and ideally located outside any special yards and/or 10m riparian / wetland margins/buffers to maximise the benefits from terrestrial buffer planting. The applicant proposes standards that undermine the proposed planting, for example a 2m walkway adjacent to the Avice Miller reserve would result in less than 1m of actual planting, riparian / wetland planting would be reduced too, especially with CPTED / walkability matters included.
- 4.28 Avice Miller Reserve has a suspected incidence of Kauri Dieback, meaning extra care will need to be given to the location of any walkway in/or adjacent to the reserve, and/or dispersal of stormwater and/or wastewater into the Reserve. This is to help prevent any further spread of the pathogen. This would extend to the Significant Ecological Area to the east of the Reserve. It is recommended that all native bush remnants with Kauri are surveyed for trees with Dieback symptoms.
- 4.29 Western Link Road is requested to have a substantially reduced riparian margin. The proposed riparian planting standards could reduce the effective planting width to less than 2m adjacent to the stream, as the riparian planting standards as written would allow for a walkway to be located in the riparian margin. Depending on the final location, a footpath could be constructed to width of 2m. Auckland Transport is seeking to remove the requirement for

- riparian planting from the road corridor, but it remains to be demonstrated how this may affect the effective width of the riparian margin.
- 4.30 Many of the stream margins are steep, and the construction of walkways would be likely be very costly, requiring significant engineering including with stream bank modifications and earthworks consents.
- 4.31 The National Environment Standard for Freshwater does support utility infrastructure located within wetlands, such as boardwalks, but ideally on a case-by-case basis where green network connectivity is necessary.
- 4.32 IXXX.2. (9) states "Subdivision and development within the precinct provides for the protection and enhancement of identified landscape features, the protection and enhancement of the ecological values of streams, natural wetlands and areas of indigenous vegetation and the retention of a bat flight corridor." Yet, IXXX.3 Policies and Standard IXXX.6.12. (1) contradicts this where ".... shown on Precinct Plan 1....".
 - 4.32.1 The policy and standard provides for a far more permissive activity status for stream and wetland reclamation than the National Environment Standard for Freshwater allows, where Clause 45 states that earthworks and vegetation clearance with, or within a 10m setback from, a natural inland wetland is a **discretionary** activity. Clause 45C (in some specific circumstances) states that earthworks and vegetation clearance with, or within a 10m setback from, a natural inland wetland is a **restricted discretionary** Activity. Clause 57 (1) states that "Reclamation of the bed of any river is a **discretionary** activity." [emphasis added].
- 4.33 A minimum 10m width buffer should be applied around each natural inland wetland across the site that is consistent with the direction and framework of the Auckland Unitary Plan: Operative in Part (AUP: OP) Chapter 15.
- 4.34 The EcIA does not discuss or acknowledge the presence of several protective covenants found throughout the Plan Change area. This is a worrying omission given that walkways, stormwater utilities and other infrastructure are likely to impact some of them. The Precinct standards are attempting to insert permissive activity standards e.g. Table IXXX.4.1 (A5). Alterations and/or variations of covenants are a Discretionary Activity via RMA s221 and includes restrictions on the removal of vegetation. Alteration of SEA habitat (E15.4.2(A43)) also having a Discretionary activity status. In my opinion, a Plan Change proposal is the incorrect process by which to seek amendments a legally protected area and furthermore the application lacks any assessment or formal accountancy for the inclusion of the proposed standard.
- 4.35 Northern and Eastern Escarpment control areas both state their purpose is to "protect landscape features" and "to promote revegetation" of the escarpments. However, the Precinct standards do not provide for any mechanism to do so, other than for amenity purposes by way of landscaping. Landscaping (Ixxx.6.5 (1)) is generally does not equate or definitively

- translate to ecological restoration. The standards appear not to give effect to the relevant Policy IXXX.3 (9).
- 4.36 The existing vegetation on both escarpments is not (mostly) identified as SEA, nor has the applicant (or ecologists) sought to designate the habitat as SEA. The lack of overlay and/or Precinct standards equates to the vegetation having no statutory protection once the Precinct becomes operative. Simply put, all the vegetation could be removed as a permitted activity once live zoned.
- 4.37 The two options are: (1) identify and add the vegetation to the SEA overlay, or (2) provide Precinct specific standards. I suggest both as E38.8.2.5 would require the vegetation protection and ongoing maintenance, and applicable planting standards would ensure Policy IXXX.3 (9) would be met, noting I am recommending minor changes to the Policy (9) in Section 7 of this review.
- 4.38 I defer to the assessment of Community Facilities, but it is not apparent that Council would take ownership and maintenance obligations of current privately held SEA's, such as that found on the Eastern escarpment, adjacent to Avice Miller reserve.
- 4.39 It is my opinion that the applicant has failed to identify all appropriate opportunities for ecological restoration and fails to deliver a set of standards giving effect to Policies IXXX3 (8) & (9).
- 4.40 It is my opinion that the applicant has failed to identify significant ecological areas (terrestrial and freshwater) or apply assessment against Policy B7.2.2(1) and fails to deliver a set of standards giving effect to Policy IXXX3 (9). Furthermore, there is a lack of appropriate assessment criteria.

Fauna

- 4.41 The EcIA (ecology report) states that the ecological impact assessment report relies, in part, on a desktop analysis of databases on terrestrial and freshwater fauna. Therefore, a request for a fauna assessment (formal robust fauna surveys) was sought via Clause 23 to inform terrestrial fauna related standards and/or enhancement / avoidance opportunities (e.g. herpetofauna, avifauna, bats, and freshwater fauna). To my knowledge no further ecological surveys have undertaken and submitted since the Clause 23 response.
- 4.42 In my opinion, the applicant has not adequately provided a thorough understanding of the ecological fauna values across the site, nor have they provided a thorough ecological assessment of actual / potential adverse effects from the proposed change in land use including for the installation of infrastructure. This is further amplified by the incomplete and/or inaccurate classification and identification of ecological features (wetland and streams) across site.
- 4.43 I will address, more fully, the issue of Long-Tailed bats in my response to Submission #28 in Section 7 of this review.

- 4.44 Appendix 1 Structure Plan Documents Section 1.4.2. Natural resources requires an understanding of the site's natural values. (1)" The protection, maintenance, and enhancement of natural resources...." & (3) "......showing how they reflect the underlying natural character values and provide opportunities for environmental restoration and biodiversity." Without the necessary assessment and survey of fauna and flora within the site, the applicant potentially fails to deliver appropriate outcomes, including whether development controls (e.g. lighting, appropriate restrictions on pet ownership, etc.) are necessary to protect, maintain and/or enhance indigenous biodiversity.
- 4.45 This is further emphasised by the National Policy on indigenous Biodiversity Clause 3.7 Precautionary approach, Clause 3.10 Managing adverse effects on SNAs of new subdivision, use, and development, and Clause 3.16 Indigenous biodiversity outside SNAs. A Private plan Change application should provide the same level of rigor to biodiversity survey and assessment as would be expected by a land use development application, arguable more so.
- 4.46 IXXX.3 Policy (8) states "Require subdivision and development to protect the landscape values of the flanks of the northern and eastern escarpments (as shown on Precinct Plan 1) and to promote the retention of existing native vegetation or the revegetation of these escarpments". Yet, there are no further standards in the Precinct referring to its protection and enhancement as described in the ecology impact assessment report and the AEE.
- 4.47 The National Policy for Indigenous Biodiversity Policy 3 states: A precautionary approach is adopted when considering adverse effects on indigenous biodiversity. Clause 3.7 states:
 Local authorities must adopt a precautionary approach toward proposed activities where:
 (a) the effects on indigenous biodiversity are uncertain, unknown, or little understood; but
 (b) those effects could cause significant or irreversible damage to indigenous biodiversity.
- 4.48 It is my opinion that the applicant has failed to demonstrate, through a lack of targeted fauna survey and/or accountancy that the relevant Objective and Policies of the National Policy for Indigenous Biodiversity, or the those of the Unitary Plan, have been met.

5.0 Submissions

- 5.1 Submissions on the proposed plan change were reviewed and noted that most submissions relate to other matters of the proposed PC93. Submissions that are relevant to ecology were chiefly on the absence of directed fauna surveys (notably bats), retention of streams and their enhancement. Conversely submission was received to provide for more permissive standards as they relate to works in and around streams.
- 5.2 Auckland Council submission #20 has commented on several matters pertaining to biodiversity.

- 5.2.1 Morrison's Orchard where, "The provisions do not recognise, maintain, and enhance these plantings. Similarly, the streams and associated plantings are not identified and therefore could be removed without appropriate consideration of their value to Morrison's Orchard."
- 5.2.2 I agree with the submission that the Precinct does not provide for retention of freshwater values (that are not identified) and the Precinct lacks any standards for the retention of 'notable trees; (shelterbelt) and/or enhancement of riparian margins.
- 5.2.3 I do acknowledge that the Precinct will retain Mixed-Rural zoning and E15.4.1 (A17) would remain, but the Precinct does lack standards pertaining to the enhancement of the riparian margin noting that shelterbelt cannot remain in perpetuity (old declining exotic trees).
- 5.2.4 The arboricultural report does not provide an assess of Group 74 (Plan 4), the shelterbelt of the orchard, but does indicate they are not to be retained.
- 5.2.5 I have not reviewed and provided assessed against the arboricultural report other than to provide comment against the submission.
- 5.2.6 Consistency with AUP precinct provisions "h. Amend existing provisions to ensure consistency with drafting in other precincts in the AUP, including standard conventions such as referencing to other parts of the AUP, and correct all numbering references."
- 5.2.7 I agree with the submission, that the Precinct does not provide consistency with standards of the Unitary Plan, notably where the applicant is seeking more permissive standards than would otherwise be provided for, e.g. removal vegetation within Significant Ecological Areas.
- 5.3 Mahurangi Trail Society (MTS) Incorporated submission #18.1 on its approval of "the development concept plan".
 - 5.3.1 I do not fully agree with the submission.
 - 5.3.2 The conceptual development plan is not approved through the Plan Change process, and changes may be required.
 - 5.3.3 MTS submission does not acknowledge, or perhaps is not aware, that the applicant is seeking permissive standards that are likely to impact on significant ecological habitats through the construction of cycleways and pedestrian linkages.
 - 5.3.4 Whilst a network of cycle ways and pedestrian linkages are an integral and important element of urban areas, their locations should be cognisant and be complimentary to ecological values.
- 5.4 Auckland Transport submission #20.43

- 5.4.1 An earlier proposal sought to include 6m width of land alongside the Wider Western Link Road as riparian planting within the road to vest. This was not acceptable to Auckland Transport. Bullet point 3 should be deleted accordingly as it suggests that the riparian yard would be included within the road reserve.
- 5.4.2 The riparian margin has now been reduced to 4m which I have commented on previously in Para 4.25.
- 5.4.3 At para 4.16 "the width of the riparian margin adjoining the road will be determined by Auckland Council" (email dated 20 July 2022, Katherine Dorofaeff).
- 5.4.4 Waimanawa Precinct Plan 1 shows an *indicative WWLR/SH1 intersection*, underlying that it's location could be subject to change.
- 5.4.5 I do not agree with the submission where it may further reduce the available planting area, but I would support the submission should the planting width be increased to no less than 10m.
- 5.5 Ash Hames and Fiona Rayner submissions
 - 5.5.1 Submitter supports #21.2 "the proposed Indicative Special Yard Avice Miller Scenic Reserve as a 6-metre setback...... and that of this 6-metres a 3m strip of the special yard is to be planted with indigenous vegetation."
 - 5.5.2 #21.9 "Rule (A6) in Activity Table IXXX.4.1 is opposed because non-complying activity status for an infringement of the proposed 6-metre yard and associated indigenous vegetation planting standard for the Avice Miller Scenic Reserve boundary is too onerous. Restricted Discretionary activity status is appropriate for infringements to the Standards. This activity status is also consistent with the AUP as it currently exists."
 - 5.5.3 I disagree with the submission (as I do the Precinct Standards) as they have not provided Restricted Discretionary assessment criteria for Council to consider. Proposed Precinct Standards also do not provide for Council discretion nor do the standards require a specific suite of planting criteria or a standard to be met. The proposed Precinct Standards do not require protection or maintenance of the planting.
 - 5.5.4 I address this in para 4.37 4.39.
 - 5.5.5 Also see response 5.8.7 as it relates to bats and lighting.
- 5.6 Blennerhassett family submission #22, Guy Matches # 26, Wynyard family #27 have all sought and commented on the same submission point.
 - 5.6.1 Confirmation is required that the identified 'Bat Flight Corridor' does not extend further north to the Submitter's land.

- 5.6.2 I cannot agree with the submission or agree that the applicant can provide that surety. Bioresearches have not properly and robustly assessed actual or potential adverse effects on fauna (notably highly mobile species; bats), and the survey does not extend on to the landholding that the submissions are directed. There cannot be any certainty that a bat flight corridor would not extend on the submitters' property.
- 5.6.3 The submitter could engage their own consultant ecologist to provide assessment of bats (and other fauna). However, I note that there are existing records of bats to the north, west and south of the property.
- 5.6.4 Also refer to Para 5.8.7
- 5.7 Ian Smallburn, Tattico, #24 submission seeks more permissive standards relating to works adjacent to streams.
 - 5.7.1 The current wording potentially suggests that any reclamation or drainage works require consent. The intent of the Rule is to only control reclamation and drainage works within the identified retained streams.
 - 5.7.2 The submission #24.6 seeks, "Reword and update (A4) to 'New reclamation and drainage of a Retained Stream on Precinct Plan 2, including filling within the stream and piping of a stream, but excluding drainage works underneath a stream or bridging over a stream' in Table IXXX4.1".
 - 5.7.3 I disagree with the submission. I have previously stated, para 4.28.1, the NES-F does not provide for a more permissive standard than in a statutory Plan. The applicant is seeking tacit acceptance regarding stream loss, where they have not demonstrated at the Plan Change stage of any functional need for the reclamation of the riverbed in that location. (NES-F reg 57)
 - 5.7.4 Works under or over a stream where it does not require consent for other matters (e.g. vegetation alteration) is unlikely to require consent. Chapter E15, E3 and NES-F already provide for satisfactory statutory matters relating to works in and around streams. The submitter has not provided any evidentiary reporting to support their position.
- 5.8 Penny Nelson, Director-General of Conservation #28
 - 5.8.1 Requests that the applicant, "Undertake further surveying in the PPC site to fully understand the population size and location of long-tailed bats."
 - 5.8.2 @para 4.31 4.37 I have concluded that the applicant has failed to adequately survey for fauna throughout the Plan Change area. I support the submission from the Department of Conservation as it relates to Long-Tailed Bats.

- 5.8.3 Artificial lighting is known to have adverse effects on bat behaviours and that of their prey⁴. *Unlit urban bushland remnants are important refuges for high bat diversity. Preventing light penetration into unlit bushland patches and corridors remains essential to protect the urban bat community.*
- 5.8.4 The lack of robust assessment of populations of bats in an area that has previously been described as an important landscape for bats is of high concern.
- 5.8.5 Weston Lea Limited & Director-General of Conservation v Hamilton City Council (2021 NZEnvC 149) canvased bats extensively for a development in Hamilton, where bat activity is arguably far better researched and understood as it relates to the landscape. Warkworth, whilst acknowledged for bat activity, the research and movement of bats is not as well known or understood.
- 5.8.6 What was apparent from the Weston Lea case, is that agreement was made for greater allowances for bats, including in the design and implementation of appropriate planting, lighting, and setback from development, as well as a staged approach to delivering of development, to allow for new planting to grow, and a staged removal of exotic trees.
- 5.8.7 I do note though that just because bats (or other fauna) are not discovered, their lack of presence is not certain. Presence-absence data is known to present several limitations. "A key issue is that a species may be declared "absent" from a landscape unit simply as a result of not detecting the species using the prescribed sampling methods. The effect of this imperfect detection is that parameter estimates will be biased, and any modelling of the data provides a description of the surveyors' ability to find the species on the landscape, not where the species is on the landscape. The reliability of so-called "presence—absence" data for making sound management decisions and valid scientific conclusions could therefore be questioned"5.
- 5.8.8 I support inclusion on cat restrictions. Developments adjacent to high ecological values have included such pet ownership restrictions.
- 5.8.9 I have no further specific advice at the time of writing and will remain so until there is more fuller understanding of bat activity in and around the Precinct(s), and that of other wildlife. On receipt of the information I suggest all interested parties convene to reach an agreed position on lighting, bat corridor / development setbacks, planting requirements etc.

⁴ Haddock JK, Threlfall CG, Law B & Hochuli DF (2019) Responses of insectivorous bats and nocturnal insects to local changes in street light technology. Austral Ecology 44(6)

⁵ MacKenzie, D.I. 2005. What are the issues with presence–absence data for wildlife managers? Special Section: The Value and Utility of Presence–Absence Data to Wildlife Monitoring and Research. Journal of Wildlife Management 69(3):849–860.

