

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

Date: Wednesday 28 - Friday 30 July 2021

Monday 2 - Thursday 5 August 2021

Time: 9.30am

Meeting room: Manukau room

Venue: Level, Civic Building

31-33 Manukau Station Road, Manukau

PRIVATE PLAN MODIFICATION 48 HEARING REPORT – VOLUME ONE DRURY CENTRE PRECINCT KIWI PROPERTY NO.2 LIMITED

COMMISSIONERS

Chairperson Greg Hill
Commissioners Karyn Kurzeja
Mark Farnsworth

Sam Otter SENIOR HEARINGS ADVISOR

Telephone: 09 353 9587 or 021 196 2582 Email: sam.otter@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 his/her 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 his/her 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 his/her 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.



Reporting officer, David Mead

A NOTIFIED PRIVATE PLAN MODIFICATION TO THE AUCKLAND UNITARY PLAN BY KIWI PROPERTY NO.2 LIMITED

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Reporting on a proposed private plan modification to rezone 95 hectares of land from Future Urban to approximately 35 hectares of Business: Metropolitan Centre zone, approximately 51.5 ha of Business: Mixed Use zone surrounding the Metropolitan Centre and 8.5ha Open Space: Informal Recreation zone known as Private Plan Change 48 - Drury Centre Precinct.

APPLICANT: KIWI PROPERTY NO.2 LIMITED

SUBMITTERS:	SUBMITTERS:		
Page 463	Dannielle Haerewa		
Page 465	Doug Signal		
Page 468	Fire and Emergency New Zealand		
Page 472	Jack Philip Burton		
Page 474	Wendy Hannah		
Page 477	Michael and Rachel Gilmore		
Page 479	Geoff Yu and Rebecca Mao		
Page 481	Phil Hogan		
Page 484	Brookfield Road Limited		
Page 487	Transpower New Zealand Ltd		
Page 493	Papakura Business Association		
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Page 508	Tony Chien		
Page 510	Kiwi Property Holdings No.2 Limited		
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Page 578	Spark New Zealand Trading Limited		
Page 590	Fletcher Residential Limited		
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Page 631	The New Zealand Transport Agency		
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Private Plan Modification 48 - Drury Centre Precinct Wednesday 28- Friday 30 July and Monday 2. - Thursday 5 August 2021

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Page 745	Kāinga Ora
Page 760	Watercare
Page 767	Ngāti Tamaoho

FURTHER SUBMITTERS:		
Page 771	Transpower New Zealand Ltd	
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Hearing Report for Proposed Private Plan Change 48: Drury Central 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: 28-30 July; 2-5 August 2021

File No: S42A report, PPC 48

File Reference

Report Author David Mead, consultant planner

Report Craig Cairncross, Team Leader Central South

Approvers Plans and Places

Report 17 June 2021

produced

Summary of Proposed Plan Change 48 (Drury Central):

Diam subject to about	Availand Heitam, Plan (On anative in ment) 2040
Plan subject to change	Auckland Unitary Plan (Operative in part), 2016
Number and name of change	Proposed Plan Change 48 – (Drury Central) to the Auckland Unitary Plan
Status of Plan	Operative in part
Type of change	Private plan change
Committee date of approval (or adoption) for notification	2 July 2020
Parts of the Auckland Unitary Plan affected by the proposed plan change	 Chapter I Precincts – new precinct added Planning maps – zones, precinct boundary, Stormwater Management Area Flow 1 Control
Date draft proposed plan change was sent to iwi for feedback	Specialist reports sent by requestor in July 2019. Precinct provisions were sent by the requestor prenotification
Date of notification of the proposed plan change and whether it was publicly notified or limited notified	27 August 2020, publicly notified
Plan development process used – collaborative, streamlined or normal	Normal
Submissions received (excluding withdrawals)	35
Date summary of submissions notified	11 December 2020
Number of further submissions received (numbers)	10
Legal Effect at Notification	No
Main issues or topics emerging from all submissions	Funding shortfalls and timing of infrastructure upgrades required to support urbanisation of the plan change area, particularly transport Outside the Alexander Deliver Outside the Alexander
	 Consistency with the National Policy Statement - Urban Development – heights and densities
	Quality urban design outcomes, especially for the metropolitan centre
	Ensuring servicing of area with utilities, and protection of network utility operator interests
	Detailed comments on the transport-related provisions
	Workability of provisions linking development trip generation to trigger transport upgrades

- Location/amount of open space, and width/planting of riparian margins
- Amendments to precinct plans particularly the indicative railway station location and the need for direct access from SH1
- Flooding effects on upstream and downstream sites
- Extensions to the plan change boundary
- Requests for lower order centre zone than Metropolitan, or a review of amount of centre zoning to be provided

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Abbreviation	Meaning
AT	Auckland Transport
ATAP	Auckland Transport Alignment Project
AUP	Auckland Unitary Plan (Operative in Part)
CVA	Cultural Values Assessment
ВМС	Business - Metropolitan Centre zone
BMU	Business - Mixed Use zone
DTIP	Drury Transport Investment Programme
FTN	Frequent Transit Network
FULSS	Auckland Council Future Urban Land Supply Strategy 2017
FUZ	Future Urban Zone
GFA	Gross Floor Area
HNZPT	Heritage New Zealand Pouhere Taonga
ITA	Integrated Transport Assessment
LTP	Auckland Council Long Term Plan (10 year budget)
NDC	Auckland Council Stormwater Network Discharge Consent
NES-CS