Conclusions and recommendations

- 6.0 I am unable to support the plan change in its current form with the standards as proposed.
 - 6.1 Council and applicant must agree on Waimanawa Precinct Plan 1, regarding the values and attributes to be shown. As I have explained, not all ecological values are shown, and there is disagreement on bat flight corridors. Special yards are not clearly shown, as are neither agreed Significant Ecological Areas.
 - 6.2 The private plan change is generally consistent with the direction and framework of the AUP: OP, delivering a minimum of a 10m riparian margin along most streams in the proposed urban areas. However, I do not support the discrepancy with the Western Link Road and a lack of robust justification as to why the location of the Western Link Road must infringe the 10m riparian margin. Noting this is a greenfield development, the applicant is not providing for a wider riparian margin, it is my recommendation that they should especially for a stream with a large catchment such as this.
 - 6.3 The private plan change is not, however, consistent with the direction and framework of National Policy Statement for Freshwater Management 2020, National Environmental Standards for Freshwater Regulations 2023, and the Unitary Plan for wetlands, or buffers around wetlands. Buffers are not proposed for wetlands. A 10m buffer for each of the wetlands is recommended, as well as avoidance of wetland reclamation for the Western Link Road.
 - 6.4 Whilst the protection of some streams is provided, those the applicant has shown on the Precinct Plan, the private plan change appears inconsistent with National Policy Statement for Freshwater Management 2020, National Environmental Standards for Freshwater Regulations 2023, and the Unitary Plan (Chapter E3). I believe this is relevant as the statutory considerations afford protection, maintenance, and preferable enhancement unless reclamation has no practicable alterative. The applicant has provided no evidence to support reclamation of some of the streams in a green field development.
 - 6.5 Whilst the protection of [most] indigenous habitat is proposed, the Precinct does not fully give effect to the AUP: OP in relation to indigenous biodiversity (B7.2), not only due to the absence of assessment of habitats against B7.2.2(1), but also standards that give effect to native terrestrial vegetation protection, retention, and enhancement, including restoration planting on the escarpments. Similarly, Morrison Heritage Orchard Precinct, the streams and associated riparian plantings are not identified or restoration provided for. It is questionable that indigenous habitats and/or exotic trees could be removed without appropriate consideration of their value to Morrison's Orchard and adjacent land use and development.
 - 6.6 Northern and Eastern escarpments have a lack of Precinct standards to deliver on the restoration of the slopes, and retention / protection of habitats. I will suggest a standard that would incorporate a contour derived assessment for restoration planting, and for the protection and maintenance of existing indigenous habitats and the restoration. This would

- include all existing SEA. However, should applicant and Council agree on Waimanawa Precinct Plan 1, the standard could be revised accordingly.
- 6.7 Walkways and their locations should be reconsidered, especially for the likelihood that locating them in riparian margins will undermine ecological / biodiversity restoration outcomes. Furthermore concerns are raised with regard to the placement and construction of walkways where it is suspected that Kauri Dieback is present.
- 6.8 Planting, pet ownership and development setbacks, as they relates to bats and/or flight corridors, requires further consideration and discussion with stakeholders.

7.0 Precinct Standards

- 7.1 I am unable to support the plan change, however with the proposed amendments to the PC92 are attached shown below, the Plan change may address some of the issues raised (notwithstanding any relating to fauna).
- 7.2 I am unable to make specific recommendations regarding bats and flight corridors, as I believe further discussion is necessary with all stakeholders.
- 7.3 Relief sought: Strikethrough is to be read as deletion; Underlining is to be read as an addition.

7.3.1 IX.2. Objectives

(9) Subdivision and development within the precinct provides for the protection, maintenance, and enhancement of identified landscape features, the protection and enhancement ecological values of streams, natural wetlands and areas of indigenous vegetation, and habitats of indigenous wildlife. the retention of a bat flight corridor.

7.3.2 IX.3. Policies

- (a) Integrating with the stream, wetland, riparian margin, and wetland buffer network to create blue / green corridors.
- (8) Require subdivision and development to protect and enhance natural wetlands <u>and their buffers</u>, and permanent and intermittent streams <u>and their riparian</u> <u>margins through indigenous restoration planting. identified on Precinct Plan 1.</u>
- (9) Require subdivision and development to protect the <u>ecological</u> and landscape values of the flanks of the northern and eastern escarpments (as shown on Precinct Plan 1) and to <u>promote ensure</u> the retention of existing native vegetation of <u>and</u> the revegetation within <u>indigenous species</u> of these escarpments.
- (11) Require subdivision and development to retain provide for the Bat flight corridors alongside part of the Mahurangi River and the Avice Miller Scenic Reserve.

- (18) Require subdivision and development to contribute to improvements to water quality and biodiversity including the creation of indigenous fauna habitat, and through enhancing ecological corridors by retention of existing habitat and connecting indigenous habitat. Require esplanade reserve, and riparian yard planting for stormwater management, ecological corridor, and amenity purposes.
- 7.3.3 Table IXXX.4.1 All zones (A4) New reclamation or drainage, including filling over or piping of a stream shown as a Retained Stream on Precinct Plan 2. NC
 - 7.3.3.1 Explanation: The National Environment Standard for Freshwater (NES-F) and Unitary Plan standards of chapter E3 contains specific regulations relating to works in and around (including reclamation of) streams and wetlands. The regulations and standards do not need to be repeated within Precinct and cannot contain more permissive standards than NES-F. Works beneath or over a stream are unlikely to trigger NES-F or AUP E3 matters but may trigger E15 matters. Assessment of effects would be considered at the development stage.
- 7.3.4 IXXX.6.2 Special Yard: Avice Miller Reserve

Purpose:

- to provide a buffer adjacent to the Avice Miller Reserve.
- (1) A building or parts of a building must be set back from the legal boundary with Avice Miller Reserve by 6m where sites are subject to the Special Yard: Avice Miller Reserve on IXXX.10.1 Precinct Plan 1.
- (2) A 3m wide strip of the Special Yard measured from the boundary of the Avice Miller Reserve shall be planted with indigenous vegetation that attain a height of at least 510m when mature, except where a public walking track is constructed within the 3m yard.
- (3) The 3m wide strip of the Special Yard shall be legally protected by a covenant or consent notice providing for the maintenance and protection of the landscaped area, the prevention of dumping of rubbish and garden waste, the management of noxious invasive weeds, and a prohibition on the keeping of domestic cats.
- (4) This yard does not apply to any bulk potable water reservoir. Any bulk water reservoir shall be set back a minimum of 3m from the Avice Miller Reserve boundary.
- 7.3.5 Ixxx.6.3 Special Yard: Bat Flight Corridor

Purpose:

- to provide an unobstructed flight corridor for Bats.
- (1) No dwellings, accessory buildings, or light standards (over 1m high) are to be constructed within the Special Yard: Bat Flight Corridors of the Mahurangi

- River, its tributaries and Avice Miller Scenic Reserve as shown on Precinct Plan 5.
- (2) Any new landscaping restoration planting which is established in the Special Yard: Bat Flight Corridors (as shown on Precinct Plan 5) is to have a maximum minimum height at maturity of £10m.
- (3) Lighting shall not exceed 0.3 lux when measured 1m above the ground level at any point within or along the external boundary of the area identified as Special Yard: Bat Flight Corridors as shown on Precinct Plan 5.
- (4) A warm white light source (2700Kelvin or lower) must be adopted to remove any blue light component
- (5) Luminaires must always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- 7.3.6 Ixxx.6.12 Riparian Yards Margins for Streams and Natural Inland Wetlands

<u>Purpose: Contribute to improvements to water quality, indigenous flora and fauna</u> habitat and biodiversity.

- (1) All existing indigenous riparian or wetland buffer vegetation must be retained.
- (2) All riparian margins of permanent or intermittent streams must be planted either side to a minimum width of 10m measured from the edge of the stream, and a minimum planted buffer width of 10m measured from the wetted edge of a natural wetland, provided that:
 - (a) All pedestrian walkways and cycleways and recreational spaces must not be located within the 10m riparian margin, or a Significant Ecological Area, and preferably not within 10m of a wetland or wetland buffer planting area width.
 - (b) This rule shall not apply to road crossings over streams.
 - (3) Riparian and wetland margin/buffer planting areas are offered for vesting in Council and/or must be protected and maintained in perpetuity by an appropriate legal mechanism.

Purpose:

- To protect and enhance water quality and ecology of the streams and natural wetlands shown on Precinct Plan 1 while preventing erosion.
- To integrate the watercourse within the Local Centre.
- To integrate the section of watercourse along the Wider Western Link Road within a wide road berm or as a separate open space integrated with the road berm.
- (1) The riparian yards of retained permanent or intermittent stream must be planted at the time of subdivision or land development to the minimum width shown on

Precinct Plan 1 measured from the top of the stream bank or, where the stream edge cannot be identified by survey, from the centre line of the stream. This standard does not apply to that part of a riparian yard where a road or public walkway crosses over the stream and/or passes through or along the riparian yard.

- (2) The riparian yards of any natural wetland shown on Precinct Plan 2 must be planted at the time of subdivision or land development to a minimum width of 10m measured from the wetland's fullest extent. This standard does not apply to that part of a riparian yard where a road or consented public walkway crosses over the wetland and associated riparian area, and/or generally passes across a stream and associated riparian area, or along the riparian yard.
- (3) The planting must:
- (a) Use eco-sourced native vegetation; and
- (b) Be planted at a density that will achieve approximately 10,000 plants per hectare of new and existing plants.
- (4) Planting must be undertaken in accordance with the Special Information Requirement Ixxx.9.2

7.3.7 <u>IXXX.9.2 Riparian planting plan</u>

An application for land modification, development and subdivision which adjoins a permanent or intermittent stream and/or natural wetland must be accompanied by a planting plan identifying the location, species, planter bag, size, site preparation (including weed and pest animal control) and density of the plants. Plant species must be predominately native and ecologically appropriate to the site and must follow the planting standards of Te Haumanu Taiao.

7.3.8 IXXX.6.14 Greenways – Walking and Cycling Infrastructure

Purpose:

- To provide for walkways and cycleways which Council wants vested in Council to form part of the public greenway network.
- (1) Walkways and cycleways that are to be vested in the Council shall be provided within the greenways shown on Precinct Plan 1 and:
- (a) Shall be constructed either to a walking track standard like that constructed in Regional Parks if not part of a vested formed road, or in the case where the greenway is part of a vested formed road, constructed to normal footpath standards as appropriate.
- (b) Shall provide connections to greenways on public or private land outside the land subject to resource consent and are future proofed by constructing track access to the boundary of the application site.

(c) The width of the track shall have a minimum width of 2m.

Where the off-road greenway is not indicated on Precinct Plan 1 as being adjacent to a stream, and it is intended to be vested; the walkway and cycleway shall be located a minimum of 8m from the stream.

(2) Where the Council does not want or is unable to accept vesting of the walkway and associated riparian yard and stream bank, then there is no requirement to provide the walkway.

7.3.9 <u>IXXX.9.4 Northern and Eastern escarpment vegetation and planting (Waimanawa Precinct Plan 1)</u>

All existing indigenous vegetation must be retained, and land with a contour gradient, at the time of any application for subdivision or development, greater than 15° must be planted with indigenous species. The restoration planting must be in accordance with Te Haumanu Taiao. The existing indigenous vegetation and restoration planting must be fenced and protected via legal covenant and maintained in perpetuity, including invasive weed and pest animal control.

Technical memo reviewed and approved for release by:

Rue Statham

Reviewed by

Senior Ecologist

Ecological Advice Team | Infrastructure and Environmental Services

23/04/2024

Appendix 1: Areas protected via RMA s221 Covenant.



Ecological Areas with RMA s221 survey plans agreed (RMA s224(c) may not have been issued)





Memo 2/04/2024

To: David Wren, Policy Planner, Auckland Council

From: Dr Frank Havel, Resilient Land & Coasts (RLC), Auckland Council

Subject: Private Plan Change – PC93 Warkworth South

Project: Warkworth South Plan Change Geotechnical Review

Status: Issued for information Version: 0

1 Introduction

We have been requested by David Wren, Policy Planer, Auckland Council to review geotechnical aspects of a Proposed Private Plan Change requesting to rezone the land located between Valerie Close and State Highway 1 (SH1), and to the east of SH1, split into Waimanawa Hills, Waimanawa Valley and the Morrison Heritage Orchard Precinct.

The following reports attached to the application were reviewed by us:

- CMW Geosciences "RE: Geotechnical Appraisal Report, 1738 State Highway 1, Warkworth" reference AKL2021-0235AC Rev 2 and dated 16 September 2022
- LDE "KA-Waimanawa Partnership Ltd & Stepping Towards Far Limited, Geotechnical Assessment Report, Proposed Warkworth South Unitary Plan Change (Waimanawa Valley, West State Highway One)" reference 18707 Version E and dated 16 December 2022

The review of the geotechnical effects of the proposed private plan change has been undertaken by Dr Frank Havel, on behalf of Auckland Council. Dr Havel is New Zealand based Chartered Geotechnical Engineer, BE, MSc (Hons), PhD, CMEngNZ, CPEng, IntPE(NZ) with over 28 years experience in academical, consulting and public field. As a geotechnical practice lead in Auckland Council, he is providing regular support to regulatory services and planes and have an extensive experience with review of geotechnical aspects of proposed plan changes.

2 Proposed Plan Change

Existing Site

The Geotechnical Appraisal Report describes the site located south-east of the SH1 as follow:

"Topography of the site is dominated by a relatively steep, prominent ridgeline along the southern boundary with a maximum elevation of approximately RL 129m. Two smaller ridgelines spur off this prominent ridge, grading steeply to moderately to the north of the site. Maximum elevations along these spur ridges range between RL 50m and RL 100m. Topography in the northern portion of the site is generally characterised by gentler, rolling hills. Multiple head scarps are visible across the site, mainly along the heads and flanks of



gullies, with a large instability feature present toward the southeast corner of the site extending outside of the site boundary.

Three small gullies run down to the northern boundary through the west, east and centre of the site. These align with the ridges mentioned above. Multiple overland flow paths, flood plains and flood prone areas also surround these streams. An existing stormwater pipe runs in close proximity to the western boundary.

An existing dwelling and swimming pool are present in the western portion of the site, and multiple farm structures surround the house. A gravel driveway runs from State Highway 1 from the north to give access to the house. We understand the property is currently being used for farming purposes.

The site is bound to the west and the north by State Highway 1, to the south by Avice Miller Scenic Reserve and to the east by rural properties and farmland. The site is located approximately 1km south of the Warkworth town centre. Unitary zoning has currently noted the majority of the site as a future urban zone, and a small strip in the southern section as a rural production zone."

The site located north-west of the SH1 is described in the LDE Geotechnical Assessment Report:

"The subject area is situated within the current extents of the Future Urban Zone of Warkworth, and part of the wider Warkworth future urban extent. The proposed plan area is bounded by Valerie Close to the south, State Highway One to the east and the existing residential area at Mason Heights in the north. The Mahurangi River flows on north-south trend and forms the western boundary extent of the plan change.

The current land uses comprise of a mixture of lifestyle, residential and rural productive land including horticulture & agriculture land uses and a former vineyard, with the remaining lots predominately in pasture and lifestyle blocks with hobby orchards, residential dwellings, and associated utility sheds."

Proposed Development

The proposed rezoning for the site is described in the LDE report:

"The entire plan change area ... is proposed to comprise a mix of Urban Zones, including Business Neighbourhood Centre, Residential Large Lot, Single House Lots, Mixed Housing Urban and Suburban Zones. The exception to this is the Morrison Heritage Orchard, located centrally along the northern boundary of the plan change, which will be zoned rural and large lot residential."

The general layout of the proposal is shown in Figure 1 below.



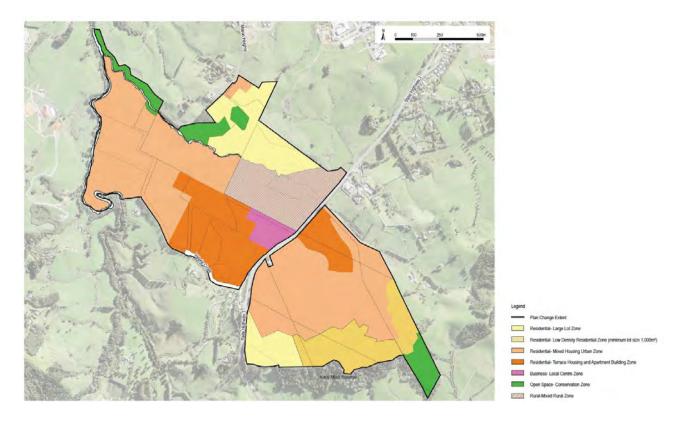


Figure 1: Warkworth South Zoning Concept Plan, Reser Urban Design

3 Assessment of Geotechnical Effects

Two geotechnical reports have been prepared for the proposed development:

- CMW Geotechnical Appraisal Report for Waimanawa Hills located south-east of SH1; and
- LDE Geotechnical Assessment Report for Waimanawa Valley located north-west of SH1

The Morrison Heritage Orchard and south-west corner of Waimanawa Hills have been excluded from both assessments. However, we understand that the proposed plan changes in these areas consist of Open Space- Conservation Zone, Rural-Mixed Rural Zone and Residential- Large Lot Zone with lower risk if exposed to the potential geohazards and can be subject to the further geotechnical assessment during resource consent process.

The areas of assessments are shown in Figures 2 and 3 below.



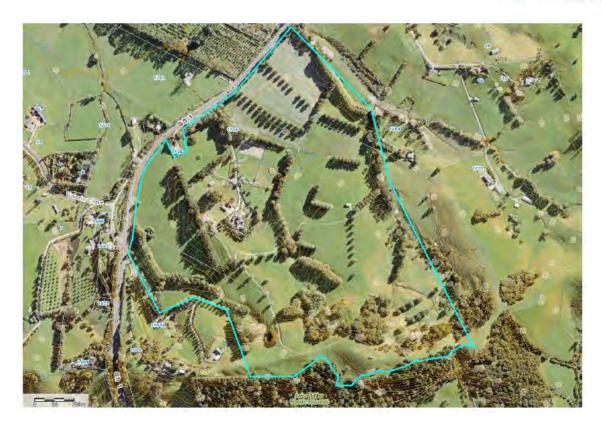


Figure 2: Location of the site assessed by CMW

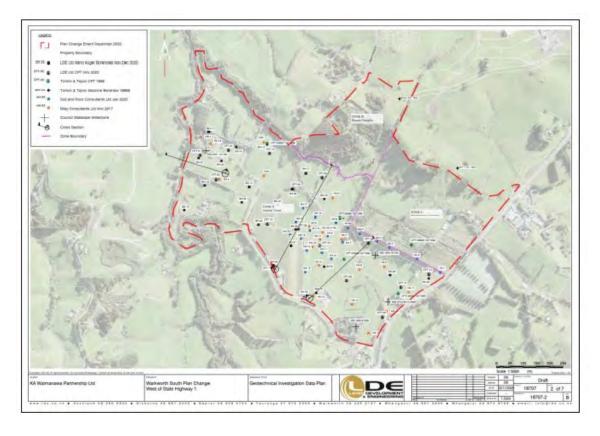


Figure 3: The site assessed by LDE. The assessment excludes Zones B and C



3.1 Anticipated Geotechnical Constraints for Waimanawa Hills

Review of the CMW report indicates the geohazards to be considered for the development of the site are as below, with relevant excerpts from the geotechnical reports for explanation:

<u>Liquefaction</u> – The geotechnical report considers that "Based on our preliminary assessment criteria, liquefaction is anticipated to be low risk to this development." No liquefaction analysis has been undertaken.

<u>Lateral Spread</u> – The lateral spreading is caused by liquefaction where a free face is present within the vicinity of the site. The geotechnical report states "As noted above, liquefaction is considered to be a low risk, however further assessment will be required following intrusive site investigations."

Slope stability – The slope stability seems to be the most significant geohazard in the southern portion of the site. As per CMW report "We [CMW] consider the instability features present within the southern portion of the site to be relatively large-scale features and that significant engineering solutions such as shear keys, inground (palisade) walls and or/ counterfort drainage will be required to remediate the landform here to allow for the proposed development. Other small-scale instability features present around the heads and flanks of gullies are expected to be remediated through palisade walls and subsoil drainage. Specific slope stability analysis will need to be undertaken as part of detailed investigation and design to assess construction requirements for the overall design of any future development to ensure appropriate slope stability factors of safety are achieved."

<u>Load Induced Settlement</u> – The settlement hazard is usually associated with soft and/or organic soils which are likely presented within the low-lying areas of the gullies. The CMW is suggesting either undercutting and removal of the soft soil, or preloading.

Expansive Soils – The CMW report states "Based on our testing and experience in the Warkworth area, we anticipate that site soils will fall within the high to extreme expansive soil classification range."

Non-engineered Fill – The geotechnical report considers that "It is evident that some amounts of uncertified fill will be present across the site, in areas of past building works or landscaping."

3.2 Anticipated Geotechnical Constraints for Waimanawa Valley

Review of the LDE report indicates the following main points of consideration for the geohazards and site development:

<u>Liquefaction</u> – A quantitative liquefaction assessment has been performed by LDE. The geotechnical report concludes that "When compared to the criteria presented within the MBIE Module 3 Table 5.1, the effect of liquefaction under both ULS and SLS earthquake conditions the site can generally classified mild (L1) performance level." and "The exception to this is CPT 12, within the low-lying region adjacent to the boundary with the historical Morrisons orchard, where high ground water (0.8m) was encountered. The assessment presented results consistent with moderate (L2) performance level."



<u>Lateral Spread</u> – The LDE geotechnical report states "It is considered that this area could be subject to lateral spread, but given the cohesive nature of the underlying soils, the results returned in the liquefaction analysis and the tapering of the phreatic surface down towards the stream, it is considered that the probability of lateral spread is low."

<u>Load Induced Settlement</u> – The geotechnical report considers that "the soft Holocene aged alluvial material located adjacent to the wetland areas and stream margin is sensitive to consolidation" and "A preload design for areas identified as having highly compressible clays and peat should be completed commensurate with a future Resource Consent Application".

Slope Stability – The LDE is indicating potential slope stability issues in the areas with steep slopes, in the form of shallow creep movement. As per their report "The Warkworth South Plan Change initial concept drawings indicate that the immediate area surrounding the steep slopes within the plan change extend are generally conserved as riparian margin. This area covers a distance of at least 20m from the banks of the Mahurangi River and stream margins to the edge of the development horizontally. If the proposed area is as planned this will cover the steepest slopes of the site and allow a setback distance for the development. Further slope stability analysis will be required to define the setback distance from these slopes. If the proposed development encroaches on these distances' stability increasing measures can be implemented to reduce the risk of loading the slope which may lead to slope failure."

The LDE is also commenting the slope stability in Zones B and C (see Figure 3) based on aerial photography study. They conclude that "the escarpment within zones B & C has historically been prone to instability issues", however, "Overall, slope instability is not considered to be a significant geotechnical risk for the future urban development is [sic] area and can be controlled by standard industry engineering methods".

Expansive Soil - The geotechnical report considers the site consists of moderate to high expansive soil.

Additionally, the LDE is report is highlighting possible risk of tunnel gully erosion presented on the site.

4 Recommendations and Conclusions

At the plan change stage, it is appropriate to comment on the suitability of the land for rezoning. We consider that the site is suitable from the geotechnical perspective to support the proposed private land change, provided that detailed geotechnical assessments, specific engineering designs of earthworks, associated remedial measures, structures, infrastructure and appropriate construction methodologies are submitted for proposed works once the scope is decided. We recommend that the resource consent stage is the most appropriate time to address the specific geotechnical issues on the site.

Inputs from the Council geotechnical specialists will be required at the future resource and building consent stages.



5 Quality assurance

Reviewed and approved for release by							
Reviewer	Nicole Li, Principal Geotechnical Specialist, RLC						
This memo is satisfactorily completed to fulfil the objectives of the scope. I have reviewed, and quality checked all information included in this memo							
Author	Dr Frank Havel, Geotechnical Practice Lead, RLC						
File location	https://aklcouncil.sharepoint.com/sites/ets-geo/_layouts/15/DocIdRedir.aspx?						
Date printed	2/04/2024 3:28 pm						

Technical Specialist Memo

To: David Wren, Reporting Planner

From: Martin Peake - Director, Progressive Transport Solutions Ltd

Date: 26 March 2024

Subject: Private Plan Change 93 – Warkworth South

Traffic And Transportation Assessment

1.0 Introduction

- 1.1 I have undertaken a review, on behalf of Auckland Council, of Private Plan Change 93 (**PPC93**) for Warkworth South, lodged by KA Waimanawa Limited Partnership and Stepping Towards Far Limited, in relation to traffic and transportation effects.
- 1.2 In writing this memo, I have reviewed the following documents:
 - a) Integrated Transport Assessment, Traffic Planning Consultants Ltd, January 2023
 - b) Assessment of Environmental Effects Report, Osborne Hay and Tattico, 24 August 2023
 - c) Warkworth South Precinct as notified dated 24 August 2023

Qualifications and Experience

- 1.3 I hold the qualification of a Masters in Civil Engineering with Management from the University of Birmingham in the UK (1993). I am a Chartered Engineer (UK) and a member of the Institution of Civil Engineers, and a member of the Chartered Institution of Highways and Transportation.
- 1.4 I have 30 years' experience as a traffic engineer. I have worked for several major consultant engineering firms, and as a Team Leader of one of Auckland Transport's Traffic Operations Teams. I have owned and operated my own traffic engineering consultancy since 2014. In these roles, I have worked in a variety of areas of transportation including traffic engineering, traffic modelling and temporary traffic management. I have provided expert traffic and transportation advice on a range of resource consents and plan changes across the Auckland region.

Involvement with Private Plan Change 93 – Warkworth South

- 1.5 I was engaged by Auckland Council in December 2022 to review the Private Plan Change to determine whether the information provided was sufficiently detailed and accurate to understand the traffic and transportation effects of the proposal.
- 1.6 I sought further information on traffic and transportation effects as outlined in Clause 23 Requests for Further Information dated February 2023 and May 2023. These were responded to by the Applicant on 19 April 2023 and 23 June 2023, respectively. The information provided generally satisfied my request for further information.
- 1.7 I have visited the site on a number of occasions with the latest being 18 July 2023.

Expert Witness Code of Conduct

1.8 I have read the Code of Conduct for Expert Witnesses, contained in the Environment Court Consolidated Practice Note (2023) and I agree to comply with it. I can confirm that the issues addressed in this Memo are within my area of expertise and that in preparing this Memo I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2.0 Key Transport Issues

- 2.1 The key transport issues in relation to the Private Plan Change (**PPC**) are summarised below and are discussed in Section 4.0.
 - a) Compliance with Future Development Strategy and strategic plans and policies and reliance on private vehicle use;
 - b) Accessibility of Plan Change area to the wider Warkworth area for active modes;
 - c) Accessibility for active modes across SH1;
 - d) Accessibility of Plan Change area to public transport;
 - e) SH1 / Wider Western Link Road intersection location and form;
 - f) Mason Heights connection;
 - g) Cross-section of Wider Western Link Road alongside Morrison Heritage Orchard; and
 - h) SH1 / Valerie Close intersection upgrade.

3.0 Applicant Assessment of Traffic and Transportation

Existing Traffic Environment

- 3.1 The Integrated Transport Assessment (ITA) outlines the existing traffic environment in Section 2 including the roading hierarchy, traffic volumes, walking and cycling, public transport, and safety record.
- 3.2 The plan change area sits either side of SH1 south of Warkworth Town Centre within the southern area of the Future Urban Zone. The area to the west of SH1 is referred to as Waimanawa Valley and the area to the east is referred to as Waimanawa Hills. The plan change includes the Morrison Heritage Orchard which is located west of SH1 in the north eastern corner of Waimanawa Valley. The area is predominantly rural.
- 3.3 At the time the ITA was prepared, the report states that SH1 carried around 19,500 vehicles per day through the plan change area and that this was forecast to reduce by 40% when the Puhoi to Warkworth motorway opens. I have not seen any count data since the motorway opened to confirm the reduction in traffic, other than to say anecdotally, there has been a substantial reduction.
- 3.4 SH1 is currently an Arterial Road and is a State Highway. I understand that the NZ Transport Agency (NZTA) is currently going through the process of revoking the State Highway status and that the management of this road will revert to Auckland Transport.

In this report, reference to SH1 is the original State Highway that runs through the plan change area.

- 3.5 The ITA identifies Valerie Close and Mason Heights which are located within Waimanawa Valley. Valerie Close is a cul-de-sac and is located at the southern end of the Plan Change Area (**PCA**) and connects to SH1. Mason Heights is also currently a cul-de-sac and provides access to land in the northern part of the PCA. Residential development is currently occurring along this road. Mason Heights connects to the wider transport network via Woodcocks Road.
- 3.6 The ITA states that there are limited existing walking and cycling facilities; there are no facilities along SH1 and therefore there are no active mode connections to the existing Warkworth urban area.
- 3.7 Walking contours up to 1km from the plan change area shows it is remote from the surrounding urban land uses. Cycling contours up to 3km indicate that the PCA is within reach of Warkworth Town Centre and land zoned for industry / business. I note that the contours have been developed from the precinct boundary and therefore, the accessibility to surrounding areas by active modes is likely to be overestimated as this does not take into account travel distances within the PCA. Furthermore, the contours do not appear to take into account available travel routes. I discuss the issue of accessibility for active modes in paragraphs 4.15 to 4.20 in relation to accessibility of the PCA to the wider network.
- 3.8 The PCA is not currently serviced by public transport. The ITA reports that the nearest service is a 3km walk away from the PCA. Bus services within and to the wider Auckland Region are currently limited. I note that since the opening of the Puhoi to Warkworth motorway that bus route 995 which connects Warkworth to Silverdale no longer runs along SH1 through the PCA as this has been diverted onto the motorway.
- 3.9 ITA Section 2.5 outlines the crash record for SH1 and Woodcocks Road. This identifies that 60% of crashes were associated with intersections with the remainder in the midblock. 40% of mid-block crashes were associated with rear-end crashes in queues or slow moving traffic. Three fatal crashes occurred on SH1 were associated with head-on crashes or overtaking. The ITA states that with the opening of the Puhoi to Warkworth motorway that the incidents of rear-end crashes are likely to reduce as traffic is diverted away from SH1. I agree with this assessment and consider that there is likely to be a reduction in other crash types due to a reduction in the number of vehicles along the SH1 corridor.

Future Traffic Environment – Strategic Context

3.10 ITA Section 3.1 outlines the background of the Warkworth Structure Plan (**WSP**) and its context to the PCA. It highlights how the PCA aligns with the anticipated infrastructure and timing as set out in the Future Urban Land Supply Strategy (**FULSS**). I note that the Auckland Council has now approved the Future Development Strategy (**FDS**) and that this supersedes the FULSS. The FDS has amended the timing of development in Warkworth and sets out key infrastructure that is required to be in place to support it. As the FDS has been approved post lodgement of the Plan Change, this has not been assessed. I discuss the FDS in paragraphs 4.2 to 4.13.

- 3.11 The ITA states that the zoning of PPC93 is generally consistent with that anticipated by the WSP except for the provision of a larger local centre (3.4ha compared to 1ha). The PC allows for more apartments due to the larger local centre but overall the number of dwellings is comparable (1,606 households anticipated by the PPC compared to 1,547 by the WSP).
- The ITA notes that the Supporting Growth Alliance (**SGA**) has prepared an Integrated Transport Assessment to support the WSP and that the SGA has continued to develop the roading network generally consistent with that envisaged by the WSP, but with some refinement of road alignments. I note that eight Notice of Requirements (**NoR**) were lodged by SGA in 2023 on behalf of Auckland Transport for route protection and that a hearing was held in November 2023. A decision is yet to be made on the NoRs. These NoRs include for upgrades to SH1 through the PCA (NoR 3), an intersection on SH1 for the Wider Western Link Road (**WWLR**) (NoR 3 and 8) which will provide access to the PCA, and the western end of the WWLR (NoR 8) up to the western boundary of the PCA.
- 3.13 ITA Section 3.2 describes the general transport infrastructure that was anticipated by the WSP to be in place. Of the roading elements outlined, only the Matakana Link Road and the Puhoi to Warkworth motorway have been completed. Funding is available for design phases of upgrades to the SH1 / Hill Street intersection, although I note funding is yet to be confirmed for construction. Other roading infrastructure, including a southern interchange with the Puhoi to Warkworth motorway, is not funded.
- 3.14 The ITA states that the assessment has focussed on the short to medium term with only the transport infrastructure that has been committed in place (i.e. the Puhoi to Warkworth motorway and the Matakana Link Road). I consider the assessment of traffic effects based on this network to be appropriate due to the uncertainty in timing of other transport infrastructure.
- 3.15 ITA Section 3.3 outlines future traffic flows as assessed in the WSP ITA. It notes that the WSP considered the full buildout of the WSP network in 2046 which included trips rates for 2048 and associated levels of mode shift to public transport and active modes when facilities would be in place to support that mode shift. The PPC ITA has assessed the short to medium term effects where trip rates would be higher when there is more reliance on private vehicle use. I generally support this approach to the assessment of traffic generation.
- 3.16 ITA Section 3.4 outlines the future public transport accessibility for Warkworth including a new public transport network. The ITA states that initially a bus station would be within the Warkworth Town Centre which would be supplemented by an interim park and ride site in north Warkworth; it states that the northern park and ride site would be replaced in the long term by an interchange in south Warkworth within Waimanawa Valley. I understand that since the ITA was prepared, the intention by Auckland Transport is that the northern park and ride site would be retained in the long term in a new location and that the facility within the PCA would be an interchange (and a smaller facility). I discuss the issue of accessibility to public transport in paragraphs 4.24 to 4.27.

- 3.17 As noted in the ITA, there is no confirmed timeframe for the provision of the public transport facility in the PCA. The PPC would set aside land for the future public transport facility and would provide bus stops near the local centre for connections to Warkworth Town Centre and the northern interchange.
- 3.18 ITA Section 3.5 describes the future pedestrian and cycle network that would be created through the implementation of the WSP. This includes a network of footpaths and cycle paths along new and upgraded arterial roads to provide connections to the Town Centre, schools, employment, and public transport, all generally within 5km. This network is to include facilities for pedestrians and cyclists on both sides of SH1 through the PCA and to the north. The WSP seeks to encourage development to provide for pedestrians and cyclists including through the provision of footpaths on both sides of new roads and where new collector roads are proposed, separated cycle facilities provided; development would be encouraged to be accessed via rear lanes or consolidated accessways where separated cycle facilities are provided.
- 3.19 The ITA states that the PPC will be consistent with the WSP provisions in relation to walking and cycling. I discuss the issue of active mode accessibility in paragraphs 4.15 to 4.20.
- 3.20 ITA Section 3.6 describes cross-sections of arterial and collector roads. I generally consider these cross-sections to be appropriate.

Proposed Development

- 3.21 ITA Section 4.1 outlines the PPC proposal in terms of the zoning and the number of dwellings. Of note is that the local centre is located adjacent to SH1 and includes the public transport facility; this is surrounded by Residential Terraced Housing and Apartment Building Zone (**THAB**) to the west and south of the local centre, plus THAB on the eastern side of SH1. The THAB would be within 400m of the local centre. Other residential zones are proposed to surround the THAB including Residential Mixed Urban Housing, Mixed Housing Suburban, Single House, and Large Lot.
- 3.22 The ITA states that the key transport outcomes of the PPC are:
 - Supporting the upgrading of the SH1 corridor to an urban arterial road along the frontage of the Plan Change Area;
 - Supporting the Wider Western Link Road including its alignment, as a vital link in the transport network for Warkworth South;
 - Providing quality connected residential neighbourhoods to support the growth of Warkworth;
 - Locating higher-density terraced housing and apartment development within a reasonable walking distance of the local centre and bus stops to maximise walking;
 - Creating a network of walkways through the Plan Change Area with a series of roads and active mode routes; and
 - Identifying key intersections to provide access to adjacent land for development.

- 3.23 I support these stated outcomes.
- 3.24 The PCA is proposed to be access from SH1 via a single access point. This is proposed to be achieved via a single four-armed intersection. The PPC proposes a spine road to the west that would form the Wider Western Link Road and would extend to the western boundary of the PCA. This is a future arterial road in the WSP. The connection to the east into Waimanawa Hills would be a collector road. The intersection would either be a roundabout or traffic signal intersection and its form would be determined at a later date. I discuss the form of the intersection in paragraphs 4.28 to 4.35.
- 3.25 The northern area of the PPC has limited connections to SH1 due to streams and reserves. It is proposed that this area of the PPC would be accessed via Mason Heights which connects to Woodcocks Road. Mason Heights is a residential street where development is currently occurring. I discuss the Mason Heights connection in paragraphs 4.36 to 4.38.
- 3.26 ITA Section 4.3 describes how the future roads within the PCA would correspond to the WSP. It discusses changes to the alignment of the WWLR and that the intersection of the WWLR with SH1 would form a cross-roads rather than a 'T' intersection as proposed in the WSP. I note that the location of the SH1 / WWLR intersection was discussed through the Warkworth NoR hearings and that agreement between Auckland Transport and the Applicant for PPC93 was reached on the location of this intersection. This included the intersection being a cross-roads intersection.
- 3.27 ITA Section 4.4 describes the road hierarchy for Waimanawa Valley and Waimanawa Hills and provides an indicative layout in ITA Figures 17 and 23. I am generally supportive of these road layouts.
- 3.28 Possible cross-sections of the key arterial and collector roads are presented in the ITA. The ITA states that the eastern end of the WWLR alongside the Morrison Orchard would only provide separated cycle facilities on its northern side opposite the local centre by way of a two-way cycle facility; a crossing facility of a high standard would be provided where the separated cycle facility on the southern side of the WWLR terminates. The ITA states that the advantage of this arrangement is that cyclists would not need to cross any intersections or vehicle crossings. I discuss the issue of this cross-section of the WWLR and cycling facilities in paragraphs 4.39 to 4.41.
- 3.29 ITA Section 4.5 describes the walking and cycling strategy. This shows proposed walking and cycling routes, includes greenway routes. These routes have been included on the proposed precinct plans. I support the proposed network of walking and cycling routes.
- 3.30 ITA Section 4.6 sets out accessibility design principles including the importance of walkable catchments and access to facilities within 400m, with lesser access within 800m. The ITA outlines how the PPC will provide for accessible design including a recommendation that the precinct will require a footpath/cycle path to be constructed to the existing Warkworth urban area along SH1. I concur with the general principles and proposals as to how the PPC will support cycling and walking. I discuss the issue of accessibility in paragraphs 4.15 to 4.20.

- 3.31 ITA Section 5 and Table 2 outlines the proposed transport infrastructure to be provided by the precinct and the triggers that will require the provision of that infrastructure.
- 3.32 The PPC proposes to construct pedestrian/cycle paths along the western side of SH1 between the SH1 / WWLR intersection and the Morrison Heritage Orchard access and on the eastern side between the SH1 / WWLR intersection and McKinney Road. The intent is to provide connections to the Warkworth Urban Area. I have concerns that the extent of these works will not be sufficient to provide a continuous safe connection for pedestrians and cyclists and this is discussed in paragraph 4.18.
- 3.33 The main access is proposed via the SH1 / WWLR intersection. Valerie Close currently provides a connection to the land west of SH1. The ITA states that this intersection is not suitable for any additional traffic without an upgrade to the SH1 / Valerie Close intersection. The precinct proposes a condition to require an assessment of the intersection where development fronts onto or is accessed from Valerie Close; it does not require an upgrade to the intersection to be provided, only the assessment. I am concerned that this would not adequately address the safe operation of the intersection and I discuss this in paragraphs 4.42 to 4.45.
- 3.34 ITA Section 6.1 and 6.2 sets out the assumptions behind the assessment of traffic effects in relation to a forecast year and the assumptions in determining the base traffic for assessment. The ITA has assessed traffic effects on the basis of the short to medium term prior to the establishment of the final roading network and public transport provision set out in the WSP and the associated shift to active modes and public transport. The ITA recognises that the trip generation in the short to medium term will be higher than that assumed in the WSP ITA and thus greater traffic will be generated by the plan change (and other approved developments and plan changes) in the immediate future.
- 3.35 The ITA uses 2028 as a forecast year as this is a year that strategic modelling was developed to assess tolling for the Puhoi to Warkworth motorway. The model included only the currently committed roading projects (the Puhoi to Warkworth motorway, Matakana Link Road and upgrades to SH1/Hill Street) and included development in line with the FULSS (such as development in Warkworth North). The trip rates used in the strategic modelling for development were based on those trips rates assuming high active mode and public transport use. Therefore, for the purposes of the PPC93 assessment, the ITA developed a methodology to determine a more realistic peak-hour traffic generation from existing committed development for the short to medium term. I have reviewed the methodology and assessment and consider the use of the 2028 base year and the adjustment to the background development traffic flows to be appropriate.
- 3.36 ITA Section 6.3 sets out the forecast traffic generation for PPC93. Trip rates that have been used for other plan changes have been agreed with SGA and have been used in the assessment. Clause 23 requests¹ for further information were raised on the trip rates used including the use of 0.65 for residential single house zones and 0.5 for THAB. The response clarified that the residential single house zone was an error and that this should have been 0.85 but the change would only result in addition of just 8 trips. For the THAB trip rate, the applicant has stated that this is consistent with the rates for medium density residential flat building (0.4 to 0.65 trips per dwelling) and was agreed with SGA. I agree

-

¹ Clause 23 Response 19 April 2023, Item 4.8(a) and (c)

that the rate used for the single house zone would not make an appreciable difference to the assessment. For the THAB I am concerned that the 0.5 rate is low given the location of the PCA to wider services (schools and employment) and public transport in the short to medium term, but I accept that this has been agreed with SGA.

- 3.37 The assessment has assumed that all trips associated with the local centre would be internal to the PCA. Given the locality of the PPC, I agree that trips will on the whole be internal trips and the assessment has taken this into account in the analysis of the operation of the SH1 / WWLR intersection.
- 3.38 Section 6.4 sets out the trip distribution of traffic generation which has been derived from matrices in the strategic model provided by the Auckland Forecasting Centre. These trips have been applied to the trips that will access the wider network and it is assumed that these would use the SH1 / WWLR intersection. Internal trips associated with the local centre have been assessed based on the number of dwellings in Waimanawa Valley and Waimanawa Hills. I agree and accept this approach.
- 3.39 ITA Section 6.5 sets out peak period mode shares as outlined in the WSP and those anticipated for the PPC. The ITA considers that the WSP modes shares are reliant on the appropriate transport infrastructure being provided which will not be the case in the short-medium term. Therefore, based on existing Warkworth journey to work data, this shows a much lower level of active mode and public transport. I agree with the assessment but note that this indicates a reliance on private vehicle use in the short-medium term.

Assessment of Transport Effects

- 3.40 ITA Section 7.1 outlines measures to cater for walking and cycling trips. I concur with the measures proposed but consider that not all the measures have been incorporated into the precinct provisions. I discuss this in paragraphs 4.21 to 4.23.
- 3.41 ITA Section 7.2 provides details of public transport and states that a public transport interchange / terminal is proposed which would be located adjacent to the local centre. High density development will be located adjacent to the local centre and bus interchange within walking distance. The ITA considers that the opening of the Puhoi to Warkworth Motorway will reduce bus travel times and increase bus usage. However, the ITA notes that the timing of the interchange is currently unknown. I agree with the assessment and consider that use of public transport will be limited until the bus facilities are provided in the PCA.
- 3.42 ITA Section 7.3 assesses the traffic effects on the proposed SH1 / WWLR intersection utilising the traffic modelling package SIDRA. The intersection has been assessed as both a roundabout and a signalised intersection. The analysis forecasts that for 2028, the intersection would operate at a Level of Service (LOS) C as both a roundabout and traffic signals. The ITA considers that the choice of intersection control would be best left to the resource consent stage. I accept the assessment of the intersection for 2028 and agree that a LOS C is an acceptable level of performance. However, it is important to understand how the intersection would operate in the future once the roading network is complete, including a southern interchange with the Puhoi to Warkworth which would

be accessed via the Wider Western Link Road when extended to the west. Such an assessment has not been provided and I discuss this in paragraphs 4.32 to 4.35.

- 3.43 ITA Section 7.4 Figures 30 and 31 present possible upgrades to the SH1 / Valerie Close intersection. I acknowledge that the figures show a possible arrangement for the intersection. However, the arrangement will need to take into account the urbanisation of SH1 as required by the precinct and the specific characteristics of the development that will be accessed via Valerie Close. I discuss Valerie Close in paragraphs 4.42 to 4.45.
- 3.44 ITA Section 7.5 provides an assessment of the site access for the Morrison Heritage Orchard based on a limit of a cumulative trip generation of 100 vehicles per hour in any hour. The assessment was for a simple priority controlled T intersection with no right turn bay. A Clause 23 request for further information was made and responded to in relation to whether a right turn bay would be required. The response concluded that a right turn bay would be required but that this could be provided within the available road reserve width or with localised widening along the Morrison Heritage Orchard frontage. The response also indicated that the design of the access would be best left to resource consent stage. As the assessment has shown there is sufficient space to provide a right turn bay, if required, I am satisfied that no specific precinct provisions are required on the design of the access.
- 3.45 ITA Section 7.6 states that the WSP ITA has demonstrated that the transport infrastructure has sufficient capacity to accommodate traffic from its full build out, including for PPC93 in 2046. I note that PPC93 proposes a cross-roads at the SH1 / WWLR intersection to provide access to both the west and east sides of the PCA whereas the WSP assumed two three-legged T intersections. Clause 23 requests for an assessment of the operation of the intersection in 2046³ were made; the Applicant responded that this had been addressed by the WSP ITA and no analysis was provided. This matter was discussed in evidence at the Warkworth NoR hearings and the applicant for this PPC provided modelling for 2046. For completeness I consider that the applicant should provide this information. I discuss the future operation of this intersection in paragraphs 4.32 to 4.35.
- 3.46 ITA Section 7.7 discusses road safety. It considers that the PPC would operate safely for pedestrians and cyclists with appropriate facilities and design (Section 7.7.1). It considers that considerable pedestrian and cycle movements would cross SH1 at the SH1 / WWLR intersection to access the local centre and these can be readily accommodated in a traffic signal intersection and that appropriate design responses would be required for a roundabout with the provision of off-road cycle paths to avoid cyclists travelling through the roundabout.
- 3.47 For motorists, safety would be achieved through the application of appropriate design standards and development controls, and through a reduction in the speed limit on SH1 where this is upgraded to an urban arterial road and with the provision of good sight lines at intersections. The ITA considers a key safety measure would be the provision of a

² Clause 23 Response 19 April 2023, Item 4.9

³ Clause 23 Response 23 June 2023, Item 2.1

- threshold treatment on SH1 where the speed limit transitions from 80km/h to 50km/h; the ITA states that this would be included in the precinct provisions.
- 3.48 I concur with the assessment that with the appropriate precinct provisions and application of appropriate design standards, that the transport network should operate safely for road users and active modes.

Auckland Unitary Plan Considerations

- 3.49 ITA Section 8 assesses the plan change against relevant Auckland Unitary Plan (**AUP**) transport objectives and policies, in particular B3 and E27. The assessment states that the plan change is consistent with B3.3 Transport. I note that the ITA states that no major transport upgrades are required beyond those in the PCA other than small, localised upgrades. However, the FDS provides details of the timing of development within Warkworth and transport measures that would be required to support that development. I discuss this in paragraphs 4.2 to 4.13.
- 3.50 ITA Section 8.2 sets out how the PPC aligns with Chapter E27 of the AUP. It notes that development not in accordance with the precinct provisions as assessed by the ITA would need to be assessed at a future resource consent stage, other than where there are changes to the THAB zone which is exempt by E27.6.1 Trip Generation standard. It states that the risk of changes to yields in the THAB zone is the same risk that was accepted by the SGA when assessing the WSP. I do not agree with this statement as the WSP contemplated more detailed assessment of development during plan changes and resource consents. Furthermore, THAB was not envisaged in the WSP for this area of Warkworth South.

Integration with Future Transport Network

3.51 ITA Section 9 considers the PPC against relevant regional plans including Auckland Plan 2050 and Auckland Regional Land Transport Plan (**RLTP**) 2021-2031 and the Auckland Regional Public Transport Plan (**RPTP**) 2018. I note that the RPTP has been updated since the ITA was prepared and that there is no funding identified in the next 10-years for public transport for PPC93, or for other transport infrastructure in Warkworth as part of the Warkworth NoRs. I discuss this issue in paragraphs 4.24 to 4.27.

4.0 Assessment of Traffic and Transport Effects

4.1 The following provides my assessment of traffic and transport effects and proposed management methods for the issues summarised in paragraph 2.1 and as identified in Section 3.0.

Compliance with Future Development Strategy and Strategic Plans and Policies

- 4.2 Since the production of the ITA and the lodgement of the plan change documentation, the Future Development Strategy (**FDS**) has been approved and finalised by Auckland Council. The FDS effectively replaces the FULSS and sets out the revised timing for the development of Future Urban Zoned land, and in the case of Warkworth, the FDS details Infrastructure Pre-requisites that are required to support development readiness.
- 4.3 For PPC93, the timing of development in Warkworth South has been pushed back to not before 2045+, this is in contrast to the FULSS which anticipated development to occur

between 2028 and 2032. In addition, the Infrastructure Pre-requisites in relation to transport are the construction of the SH1 Southern Interchange, Wider Western Link Road, Southern Public Transport Interchange and the SH1 South Upgrade.

- 4.4 In the current RLTP (2021 to 2031) there is no funding allocated to any of the prerequisite projects.
- 4.5 The Applicant is proposing as part of PPC93 to provide the following transport infrastructure:
 - upgrade of SH1 to urban arterial standard with the development of the first 20 dwellings;
 - b) Interim pedestrian/cycling facilities on one or both side of SH1 between the proposed SH1 / WWLR intersection towards the edge of the urban Warkworth area at McKinney Road; and
 - c) Construction of the Wider Western Link Road between SH1 and the western PCA boundary.
- 4.6 The SH1 upgrade would partly deliver on the SH1 South Upgrade, provide the eastern section of the WWLR, and subject to my comments below, provide interim active mode connections to the Warkworth urban area to the north on SH1.
- 4.7 The Applicant has relied on the WSP ITA for the assessment of the plan change with the full build out of the WSP in 2048. This is on the basis that PPC93 is closely aligned with the number of dwellings anticipated in the WSP albeit with higher density (THAB) around the local centre and public transport interchange. The local centre is larger than that proposed in the WSP and the ITA considers that this will largely offset additional traffic from the increase in dwellings. I concur with this assessment as the larger centre is likely to provide a greater range of amenities and employment opportunities which should reduce demand for travel outside of the precinct. These would also be accessible for active modes as they are centrally located to PPC93. Other than for the operation of the SH1 / WWLR intersection which is proposed to be a four-leg intersection which differs to that assumed in the WSP, I consider for the above reasons, the WSP assessment is appropriate in this instance. I discuss the 2048 future year assessment of the SH1 / WWLR intersection in paragraphs 4.32 to 4.35.
- 4.8 For the interim period, prior to the full build out of the WSP, and in particular prior to the construction of the Infrastructure Pre-requisites, the ITA has assessed the SH1 / WWLR intersection for a design year of 2028. This demonstrates that either a roundabout or traffic signal intersection has sufficient capacity to accommodate PPC93 traffic without the pre-requisite transport upgrades.
- An assessment of the traffic effects on the wider road network has not been undertaken. However, ITA Section 3.3 of the ITA states that SH1 south of McKinney Road carried 23,800 vehicles per day in 2017 and that by 2046 SH1 in the vicinity of SH1 (under all infrastructure scenarios), it is expected to carry 27,000 vehicles per day. ITA Section 2.2.1 states that SH1 is expected to experience a 40% reduction in traffic with the opening of the Puhoi to Warkworth motorway. Whilst I have not seen data to confirm the actual reduction in traffic, anecdotally there has been a substantial decrease in traffic. It is my view that the reduction in SH1 traffic due to the motorway will provide spare capacity that can accommodate PPC93 traffic beyond 2028 as any substantial increase in traffic is likely to be as result of rezoning of other FUZ land. The lapse periods sought

- by the Requiring Authority for the Warkworth NoRs ranged from 10 to 20 years. Whilst I acknowledge there is currently no funding, I would expect that progress towards implementing some or all of these NoRs would occur prior to 2046.
- 4.10 The timing of the implementation of the Warkworth NoRs is likely to be partly driven by the timing of development in the FDS and partly by actual development and future plan changes. Therefore, should PPC93 be approved, I expect that this could influence when the pre-requisite transport infrastructure would be delivered. The FDS acknowledges that development can be brought forward where a requestor for a plan change funds the pre-requisite infrastructure. In the case of transport, the Applicant of PPC93 is proposing to partly fund some of that infrastructure.
- 4.11 Therefore, in my view, whilst the timing of PPC93 is earlier than that envisaged by the FDS, there is sufficient capacity to accommodate the forecast traffic and the Applicant is providing parts of the pre-requisite transport infrastructure to support the plan change.
- 4.12 With regards to the alignment with the AUP and the Regional Policy Statement, the key objectives and policies are in relation to B3.3 Transport, and in particular B3.3.2(5) 'Integration of subdivision, use and development with transport'. I generally agree that PPC93 aligns with these policies in relation to active modes, however, until public transport is provided to PPC93, either to a public transport interchange or via a service that connects PPC93 to the northern park and ride site or the terminus in Warkworth Town Centre, I consider that the PPC poorly aligns with policies B3.3.2(5)(b) and (c). This is of particular concern given that there is no funding in the RPTP 2023-2032 for extending bus services to Warkworth South or funding for the public transport interchange in PPC93. This is likely to result in the short to medium term in reliance on private vehicle use for longer distance journeys, such as to Auckland.
- 4.13 I note that the PPC has not been assessed against the Transport Emissions Reduction Pathway (**TERP**). Given the potential reliance on private vehicles due to the poor access to public transport in the short to medium term, the assessment should consider what measures can be undertaken to reduce transport related emissions and reliance on private vehicle use, particularly for longer distance commuting from the PCA.
- 4.14 In summary, I am concerned that PPC93 will be reliant on private car use for longer distance trips in the short to medium term due to the lack of access to public transport. I consider that the Applicant should provide further assessment as to how PPC93 aligns with the AUP Regional Policy Statement objectives and policies in relation to transport, particularly for THAB in the period where access to public transport is likely to be limited. An assessment should also be provided as to how PPC93 aligns with the TERP and what measures will be provided to reduce reliance on private vehicles and reduce transport related emissions.

Accessibility of Plan Change to the Wider Warkworth Area for Active Modes

4.15 The PPC proposes to provide a network of walking and cycling facilities within the PCA. Footpaths are proposed on all roads and separated cycle facilities are proposed on arterial and collector roads and on the greenway link. On local roads, cyclists would be expected to use the roads as these are anticipated to have low traffic volumes and would be designed for slow speeds. In addition, recreational off-road cycle facilities and footpaths would be provided through the PCA.

- 4.16 I consider the provision for active modes through the PCA to be appropriate and would provide a well-connected network, provided that there are safe and convenient connections provided across SH1 between Waimanawa Valley and Waimanawa Hills. I discuss this specifically in paragraph 4.21.
- 4.17 As is highlighted in the ITA, the PCA is currently not well-connected for active modes to the wider Warkworth urban area. There are no existing facilities along SH1 and therefore this will deter active modes from travelling to the wider urban area. The Applicant has proposed interim pedestrian/cycle facilities along the western side of SH1 between the SH1 / WWLR intersection and the access to Morrison Heritage Orchard, and on the eastern side to the SH1 / McKinney Road intersection.
- 4.18 Whilst McKinney Road may be considered to be the edge of the urban area, I note that there are no facilities for pedestrians or cyclists to cross McKinney Road or facilities between McKinney Road and the northern Wech Drive intersection with SH1 where a footpath is provided. Therefore, this is a gap in the network that is likely to be a deterrent for active mode users to use the proposed interim facility. I therefore consider that the interim facility should be extended to the northern Wech Drive / SH1 intersection. I note that is also a concern raised by Auckland Transport in their submission.
- 4.19 The interim facility on the western side of SH1 is proposed to terminate at the Morrison Heritage Orchard access. Therefore, any active mode user wishing to travel to the north would need to cross SH1 or travel south back to the SH1 / WWLR intersection to cross the road. It is understood that the Applicant does not propose to include a crossing facility in the transport infrastructure required by the precinct provisions but to rely on future resource consents. In my opinion, a crossing facility to assist pedestrians and cyclists crossing SH1 where the western facility terminates should be required as part of the precinct provisions to ensure the facility is safe for active modes and to provide a connected network.
- 4.20 Development in the northern area of Waimanawa Valley is proposed to have vehicle access from Mason Heights. The precinct plan and the ITA shows active mode connections to the southern area of the precinct and to the east as shown by the dotted blue and red lines in Figure 1 below. Mason Heights provides access to Woodcocks Road where there are retail activities and Mahurangi College. Therefore, it will be important that a connection for pedestrians is provided to Mason Heights. I consider that the precinct provisions should ensure that with any connection created to Mason Heights should include pedestrian facilities. I anticipate that Mason Heights would be suitable for cyclists to use the road. The submission of Auckland Transport at submission point 20.53 suggests amended wording which I support.

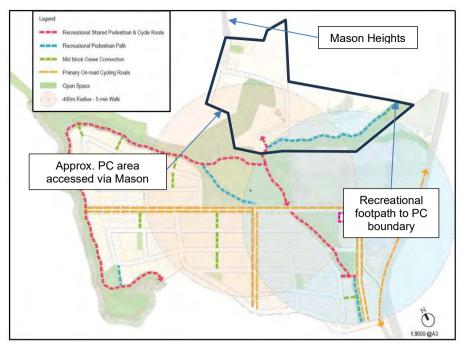


Figure 1 - Walking and Cycling Strategy (Figure 24 of ITA)

Accessibility for Active Modes Across SH1

- 4.21 The ITA states in Section 7.1 that pedestrian and cycling crossing facilities will be provided across SH1 as part of the suite of active mode measures. However, there are no specific requirements in the precinct to provide such measures. I would expect as a minimum that crossing facilities will be provided within the design of the SH1 / WWLR intersection as this will provide a key connection between Waimanawa Hills and Waimanawa Valley for access to and from the local centre and public transport interchange.
- 4.22 In addition to this location, Precinct Plan 3 shows an indicative off-road greenway route connecting from Waimanawa Hills to SH1 (refer to Figure 2). It is considered that this is likely to create a demand for crossing SH1 in this general area either for people accessing the local centre or residential development west of SH1. A Clause 23 request for further information was made on this matter and the Applicant has stated that any requirement for a crossing facility will be dependent on a connection at Valerie Close and would be assessed at resource consent stage⁴.
- 4.23 Whilst these matters may be considered at resource consent stage, the provision of a crossing facilities may be dependent on phasing of those consents. A facility in the area indicated would improve network connectivity for active modes and enhance safety. I consider that to ensure that facilities are considered in any future resource consent application that the precinct provisions should require an appropriate assessment for active mode crossing facilities.

-

⁴ Clause 23 Response 19 April 2023 Item 4.7(b) and Response 23 June 2023 Item 2.4



Figure 2 - Extract from Precinct Plan 3 Transportation showing greenway connection to SH1

Accessibility of Plan Change to Public Transport

- 4.24 As I discussed in paragraph 4.12, there is currently no funding to provide the public transport interchange in PPC93 or to provide bus services to the precinct. With the opening of the Puhoi to Warkworth, Route 995 has been diverted from SH1 to the motorway, as this provides for faster, more efficient journeys to Silverdale. Therefore, there is currently no bus service to, or through the PCA, nor is there a bus service planned.
- 4.25 Therefore, I consider that until such time as bus services are provided to the PCA, PPC93 will have poor access to public transport and the area will be predominantly reliant on private vehicle use. This will be particularly the case for longer distance trips.
- 4.26 This is reflected in the forecast mode share in the short to medium term in ITA Section 6.5, Table 8. This forecasts just 3 peak hour bus trips based on the existing Warkworth journey to work mode share data.
- 4.27 Around 400 to 600 dwellings are typically required to support public transport. However, until the roading network is connected to the west e.g. the Wider Western Link Road is connected through to Woodcocks Road, southern interchange constructed and other key roading connections provided in Warkworth North, the ability to provide an efficient bus service may be limited. The ITA for the Warkworth NoRs presented the proposed future bus network and this is replicated below in Figure 3. I consider it may be sometime before a bus service is provided within Warkworth South which would result in reliance on private vehicles, particularly for longer distance trips.

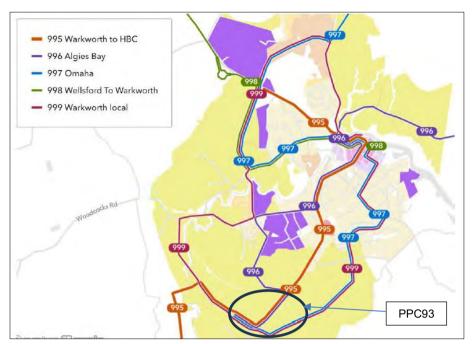


Figure 3 - Future Public Transport Network Warkworth (Figure 4-5 Extracted from Warkworth NoR ITA)

SH1 / Wider Western Link Road Location and Form

- 4.28 The location of the SH1 / WWLR is discussed in Section 4.3.1 of the ITA. Through the Warkworth NoR hearings, the location was confirmed with the Requiring Authority as the PPC93 proposed location differed to that developed by the SGA. The NoR boundary was refined and agreed between the Applicant for PPC93 and the Requiring Authority. The adjustment to the NoR boundary was to locate the intersection slightly northwards and to include extending the designation boundary into the south eastern corner of the Morrison Heritage Orchard. I note that there was discussion between the parties on the alignment of the Wider Western Link Road approach to the roundabout and its separation to the Morrison Heritage Orchard. Furthermore, there was discussion on the form of the cycling facilities along the WWLR as to whether they should be on both sides of the WWLR or only on the northern side, as proposed by the PPC93 Applicant.
- 4.29 Notwithstanding the agreement for the NoR, the SH1 / WWLR intersection is shown indicatively on Precinct Plan 3 Transportation. I consider this would still provide flexibility in its location should it be required during the design process.
- 4.30 The ITA has assessed the intersection as both a roundabout and traffic signal intersection and has shown that either option would operate at an acceptable level of service in 2028. I note that the indicative design for the NoR showed the intersection as a single lane roundabout.
- 4.31 In my view, a traffic signal intersection would provide safer facilities for active modes as this would have controlled pedestrian crossings incorporated into its operation; if necessary, the intersection could be raised to moderate vehicle speeds. I accept that pedestrian facilities could be incorporated into a roundabout but these add to the complexity of the operation of the intersection and could result in queuing back through the roundabout depending on the crossing location and the type of crossing facility.
- 4.32 The ITA only assessed the intersection in 2028. Clause 23 requests for further information were made⁵ for an assessment of the intersection in 2048 with the full build

-

⁵ Clause 23 Response, 19 April 2023 Item 4.1 and Response 23 June 2023 Item 2.1

of the WSP to confirm that there would be sufficient capacity in the future year and to determine whether an upgrade may be required in the future. The responses stated that this assessment was undertaken in the SGA ITA. However, the SGA assumed that this intersection was a T intersection and not a cross roads. Therefore, I consider that the assessment undertaken by the SGA was not appropriate.

- 4.33 In evidence at the Warkworth NoR hearings, the PPC93 Applicant's traffic engineer provided modelling of a four-legged single lane roundabout for 2046 which showed that the roundabout at a satisfactory level of service⁶. In addition, modelling was undertaken for a traffic signal intersection designed within the proposed NoR designation boundaries for the SH1 / WWLR intersection. This modelling forecast that the signalised intersection would operate at a poor level of service (LOS E). I consider that constraining the design to within the NoR boundary may have limited the ability to provide the necessary turning lanes for a signalised intersection to operate at a more favourable level of service.
- 4.34 For completeness, I consider the Applicant should provide either in evidence or at the hearing the traffic modelling of the roundabout and the traffic signal intersection for 2046.
- 4.35 I consider that further assessment of the intersection would be required during the resource consenting process as to the intersection form (roundabout or traffic signals) and that this should consider its future operation. I am satisfied from the analysis provided that there is an acceptable solution in the short to medium term.

Mason Heights Connection

- 4.36 I discussed the Mason Heights connection in relation to active modes in paragraph 4.20. The connection is required for vehicles as it is understood that site constraints prevent a vehicle connection to the south.
- 4.37 The precinct provisions include a requirement for the 'Upgrading of Mason Heights' in Table IXXX.6.15.1 Transport Infrastructure Requirements (T9). This requires the upgrade if there is development fronting this road or Mason Heights is extended or a road connected to it.
- 4.38 I agree that works will be required to Mason Heights but consider that the description in the table is vague and ambiguous as to what upgrade is required. I consider that it should be clear that the road would be upgraded to urban local road standard and that this should include footpaths (as recommended in paragraph 4.20). The upgrade should be on both sides of Mason Heights.

Cross-section of Wider Western Link Road alongside Morrison Heritage Orchard

- 4.39 The Wider Western Link Road is proposed to have separated cycle facilities on both sides of the road except alongside the Morrison Heritage Orchard where a two-way cycle facility is proposed only on the northern side. ITA Section 4.4.1 discusses the cross-section and this states that the advantage of the two-way facility on the northern side is that this avoids vehicle crossings and intersections.
- 4.40 I consider that as details of the local centre have yet to be developed it would be too early to determine whether vehicle crossings would be required. Furthermore, I consider that a cycle facility should be provided on the southern side as well as the northern side

.

⁶ Statement of Mr Todd Langwell on behalf of KA Waimanawa Limited Partnership, Stepping Towards Far Limited and Christine and William Endean – NoR 3, State Highway 1, South Upgrade and Nor 8, Wider Western Link Road, 11 October 2023

to provide better connections to the local centre. It would provide better continuity in cycling provision for cyclists travelling east-west between Waimanawa Hills and Waimanawa Valley and would avoid the need for cyclists to unnecessarily cross the road

4.41 Whilst this is a matter of detail that can be developed during subsequent consenting processes, Table IXXX6.15.2 Minimum Road Width, Function and Required Design Elements in the precinct provisions specifies in note 5 that the facility would only be provided on the northern side of the WWLR where it abuts an existing stream riparian yard. I consider that this note should be deleted or amended; I note that Auckland Transport submission (Submission Point 20.60) recommended an amendment to the note to remove the specificity about the location of the facility. I support this amendment as it would provide flexibility in the design to enable it to take into account the design of the local centre.

SH1 / Valerie Close Intersection Upgrade

4.42 The ITA states in Section 5.2 that the SH1 / Valerie Close intersection is unsuitable for additional traffic without an appropriate upgrade. I concur with this assessment due to the restricted sight lines. However, the precinct provisions only require an assessment of the intersection:

In the event of any subdivision with frontage along Valerie Close occurring or a new road connection to Valerie Close, an assessment is to be undertaken to confirm if any upgrading of the intersection is required as part of that subdivision.⁷

- 4.43 No upgrade of the intersection is required by the precinct provisions.
- 4.44 A possible upgrade is illustrated in ITA Section 7.4, but as I noted in paragraph 3.43, the upgrade would need to take into account the urbanisation of SH1 and the form and type of development that would be utilising Valerie Close.
- 4.45 I consider that the precinct provisions should require an intersection upgrade to be provided and the general aims of the upgrade rather than specifying the actual upgrade for the reasons I discussed in the previous paragraph.

5.0 Submissions

5.1 Submissions relevant to traffic and transportation issues have been reviewed and are discussed below. Where submitters have raised similar issue, these have been discussed together as a theme.

Congestion (Submissions 9, 10 and 30.1)

- 5.2 Several submitters have raised concerns that PPC93 will result in congestion. Particular concerns are around congestion at holiday times and congestion without the necessary infrastructure to support the plan change.
- 5.3 The traffic analysis in the ITA demonstrates that the main site access via the SH1 / Wider Western Link Road (WWLR) intersection would operate within capacity and with minimal delays in the short to medium term. PPC93 will deliver some of the planned infrastructure for Warkworth, in particular measures within the PPC93 including upgrades to SH1 through the plan change area, the eastern section of the WWLR and

⁷ Proposed Precinct Provisions Table IXXX.6.15.1 Transport Infrastructure Requirements, row T1

- will provide for the bus interchange. I note that the Puhoi to Warkworth motorway has resulted in a reduction in traffic along SH1 and a reduction in congestion along this route.
- I acknowledge that during holiday periods traffic volumes increase through Warkworth, however, holiday traffic will be more associated with the Matakana Link Road and Hill Street rather than south Warkworth.

Alignment of Western Link Road (Submission 12.1)

5.5 This submitter has requested that the alignment of the Western Link Road should connect to SH1 at 1829 State Highway 1. I understand that this submitter is referring to the proposed road as part of the SGA Warkworth NoRs (NoR 6 – Western Link Road South) that would connect between Evelyn Street and State Highway 1. This road is outside the scope of the PPC.

Submission 17 – Auckland Council as Submitter

- Auckland Council has provided a submission on the precinct provisions for PPC93. The following provides responses to the traffic and transport related requests.
- 5.7 Submission Points 17.3 and 17.4 request that all activities for subdivision and development should be a non-complying activity where this is non-complying with Standard IXXX.6.8 Western Link Road and IXXX.6.15 Transportation Infrastructure. For consistency, to ensure the WWLR and other transport infrastructure is provided, I support these amendments.
- 5.8 Submission Point 17.5 requests that non-compliance with Standards IXXX.6.8 Western Link Road and IXXX.6.15 Transportation Infrastructure should be notified. As these pieces of transport infrastructure are necessary to support the plan change, I support this amendment.
- 5.9 Submission Point 17.6 requests that the triggers in Table IXXX.6.15.1 Transport Infrastructure Requirements be reduced from 20 residential lots to 3 residential lots. The request appears to be made to be consistent with the Medium Density Residential Standard. I consider that the 20 lot threshold is more reasonable for providing significant transport infrastructure to support that development. I recommend declining this request.
- 5.10 Submission Point 17.7 requests that an additional north-south connection through Waimanawa Valley is provided on Precinct Map 3. It is not clear the purpose of the additional connection. There are a number of north-south roads proposed within the precinct and shown on the map. I recommend declining this request.
- 5.11 Submission Point 17.9 requests that for the Morrison Heritage Orchard Precinct, that amendments are made to the activity tables to address the cumulative effects of activities. Standard XXX.6.1(2) General Access and Traffic Generation restricts trip generation to a cumulative 100v/hr (any hour) for activities A3 to A13. From a transportation perspective, I consider that this would address the concern. I recommend no changes to the precinct provisions.

Submission 19 – Access to 1768 State Highway 1

5.12 This submitter seeks reasonable and appropriate access from SH1 for general access and when urban development occurs in line with PPC93 for access to land at 1768 State Highway 1. The land currently has access from SH1 via a long vehicle access way.

Precinct Plan 3 shows an indicative collector road connecting to the submitter's land. This would provide the connection sought when PPC93 is developed as the collector road would connect to SH1 at the proposed SH1 / WWLR intersection. The land would continue to the accessed via SH1 until development occurs. I consider that no changes to the precinct provisions are required.

Submission 20 - Auckland Transport

- 5.13 Auckland Transport has provided a detailed submission on the plan change. The submission predominantly relates to the precinct provisions. For brevity, I have reviewed the submission and provide, as Attachment 1, a table that summarises the relevant submission points that relate to traffic and transport issues and I provide my comments and recommendations in the table.
- 5.14 Submission Point 20.2 relates to the PPC as a whole and raises the concern that the plan change will enable development in a location which does not have frequent public transport services and where there is no Auckland Transport funding available to improve services. For this reason, Auckland Transport considers that the plan change does not give effect to some NPS-UD and RPS objectives and policies relating to public transport. Auckland Transport requests that the plan change is assessed against the NPS-UD and RPS objectives and policies relevant to public transport and transport choice. I support the request for the assessment against these plans.

Submission 21 – Ash and Rinoa Rayner

5.15 Submission points 21.3 and 21.5 seek that existing vehicle access onto SH1 will be retained under the vehicle access restriction standard. It is concurred that it would be appropriate that existing vehicle crossings onto SH1 should be retained as alternative access may not be feasible. I suggest that Objective 16 could be updated to read:

Objective 16: Avoid direct vehicle access from individual sites (except vehicle crossings in existence at the time the Precinct is made operative) onto the Wider Western Link Road

5.16 Additionally standard IXXX6.7(2) could be clarified with the addition of the following at the end of the standard

This standard does not apply to any vehicle crossing that exists onto State Highway 1 at the time the Precinct is made operative.

5.17 At submission point 21.6, the submitter opposes the Discretionary activity of non-compliance with Standard IXXX6.15 Transportation Infrastructure as pedestrian connections are unlikely to apply in the large lot zone. There are a number of transport infrastructure requirements in IXXX6.15 which could apply due to development in the large lot zone. Therefore, it is considered that the activity status should be retained and the request declined.

Submission 24 – KA Waimanawa Limited Partnerships and Stepping Towards Far Limited

- 5.18 This submission is from the Applicant for PPC93. The submission seeks amendments to a number of the precinct provisions.
- 5.19 Submission point 24.11 seeks to amend the wording of the trigger (T2) in Table IXXX.16.15.1 Transport Infrastructure Requirements as this is open to interpretation. The submitter proposes that the wording be amended to provide more clarity. The

- requested change is consistent with submission point 20.48 from Auckland Transport and the amendment is supported.
- 5.20 Submission point 24.12 requests amendment to Table IXXX6.15.1 column 2 (T2) and (T3) in relation to the description of transport upgrades for clarity (in combination with an updated Precinct Plan 3) and the deletion of row T4. Amendments to the wording and Precinct Plan 3 would provide clarity of the transport upgrades. Auckland Transport has also requested changes in submission points 20.48 and 20.50 and my preference is for the amendments proposed by Auckland Transport.
- 5.21 Consistent with my recommendations in this report and with other submissions, a pedestrian/cycle crossing facility is required on SH1 to provide a connection across SH1 between the paths on either side of the road.
- 5.22 I would support the deletion of row T4 subject to an appropriate description in T3.
- 5.23 Submission point 24.13 raises concern that the current wording of the trigger within (T5) is open to interpretation. It is proposed to re-word this section to provide more clarity. The requested change is consistent with submission point 20.51 from Auckland Transport and I support the requested amendment.
- 5.24 Submission point 24.14 requests amendments to the wording of Table IXXX6.15.1(T7) which requires the trigger for the construction of the Green Avenue to be required where there is vehicle access to Valerie Close. The Auckland Transport submission 20.52 requests that the trigger be when there is development with frontage to the road. I consider that a hybrid trigger is required which combines both submission point 20.52 and 24.14 as either could require the construction of the green way. I suggest the following wording to Table IXXX.6.15.1(T7):

As part of the first subdivision for residential development within Waimanawa Valley, as shown on Precinct Plan 3, which has vehicle access to Valerie Close, or development with frontage to the Green Avenue.

5.25 Submission point 24.15 requests an update to Note 3 under Table IXXX16.15.2 amending the description of the walking and cycling facility along SH1. The requested amendment only relates to a path north of the Wider Western Link Road. Cycle and pedestrian provision will be required along the upgraded sections of SH1. Therefore the note should be explicit on this matter. The Auckland Transport submission has suggested wording in their submission point 20.58 and this is supported. I recommend that the request be declined in favour of the Auckland Transport submission point 20.58.

Submission 25 – Mikel Thorogood

- 5.26 Submission point 25.1 requests that PPC93 provides upgrades to the McKinney Road intersection and provides a pedestrian/cycle connection to Wech Drive, if PPC93 proceeds ahead of the McKinney Road precinct. It is concurred that PPC93 should extend the footpath/cycle path to the northern Wech Drive intersection with SH1. I consider that the upgrade for the McKinney Road intersection is required by development on McKinney Road rather than PPC93.
- 5.27 Requested amendments to the precinct provisions by Auckland Transport would address the issue of the footpath/cycle path which would require this to be extended to the northern end of Wech Drive. I recommend the adoption of amendments to the

description (and extent) of the footpath/cycle path on SH1 to extend to the northern end of Wech Drive in Auckland Transport submission point 20.50.

Submission 27 - John and Sue Wynyard

5.28 At submission point 27.2, the Submitter seeks identification of the Wider Western Link Road bridge location. The location put forward in the Warkworth NOR 8 – Wider Western Link Road is supported by the submitter, and it is sought that this location be secured and identified on Precinct Plan 1 – Spatial Provisions. For consistency with the NoR 8, it is concurred that there would be merit in identifying the bridge connection on the Precinct Plan 3 if this is within the extent of the precinct area.

Submission 29 – Ministry of Education

- 5.29 Submission points 29.1 and 29.2 request that amendments are made to Objective 10 and Policy 12 so that they refer to the provision of educational facilities.
- 5.30 The traffic and transport effects of education facilities within the plan change area have not been assessed in the ITA. Therefore, any additional mitigation measures required are unknown. On this basis I consider that the request should be declined.

Submission 31 – Waka Kotahi NZ Transport Agency

- 5.31 Submission point 31.1 requests that an assessment of the proposal relative to the Future Development Strategy should be provided. The FDS has recently been approved and was not assessed in the lodged documentation. The FDS recommends certain infrastructure to support development in Warkworth South and this should be considered in the assessment. I consider that an assessment of the PPC against the FDS should be provided either in evidence or at the hearing.
- 5.32 Submission point 31.2 requests that an assessment of the proposal should be provided relative to the Transport Emissions Reduction Pathway (TERP). I support the request.
- 5.33 Submission point 31.3 requests that the ITA and planning provisions be updated to include all required upgrades, including walking and cycling connections to existing paths in the urban area and clarify the extent of intersection upgrades required, including at Valerie Close. I agree that updates are required to ensure appropriate walking and cycling connections are provided and that upgrades are provided to the Valerie Close intersection with SH1. The request is consistent with submissions from Auckland Transport.
- 5.34 Submission point 31.4 requests that an assessment of the number and location of pedestrian crossings of SH1 required to service this development be provided and that the precinct provisions be updated to reflect the outcomes of this assessment. I agree that crossings will be required across SH1 to provide connections between areas east and west of SH1. Furthermore a crossing will be required to connect across SH1 at the northern end of the interim path on the western side of SH1 by the Morrison Heritage Orchard entrance to provide connectivity between the paths on the east and western sides of the road and for the safe operation of the facility. Crossings along the upgraded SH1 can be determined during subsequent design / consent phases once more information is known about the form of development but I consider the precinct provisions should ensure that these are considered at the time of resource consent.

Provide infrastructure prior to development (Submissions 33.1 and 34.1)

- 5.35 Submitters requested that infrastructure of major arterial roads, sewerage, etc, should be in place before any development takes place.
- 5.36 The PPC will provide key pieces of infrastructure along SH1 (including upgrades to SH1 and temporary pedestrian/cycle connections to the north) and the eastern section of the WWLR.

Submitter 39 – Thompson Road Residents

5.37 Submission point 39.2 requests that a note be added to Precinct Plan 1 – Spatial Provisions to indicate that the trail to the north of 1768 State Highway 1 is indicative and planned upgrades of Thompson Road to facilitate the trail will be required. This trail is outside of the area of the precinct and therefore it is considered not necessary to include the requested note on the Precinct Plan 1.

6.0 Precinct Provisions

- 6.1 I have reviewed the precinct provisions and based on my assessment in Section 4.0 and from my review of the submissions in relation to transport, I provide my comments on the precinct provisions below. Submitters, including Auckland Transport and the Applicant have sought changes to the precinct provisions. I have not replicated below changes requested that I support considering the extensive nature of those requested by Auckland Transport. My comments on the Auckland Transport submissions and requested changes are included in the table in Attachment 1.
- 6.2 Policy 19 in relation to 'minimising direct vehicle access to collector roads' is in conflict with Standard IXXX6.7(4) which states residential sites 'must not have direct vehicle access to the road'. I recommend that Policy 19 be deleted.
- 6.3 Amendments are required to Table IXXX.6.15.1 (T3) to provide a connected interim active modes facility along SH1 as discussed in paragraphs 4.17 to 4.19. This is to ensure:
 - a) the interim active modes connection along SH1 is connected to an existing footpath or cycle path on the edge of the Warkworth urban area at the northern Wech Drive intersection with SH1; and
 - b) that the interim facility provides safe crossing facilities near the Morrison Hertiage Orchard vehicle access where the western facility is proposed to terminate.
- The description of the transport infrastructure upgrade in Table IXXX.16.15.1 (T3) and (T4) should provide a more prescriptive description. The following wording is recommended for the Transport Infrastructure Upgrade column (column 3) which would replace rows T3 and T4:
 - (T3) Construction of a pedestrian / cycle path along SH1 in the following locations:
 - a) <u>SH1 west side between Wider Western Link Road and the</u> Morrison Heritage Orchard vehicle crossing; and
 - b) <u>SH1 east side between Wider Western Link Road and the</u> northern Wech Drive intersection with SH1.

Formal safe pedestrian and cycle crossing facilities shall be provided across SH1 near the Morrison Heritage Orchard vehicle crossing. Appropriate safe pedestrian and cycle crossing facilities shall be provided across McKinney Road.

- 6.5 I do not consider any changes are required to the trigger for T3.
- I discuss in paragraphs 4.21 to 4.23 the requirement for pedestrian crossing facilities across SH1. To ensure facilities are provided, I recommend that a note be added under Table IXXX.6.15.1 that refers to the provision of active mode facilities. I suggest the following amendments:

Table IXXX.6.15.1 Row (T2), Add <u>(refer note 3)</u> after description of transport infrastructure upgrade

- (3) Active mode crossing facilities across SH1 shall be provided with the upgrade of SH1 to provide convenient connections between the eastern and western sides of the precinct taking into account any active mode connections to SH1 and location of any bus stops along SH1 and land uses.
- 6.7 As discussed in paragraphs 4.42 to 4.45, the description of the transport infrastructure upgrade for SH1 / Valerie Close is vague and does not actually require the implementation of the upgrade, only an assessment. The following wording to replace the (T1) row in Table IXXX.6.15.1 is proposed:

Transport Infrastructure Upgrade		Trigger		
<u>(T1)</u>	Upgrade to Valerie Close / State Highway One intersection to provide for safe and efficient operation as determined by an assessment of the safe and efficient operation of the intersection by a suitably qualified traffic engineer.	Any new road connection or any subdivision or development with direct vehicle access to Valerie Close		

- 6.8 To address the concerns raised by submitters on access to SH1 as discussed in paragraphs 5.15 and 5.16 the following amendment to Objective 16 IXXX6.7(2) is recommended:
 - Objective 16: Avoid direct vehicle access from individual sites (except vehicle crossings in existence at the time the Precinct is made operative) onto the Wider Western Link Road
- 6.9 Additionally standard IXXX6.7(2) could be clarified with the addition of the following at the end of the standard:

This standard does not apply to any vehicle crossing that exists onto State Highway 1 at the time the Precinct is made operative.

6.10 To address submitter comments on the Transport Infrastructure Upgrade trigger for the provision of the Green Avenue (Table IXXX6.15.1(T7)), a hybrid trigger between the amendments requested by the Applicant as submitter (submission point 24.14) and Auckland Transport's submission (submission point 20.52) is recommended as follows:

As part of the first subdivision for residential development within Waimanawa Valley, as shown on Precinct Plan 3, which has vehicle access to Valerie Close, or development with frontage to the Green Avenue.

7.0 Conclusions and Recommendations

- 7.1 The following conclusions and recommendations are made with respect to traffic and transportation issues.
- 7.2 I consider that PPC93 poorly aligns with the Regional Policy Statement in relation to transport (in particular B3.3.2(5)(b) and (c)) as there is no funding to provide for either the public transport interchange or to provide bus services to the Plan Change Area. I consider that this will result in reliance on private vehicle use, particularly for longer distance trips in the short to medium term. I consider that the Applicant should provide further assessment as to how PPC93 aligns with the AUP Regional Policy Statement objectives and policies in relation to transport, particularly for the proposed Residential Terrance Housing and Apartment Building zone (THAB) in the period where access to public transport is likely to be limited.
- 7.3 The timing of PPC93 is earlier than that envisaged by the recently approved Future Development Strategy and in advance of the identified pre-requisite transport infrastructure. However, I consider that there is sufficient capacity within the immediate surrounding road network to accommodate the forecast traffic in the short to medium term and acknowledge that the Applicant is providing parts of the pre-requisite transport infrastructure to support the plan change.
- 7.4 From my assessment and review of submissions, I recommend that either in evidence or at the hearing that the Applicant provides the following information or assessment:
 - a) Assessment of PPC93 against the Transport Emissions Reduction Pathway (TERP) including details of measures to reduce transport related emissions and reliance on private vehicle use, particularly for longer distance commuting from the PCA.
 - b) Assessment of the plan change against the National Policy Statement Urban Design and RPS objectives and policies relevant to public transport and transport choice.
 - c) Assessment of the PPC against the Future Development Strategy.
 - d) Details of the traffic modelling of the SH1 / WWLR intersection (roundabout and the traffic signal intersection) for 2046.
 - e) The feasibility of interim pedestrian and cycle facilities along SH1 from the Wider Western Link Road to Welch Drive should be demonstrated.
- 7.5 Subject to the above further information, and my recommendations on changes to precinct provisions (as outlined in Section 6.0) and specific amendments to the precinct provisions sought by submitters which I have indicated support, I consider that the traffic and transport effects of the plan change can be appropriately managed.

- 7.6 I provide the following recommendations:
 - a) The interim active modes facility along SH1 north of the Wider Western Link Road should be extended to the northern Wech Drive / SH1 intersection.
 - b) A crossing facility to assist pedestrians and cyclists crossing SH1 where the interim active modes facility on SH1 terminates at the Morison Heritage Orchard should be required in the transport infrastructure detailed in the precinct provisions.
 - c) Precinct provisions should ensure that any connection created to Mason Heights should include pedestrian facilities and that any connection to Mason Heights is provided to an urban local road standard, including upgrading Mason Heights to urban standard.
 - d) The precinct provisions should require an assessment for active mode crossing facilities across SH1 to ensure facilities are considered in any future resource consent application.
 - e) The precinct provisions should require an upgrade to the SH1 / Valerie Close intersection.

Martin Peake

26 March 2024

Attachment 1 – Auckland Transport Submission

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
20		Auckland Transport			
20	20.2	The plan change will enable development in a location which does not have frequent public transport services and where there is no Auckland Transport funding available to improve the services. For this reason the plan change does not give effect to some NPS-UD and RPS objectives and policies relating to public transport. In particular it will not: Assess against the NPS-UD and RPS obs and pols relevant to PT and transport choice.	Oppose	Agree. Support the requirement to undertake an assessment against the relevant policies.	Undertaken assessment of relevant policies re. public transport deficiencies and NPS-UD / RPS.
	20.4	Seeks to ensure that a minimum area of 2500m ² is set aside for the public transport interchange through appropriate amendments to the precinct.	Support in part	Agree. It is suggested that the legend in Map 3 for the Indicative Future Public Transport Hub should be amended to include reference to 2500m ²	Amend Map 3 legend "Future Public Transport Hub Interchange (min. area 2,500m²"
	20.6	Remove reference to collector road standard in paragraph 12 of Project Description.	Oppose in part	Agree that the road will effectively function as an arterial with the proposed dimensions. The reference to collector road is unnecessary.	Support amendment requested. Delete reference to collector road in the 12 th paragraph of the Project Description and make consequential amendments to the precinct provisions.
	20.7	Requests amendment to paragraph 14 of Project Description to make is clear that the greenways are an off-road network.	Oppose in part	Agree that the description would clarify the form of the greenways.	Support amendment requested and amendment to paragraph 14 of the Project Description.
	20.9	Seeks Objective 2 to be split into two objectives and minor amendments to terminology for clarity.	Oppose in part	Agree that the amendment would provide better clarity.	Support amendment requested to split Objective 2 into two objectives and amend terminology for clarity.

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
	20.11	Seeks amendments to Objective 10 to recognize the importance of the transport interchange and need for access by a range of modes.	Support in part	Agree that the amendments would clarify the importance of the transport interchange.	requested to highlight the importance of public
	20.12	Requests a new objective to ensure subdivision and development does not occur in advance of the delivery of transport infrastructure	Oppose	Such an objective would highlight the importance of providing the transport infrastructure to support the plan change.	Support addition of a new objective.
	20.13	Requests a new objective to address the need for safe, effective and efficient access to and from and within the precinct.	Oppose	The suggested amendment to objective 2 (submission point 20.9) is considered to effectively achieve the same outcomes.	addressed by submission point 20.9 which amends to
	20.14	Requests an objective that focuses on active modes and public transport for consistency with the NPS-UD and relevant RPS objectives and policies.	Oppose	The suggested objective is supported as this emphasizes the importance of active modes and public transport.	Support addition of a new objective.
	20.16	Requests an amendment to Policy 13 to make it clear that there is a need to provide walking and cycling connections to existing urban development.		The amendment would provide greater clarity over the importance of providing for walking and cycling.	Support requested amendments to Policy 13.
	20.17	Requests an amendment to Policy 14 to explicitly refer to the design of roading to be in accordance with Table Ixxx6.15.2 Minimum Road Width, Function and Required Design Elements	Support in part	The amendment would strengthen the connection to the standard.	Support requested amendment to Policy 14.

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
	20.18	Requests an amendment to Policy 15 to remove reference to the collector road and to emphasise the Wider Western Link Road would form part of the arterial road network when connected to the Woodcocks Road.	Support in part	The amendment would be consistent with submission point 20.6.	Support requested amendments to Policy 15.
	20.19	Request an amendment to the Policy 16 to provide for access across roads with vehicle access restrictions to the public transport interchange for buses and service vehicles	Support in part	The amendment is considered appropriate as access for buses and service vehicles will be required across any VAR to the public transport interchange.	Support requested amendment to Policy 16.
	20.21	Requests a new policy that directly links to Objective 10 regarding the provision of a public transport interchange.	Oppose in part	A policy linking to Objective 10 is considered appropriate.	Support requested new Policy providing for the public transport interchange.
	20.23	Requests that non-compliance with Table IXXX6.15.2 should be a restricted discretionary activity to provide flexibility if the design needs to be adjusted in some circumstances.	Oppose in Part	The request could conflict with IXXX4.2(A3) and (A4), Table IXXX4.4 (A8) and (A11), IXXX4.5 (A6) and (A9), Table IXXX4.6 (A7) and (A11) which for noncompliance with standard IXXX.6.15 are Discretionary, as these apply to the whole of the standard. If the request is adopted, a separate standard should be included for compliance with Table IXXX6.15.2 Minimum Road Width, Function and Required Design Elements table.	Support requested amendments to activity tables only if a separate standard is created for compliance with Table IXXX6.15.2 Minimum Road Width, Function and Required Design Elements table.

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
	20.24	Requests that Table Ixxx4.1 (A17) be amended to include the activity having to comply with Standard IXXX6.15 Transportation Infrastructure as this appears to have been omitted in error. This is the case for other activities in all the activity tables.	Oppose	Agree that activities should comply with Standard IXXX6.15, and that the other activities should be reviewed and the standard included.	Support request to add reference to Standard IXXX6.15 Transportation Infrastructure into the activity tables for appropriate activities.
	20.25	Requests that non-compliance with Standard IXXX6.15 (other than Table IXXX6.15.2) be a Non-Complying activity rather than discretionary for Table IXXX4.2 (A3)	Oppose	Non-compliance status would emphasise the importance of the provision of the relevant transportation infrastructure.	Support requested change of IXXX4.2(A3) to Non-Complying.
	20.26	Requests that non-compliance with Standard IXXX6.15 (other than Table IXXX6.15.2) be a Non-Complying activity rather than discretionary for Table IXXX4.2 (A4)	Oppose	Non-compliance status would emphasise the importance of the provision of the relevant transportation infrastructure.	Support requested change of IXXX4.2(A4) to Non-Complying.
	20.27	Supports Non-Compliance status of not complying with Standard IXXX6.7 Limited Access Restrictions and Pedestrian Connections. Requests that this be applied to the standard to all zones.	Oppose in part	For consistency and to emphasise the importance of the standard, it is agreed that non-compliance with the standard should be Non-Complying.	Support Non-Compliance status for activities not complying with Standard IXXXX6.7 – Limited Access Restrictions and Pedestrian Connections. Support inclusion of activity status for development as well as Sub-division.
	20.28	The restaurants and cafes in the former Ransom Vineyard are a Permitted activity, but no transport assessment has been provided for this (Table XXX4.4 (A6)). Request that this activity either be Discretionary of Restricted Discretionary with appropriate assessment criteria. Alternatively, the transport effects should be assessed.	Oppose in part	Agree that no transport assessment has been undertaken of cafes or restaurants in this location which is proposed to be zoned for	Support proposed activity status for Table XXX4.4 (A6) unless a transport assessment is provided.

Ref.		sworth South – Auckland Transport Submission Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
				residential only. Would support the proposed activity statuses unless transport assessment is provided otherwise.	
	20.29	The educational facilities in the former Ransom Vineyard are a Permitted activity, but no transport assessment has been provided for this (Table XXX4.4 (A7)). Request that this activity either be Discretionary of Restricted Discretionary with appropriate assessment criteria. Alternatively, the transport effects should be assessed.	Oppose in part	Agree that no transport assessment has been undertaken of cafes or restaurants in this location which is proposed to be zoned for residential only. Would support the proposed activity statuses unless transport assessment is provided otherwise.	
	20.30	Requests that non-compliance with Standard IXXX6.15 (other than Table IXXX6.15.2) be a Non-Complying activity rather than discretionary for Table IXXX4.4 (A8)	Oppose in part	Non-compliance status would emphasise the importance of the provision of the relevant transportation infrastructure.	
	20.31	Requests that non-compliance with Standard IXXX6.15 (other than Table IXXX6.15.2) be a Non-Complying activity rather than discretionary for Table IXXX4.4 (A11)	Oppose in part	Non-compliance status would emphasise the importance of the provision of the relevant transportation infrastructure.	, ,, ,
	20.32	Requests that non-compliance with Standard IXXX6.15 (other than Table IXXX6.15.2) be a Non-Complying activity rather than discretionary for Table IXXX4.5 (A6)	Oppose in part	Non-compliance status would emphasise the importance of the provision of the relevant transportation infrastructure.	, ,, ,

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
	20.33	Requests that non-compliance with Standard IXXX6.15 (other than Table IXXX6.15.2) be a Non-Complying activity rather than discretionary for Table IXXX4.5 (A9)	Oppose in part	Non-compliance status would emphasise the importance of the provision of the relevant transportation infrastructure.	
	20.34	Requests that Table IXXX4.6 (A1) is for the operation <u>and</u> <u>maintenance</u> of the public transport interchange.	Support in part	Agreed that it is appropriate that maintenance should be included for the public transport interchange.	Support requested amendment to Table IXXX4.6(A1)
	20.35	Seeks deletion of compliance standard IXXX6.7 Limited Access Restriction from Activity (A6) in Table IXXX4.6 for the public transport interchange as the interchange has a requirement for vehicle access.	Support in part	A key requirement for the interchange will the provision of vehicle access for buses to ensure the efficient movement of vehicles to and from the interchange. The amendment to omit compliance with the limited access restriction is considered appropriate.	compliance with Standard
	20.36	Requests that non-compliance with Standard IXXX6.15 (other than Table IXXX6.15.2) be a Non-Complying activity rather than discretionary for Table IXXX4.6 (A7)	Oppose in part	Non-compliance status would emphasise the importance of the provision of the relevant transportation infrastructure.	
	20.37	Requests that non-compliance with Standard IXXX6.15 (other than Table IXXX6.15.2) be a Non-Complying activity rather than discretionary for Table IXXX4.6 (A11)	Oppose	Non-compliance status would emphasise the importance of the provision of the relevant	Support requested change of IXXX4.6(A11) to Non-Complying.

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
				transportation infrastructure.	
	20.39	Considers that Standard IXXX6.7 Limited Access Restrictions and Pedestrian Connections does not need to address pedestrian connections, other than protection for their safety through the access restrictions, as pedestrian connections are dealt with in other standards.	Support in part	Agree that Standard IXXX6.7 should remove clause (3) and amend the Standard naming.	Support requested amendment to Standard IXXX6.7
	20.40	Amendments are requested to the title and purpose of Standard IXXX6.7 Limited Access Restriction and Pedestrian Connections to better reflect the purpose of the standard.	Support in part	Agree that the suggested amendments would better reflect the intent of the standard.	amendments to Standard
	20.41	Consequential amendments and amendments for clarity are requested to the wording of Standard IXXX6.7 Limited Access Restrictions clauses (2) and (4).	Support in part	Agree that the suggested amendments would provide better clarity in relation to other submission points raised.	amendments to Standard
	20.42	Requests the deletion of Standard IXXX6.8 Wider Western Link Road as the requirements for the link road are covered by other standards.	Oppose	Agree that other standards address the provision of the Wider Western Link Road.	Support the deletion of Standard IXXX6.8 Wider Western Link Road.
	20.44	Requests amendments to Standard IXXX6.14 Greenways – Walking and Cycling Infrastructure to be consistent with other submission points and to remove descriptions on the form of the facility.	Oppose in part	Agree with the amendments for consistency with other submission points.	Support requested amendments to Standard IXXX6.14 Greenways – Walking and Cycling Infrastructure
	20.45	Requests amendments to Standard IXXX6.15 Transportation Infrastructure title and purpose for clarity and to make it clear that infrastructure is to be provided.	Support in part	Agree with the amendments proposed as these provide better clarity.	Support requested amendments to Standard IXXX6.15 title and purpose.
	20.46	Amendments requested to Standard IXXX6.15 Transportation Infrastructure to make it clear that subdivision and development should not exceed the triggers in the table without the relevant transport infrastructure being provided.	Oppose in part	Agree that the amendments would provide clarity on limiting development/subdivision	Support requested amendments to Standard IXXX6.15 Transportation Infrastructure.

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
				in relation to the provision of the relevant transport infrastructure.	
	20.47	Table IXXX6.15.1(T1) is written as an assessment criteria rather than a rule as to when an upgrade to Valerie Close is required.	Oppose in part	Agree that a trigger for when Valerie Close needs to be upgraded would be appropriate. However, this may be subject to different conditions in terms of amount of development and design of the upgrade to SH1. The trigger may require an assessment and then the provision of the upgrade if determined necessary by the assessment.	amendment. Amend the trigger to require the assessment and provide the upgrade if this is determined necessary by the assessment. Wording is
	20.48	Request amendment to the description of the upgrade to SH1 in Table IXXX6.15.1(T2).	Support in part	Agree the suggested amendments would better describe the upgrade to SH1.	Support requested amendment to Table IXXX6.15.1(T2).
	20.49	Amend the wording of the trigger for the SH1 upgrade.	Support in part	It is not clear what the suggested amendment to the wording would achieve other than the addition of "cumulative total" of 20 residential lots.	amendment to IXXX6.15.1(T2) trigger. Support amendment to the
	20.50	Seeks amendments and clarifications to Table IXXX6.15.1 to better clarify the extent and form of cycle and pedestrian facilities to be provided along SH1.		Agree that clarity is required in the description to the standards for IXXX6.15.1 (T3) and (T4).	Support amendments to

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
		Requests that the applicant demonstrates that safe ped/cycle facilities can be provided to the northern end of Wech Drive.		Agree it should be demonstrated that facilities can feasibly be provided along SH1 in the interim before final upgrades are made to SH1.	provided. Suggested wording is provided in Paragraph 6.4. Support request for detail demonstrating the feasibility of the facilities.
	20.51	Amend the wording of the trigger for the construction of Wider Western Link Road.	Support in part	Agree the suggested amendments would better describe the upgrade to SH1. The addition of cumulative is considered	Support requested amendment to Table
	20.52	Requests deletion of Table IXXX6.15.1(T7) as this would require the Greenways to be constructed as part of any subdivision or development when it should be only when there is site frontage to the greenway. Requests that it should be combined with (T8)	Support in part	appropriate. Agree the trigger should be amended to include reference to site frontage. However, the Applicant in submission point 24.14 has requested an amendment to the trigger around development on Valerie Close. A hybrid condition between this submission point 24.14 is considered appropriate.	IXXX6.15.1(T7) to combine the trigger requested in this
	20.53	Request amendments to IXXX6.15.1(T9) to provide clarity over extent of upgrades required.	Support in part	Agree that the suggested amendments would provide clarity over the upgrade required to Mason Heights	Support requested amendment to Table IXXX6.15.1(T9)

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
	20.54	Requests amendments to clarify the trigger for the upgrade of Mason Heights (Table IXXX6.15.1(T9).	Support in part	Agree that the suggested amendment provides better clarity as to when an upgrade is required.	amendment to Table
	20.55	Request consequential amendments to the note under Table IXXX6.15.1 to remove reference to (T9) as there are gaps along Mason Heights that would need to be filled in as part of the upgrade.	Oppose in part	Agree with the amendment.	Support requested amendment to note under Table IXXX6.15.1
	20.56	Request amendment to the title of Table IXXX6.15.2 Minimum Road Width, Function and Required Design Elements to be consistent with other Precincts.	Support in part	Agree with the amendment	Support requested amendment to title of table IXXX6.15.2.
	20.57	Amendments are required as the access restrictions recorded in Table IXXX.6.15.2 for Green Avenue and other collector roads do not match with the vehicle access restrictions applying under Standard Ixxx.6.7(2) and (4).	Oppose in part	Agree that the table should be amended to be consistent with Standard IXXX6.7	amendment to Table
	20.58	Requests that amendments are made to Note 3 under Table IXXX6.15.2 to provide better provision for active modes along SH1.	Oppose in part	Agree that amended wording would provide better clarity over the level and form of provision of the facilities.	Support amendments to the wording of Note 3 under Table IXXX6.15.2 that provides clarity over the provision of ped / cycle facilities along SH1.
	20.59	A minor amendment is required to clarify that it is bus stop 'form and location', as well as bus routes that will be determined with Auckland Transport as part of later consent processes.	Support in part	Agree that clarification is required to IXXX6.15.2 Note 4	Support requested
	20.60	Request that the wording of Note 5 be amended under Table IXXX16.15.2 about the form of cycle facility along the Wider Western Link Road as the form of the facility cannot be confirmed at this stage of the consenting process.	Oppose in part	Agree that amended wording would provide flexibility as to the form of the facility once more design detail is known at resource consent stage.	Support requested amendment to Note 5 under Table IXXX6.15.2

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
	20.61	Request modification to the assessment criteria IXXX7.2 regarding the provision of pedestrian and cycling facilities to the public transport interchange.	Support in part	Neutral on change to wording.	Neutral on proposed change to IXXX7.2.
	20.63	Amendments are required to better describe the matters of discretion relating to transport for IXXX8.1(1)(b).	Oppose in part	The suggested amendments would provide clarity and better define matters of discretion	Support requested changes to IXXX8.1(1)(b)
	20.66	The assessment criteria relating to transport should be strengthened by requiring a consideration as to 'whether' they are met, rather than 'the extent to which' they are met.	Oppose in part	Agree that the amendment would strengthen the assessment criteria.	Support requested amendment to IXXX8.2(1)(c)
	20.68	Request that assessment of the local centre should refer to any connection to public transport facility rather than just the public transport interchange.	Support in part	Agree that the criteria should be amended as suggested as the location of any bus stops in relation to the local centre are yet to be determined.	Support requested amendment to IXXX8.2(2)(i)
	20.69	Requests amendments to IXXX9.1 Transport and Safety to provide better clarity of the assessment required and to be consistent with other recently approved plan changes.	Oppose in part	Agree that the suggested amended wording would provide better guidance as to the assessment and information required.	Support requested amendment to IXXX9.1
	20.70	Request amendments to Precinct Plan 1 to remove unnecessary detail which is shown on Precinct Plan 3.	Oppose in part	Agree that the changes to Precinct Plan 1 would make the plan easier to read.	Support requested amendment to Precinct Plan 1.
	20.71	Request amendment to the wording in the legend for the Public Transport Interchange, and to include the area of the interchange.	Support in part	Agree that the amendment would provide consistency in terminology. The area of the interchange stated in	Support requested amendment to Precinct Plan 3.

Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation
				the submission differs to submission point 20.4 (2100 rather than 2500m²). The correct area should be included on the plan.	
	20.72	Request that Precinct Plan 3 should better present the proposed cycle facilities.	Oppose in part	Agree that the cycle facilities on Precinct Plan 3 are difficult to read. It is considered the precinct plan 3 be amended to better illustrate the location of the indicative off-road greenway routes and the indicative dedicated on-road cycle paths.	Update Precinct Plan 3 to better illustrate the location of cycle facilities.
	20.75	Requests Non-complying status if access from the Morrison Orchard is provided via the Wider Western Link Road as this has not been assessed.	Oppose	Agree with the proposed activity status.	Support requested amendment to the Activity Table IXXX4.1.
	20.76	Request that weddings and functions are addressed in the precinct provisions so that the transport effects are addressed.	Oppose	Standard IXXX6.1(2) limits the trip generation for activities, including weddings and functions. This would control the volume of traffic and associated traffic effects.	Decline the requested
	20.77	Request deletion of XXX.5(1) which allows RD activities to be considered without public notification as some activities may require assessment by Auckland Transport.	Oppose	Agree that some activities may have affects that need to be notified.	Support requested amendment to XXX5(1)

PPC	PC93 –Warkworth South – Auckland Transport Submission					
Ref.	Point	Submission Point	Submitter Support/ Oppose	Reviewer Comment	Reviewer Recommendation	
	20.78	Request amendments to Standard IXXX6.1(1) to more clearly define the access restrictions to SH1	Oppose	Agree that the amendments would provide better clarity.	Support requested amendment to IXXX6.1(1)	
	20.79	Considers the standard relating to traffic generation lacks robustness and would be difficult to monitor and enforce.	Oppose	The precinct would have a single access point and therefore it would be straight forward to monitor the number of vehicles entering and exiting the site. The standard could be strengthened by providing greater detail as to whether the threshold is to be reviewed and whether this is to be determined by a suitably qualified traffic engineer.	to ensure that the traffic	
	20.80	The ITA and other documentation suggests that there is no intention to provide vehicle access from the Wider Western Link Road to the Morrisons Orchard. This should be reflected in precinct provisions. This is consistent with the approach in the Waimanawa Precinct.	Oppose in part	Agree that the provision of a specific standard would provide greater certainty that an additional connection to the WWLR would not be created.	Support requested amendment to IXXX6.1	
	20.81	It is appropriate to require transport assessments to be provided to support applications which have potential transport effects, particularly in relation to the access point on State Highway 1. However the cross-reference to E27.9 requirements should be replaced by a requirement which is more specific to the precinct.	Support in part	Agree that more specific requirements for the transport assessment would be appropriate.	Support requested amendment to IXXX8.1	

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

19 March 2024

To: David Wren - Planning Consultant on behalf of Auckland Council

From: Rebecca Ramsay – Senior Specialist: Heritage, Heritage Unit, Plans and

Places

Subject: Private Plan Change – PC 93: Warkworth South, Proposed

"Waimanawa" and "Morrison Heritage Orchard" Precincts. Historic

Heritage (Archaeological) Assessment

1.0 Introduction

1.1 I have undertaken a review of the proposed private plan change (PC 88), on behalf of Auckland Council in relation to historic heritage (archaeological) effects.

- 1.2 Megan Walker (Specialist: Historic Heritage) has undertaken a review of specific built heritage matters relating to PC 93. This memo is provided in Appendix 1 and referenced in text.
- 1.3 My review has not addressed effects on mana whenua cultural values. The cultural and other values that mana whenua place on the area may differ from its historic heritage values and are to be determined by mana whenua. It is the applicants' responsibility to consult with mana whenua to determine mana whenua values.
- 1.4 I have a Master of Arts degree with first class honours in anthropology (archaeology) specialising in New Zealand archaeology. I have worked in the field of historic heritage management for 9 years. My experience spans archaeology (including landscape archaeology) and heritage policy.
- 1.5 In writing this memo, I have reviewed the following documents:
 - PC 93 Warkworth South Private Plan Change Request. August 2023. Prepared by Osborne Hay (North) Limited and Tattico Limited, for K A Waimanawa Limited Partnership and Stepping Toward Far Limited
 - o Appendix 1A Warkworth South Plan Change
 - Appendix 1B Warkworth South Planning Maps
 - o Appendix 2 Urban Design Report
 - Appendix 11 Archaeological Assessment Low, J., Farley, G., Apfel, A. and Roth, K. December 2022. Warkworth South Plan Change: Archaeological Assessment. Prepared by Clough and Associates Limited. for KA Waimanawa Partnership Limited and Stepping Towards Far Limited.
 - Appendix 12 Cultural Values Assessment: Manuhiri Kaitiaki Charitable Trust. August 2021.
 - Clause 23 Response June 2023
 - Summary of Decisions Requested
- 1.6 A site visit to the proposed plan change area was undertaken on 19 March, 2024.

2.0 Key Historic Heritage Issues

2.1 The key issue in relation to historic heritage is whether the application has sufficiently assessed and addressed actual or potential effects on historic heritage.

3.0 Applicant's assessment

Archaeological Assessment

- 3.1 The applicant has provided an archaeological assessment by Jennifer Low, Glen Farley, Aaron Apfel, Kirsten Roth of Clough and Associates Ltd. (Appendix 11) to address actual and potential effects on historic heritage. Other reports including the cultural values assessment (Appendix 12) also address historic heritage to some extent along with other values. The cultural values assessment (Appendix 12) provides Mana Whenua perspectives on the significance of the archaeological sites that are assessed in the archaeological report.
- 3.2 The archaeological assessment provides a historical background, a description of archaeological sites within the plan change area, and of the wider archaeological context. It then assesses the significance of the sites in the plan change area against both the Auckland Unitary Plan (AUP) Historic Heritage Regional Policy Statement (RPS) and Heritage New Zealand Pouhere Taonga Act (HNZPTA) criteria. The assessment concludes with a preliminary summary of potential effects and constraints and a series of recommendations.
- 3.3 Overall, the methodology applied, and conclusions reached in the applicant's archaeological assessment are sufficient.
- 3.4 The report identifies that the proposed Plan Change has the potential to affect one known archaeological site (R09/2284, Historic Road). This place relates to a section of road connecting the Kaipara Flats to the Mahurangi Harbour created in the 1850s, with some sections remaining in use as present day farm tracks. The former road, tracks across the northern boundary of the Plan Change Area, within properties 49, 43 and Lot 6 DP 150976 Mason Heights. The site was assessed as of limited archaeological/historic heritage value.¹
- 3.5 Potential effects on two unconfirmed pre-1900 European homesteads have also been identified. It is unclear in the report which two places are specifically referred too and it is assumed these statements relate to Cherry's Hut site (R09/2243, CHI No. 21949) and Woodlee (R09/2260, CHI No. 22197) which have been tentatively located outside of the plan change area.
- 3.6 Further the report identifies wider archaeological potential where archaeological sites have been recorded in the general vicinity and states it is possible that unrecorded subsurface remains may be exposed during development.
- 3.7 Overall, the report recommends:²
 - There should be no major constraints on the proposed Plan Change on archaeological grounds as only one known site, of limited archaeological value, and two potential sites, have the potential to be affected by future development.
 - Once detailed development plans are available any works with the potential to affect site R09/2284 in the northern part of the Plan Change Area should be subject to more detailed assessment.
 - An archaeological Authority should be applied for under Section 44(a) of the HNZPTA prior to the start of any works affecting site R09/2284.

-

¹ Appendix 11 page 119-120.

² Appendix 11 page 124.

3.8 These conclusions and recommendations have been supported in the Plan Change Section 32 Report.³

Cultural Values Assessment

- 3.9 A series of recommendations in the Cultural Values Assessment provided by Manuhiri Kaitiaki Charitable Trust (for Ngāti Manuhiri), also have an overlap with historic heritage matters. These have been summarised in the Plan Change Request Report, relating to the on-going design then development stages.⁴ These include:
 - KA Waimanawa Limited Partnership and Stepping Towards Far Ltd are agreeable to the Trust providing the appropriate tikanga, review of plans and cultural/environmental monitoring for the project particularly at the start and during the bulk earthworks.
 - KA Waimanawa Limited Partnership and Stepping Towards Far Ltd will investigate
 possible design features to be incorporated including signage through Waimanawa
 explaining the history of the wider area and the history of Ngāti Manuhiri. There is an
 opportunity for this history to be provided chronologically down and through the valley
 along the walkways.
 - An Accidental Discovery Protocol will be developed for the bulk earthworks stage.

4.0 Submissions

4.1 No submissions were received in relation to archaeological / historic heritage matters.

5.0 Conclusions and recommendations

- 5.1 The Historic Heritage Assessment provides a full description of the heritage sites and values⁵ within the plan change area.
- 5.2 Any archaeological / historic heritage effects associated to the plan change can be appropriately managed through the existing provisions in the AUP and under the Heritage New Zealand Pouhere Taonga Act (2014).
- 5.3 Once detailed development plans for the Mason Heights section of the proposed plan change area are available, a more detailed assessment regarding actual and potential effects on Historic Road, R09/2284 is required to support an authority application under the Heritage New Zealand Pouhere Taonga Act (2014).
- 5.4 Further, it is worth reiterating that development of a project specific accidental discovery protocol, must not be contrary to the Accidental Discovery Rule set out in the AUP.⁶
- 5.5 Overall, I agree with the assessment's identification of potential impacts on historic heritage, and I can support the private plan change.

³ Warkworth South Private Plan Change Request. August 2023. Prepared by Osborne Hay (North) Limited and Tattico Limited, for K A Waimanawa Limited Partnership and Stepping Toward Far Limited. Page 91-92.

⁴ Appendix 12, Section 5 and Warkworth South Private Plan Change Request page 63-64.

⁵ AUP - B5. Ngā rawa tuku iho me te āhua – Historic heritage and special character

⁶ AUP – Chapter E Auckland-wide, E11 Land disturbance – Regional (E.11.6.1) and E12 Land disturbance – District (E12.6.1).

Plan Change 93 – Warkworth South – Historic heritage (built) assessment

1.0 Introduction

- 1.1 I have undertaken a review of the private plan change on behalf of Auckland Council relating to effects on historic heritage. My review is focused on built heritage and includes addressing potential historic heritage interest. This advice does not address effects on archaeology, which is the subject of a separate review by Rebecca Ramsay, nor does it address effects on mana whenua cultural values.
- 1.2 My current role is Specialist Historic Heritage in the Heritage Policy Team. I have held this role since April 2015. Prior to this role, I was employed as an architectural graduate by conservation architects, DPA Architects, from February 2009 until March 2015.
- 1.3 I have a Bachelor of Architecture (Honours) from the University of Auckland. I have six years of experience in conservation architecture and have researched and prepared over 70 conservation plans and heritage assessments. I have eight years of experience in heritage policy planning, which includes skills and experience in plan development and modifications, inputting into structure and area plans and resource consents, undertaking heritage surveys, and evaluating heritage places.
- 1.4 In writing this memo, I have reviewed the following documents:
 - PC 93 Warkworth South Private Plan Change Request. August 2023.
 Prepared by Osborne Hay (North) Limited and Tattico Limited, for K A
 Waimanawa Limited Partnership and Stepping Toward Far Limited
 - o Appendix 1A Warkworth South Plan Change
 - Appendix 1B Warkworth South Planning Maps
 - o Appendix 2 Urban Design Report
 - Appendix 11 Archaeological Assessment⁷
 - Clause 23 Response June 2023
 - Summary of Decisions Requested

2.0 Key built historic heritage issues

2.1 The key issue in relation to built heritage is whether the application has assessed and considered if there is potential built heritage and how it would be affected by the proposal of the private plan change.

3.0 Applicant's Archaeological Assessment

- 3.1 There are four places of interest that have been addressed in the revised Archaeological Assessment, (December 2022). These are:
 - 1773 State Highway 1 a 1940s brick and tile English cottage style house- this is an incorrect address and house type. I acknowledge this was an error in the Warkworth Structure Plan 2018 Heritage Topic Report. The house that is of interest is at **1765 Old State Highway 1** and is potentially the 1935 weatherboard home built by Athol Morrison as referred to in the Historic Ownership study on page 32.

⁷ Low, J., Farley, G., Apfel, A. and Roth, K. December 2022. *Warkworth South Plan Change: Archaeological Assessment*. Prepared by Clough and Associates Limited. for KA Waimanawa Partnership Limited and Stepping Towards Far Limited.

- 1723 State Highway 1 a late bungalow c1930s⁸
- 1711 State Highway 1 a bungalow c1920s
- 8 Valerie Close a bungalow c1920s
- 3.2 Although there is not a full assessment of any of these properties, the information provided is moderately sufficient to understand their potential value.
- 3.3 The assessment has undertaken a history of early European activity in the area which assists in determining the potential historic heritage values of these places. The report has also referred to the Heritage Topic Report prepared for the Warkworth Structure Plan (Brassey and Walker 2018) to address the places of concern. The assessment has also undertaken a field survey for three of these places, which includes photographs of the houses. This is also helpful in understanding the potential heritage values of these places. The writers were not provided access to the Morrison property at 1765 State Highway 1 and therefore were unable to provide field information on this house.
- 3.4 According to the survey maps that informed the Archaeological Assessment, one of these places appear to have been relocated to their current sites. That is the bungalow at 1711 State Highway 1, unless it was built after the 1928 survey map was produced. This has not been determined.
- 3.5 The assessment has made no recommendations with regards to the early 20th century buildings within the plan change area.

4.0 Submissions

4.1 No submissions were received in relation to archaeological / historic heritage matters.

5.0 Conclusions and recommendations

- 5.1 The Archaeological Assessment provides an adequate description of the history and physical description of the early 20th century buildings that the authors had access to in the field survey. There are no images or descriptions for the bungalow in P6 (1711 State Highway 1) or what appears to be a bungalow⁹ in P3 (1765 Old State Highway 1) as these were not sighted. It should be noted that the historic heritage values¹⁰ have not been assessed by the authors. However, through the family ownership history, conveyed in the assessment, the values of these places are better understood.
- 5.2 While these buildings may not meet the threshold to be considered historic heritage, they are important historic representatives, and tell the story of the early history and families of the area, particularly with regard to the Langridge and Morrison families. Of particular interest is the bungalow in P7 (8 Valerie Close) and potentially the house in P3 (1765 Old State Highway1).
- 5.3 The new community proposed by the plan change presents an opportunity to consider the relocation of these buildings if not within the plan change area, then

⁸ In the 2018 Warkworth Structure Plan Heritage Topic Report, this place was depicted as possible and earlier homestead c1910s. However, the authors were unable to view the place and the photographs produced in the PC93 Archaeological Assessment indicate the house is more likely to be a late 1920s or 1930s bungalow.

⁹ This house has only been sighted from Google Street View and it is difficult to assess its age, type and integrity without a field visit.

¹⁰ AUP - B5. Ngā rawa tuku iho me te āhua – Historic heritage and special character

within the Warkworth area, as part of its placemaking process. I would recommend this as a desirable outcome for the bungalow in P7 (8 Valerie Close) and possibly what is potentially the 1935 homestead of Athol Morrison in P3 (1765 Old State Highway 1).

5.4 Overall, I can support the private plan change, but recommend the consideration of relocation as specified above.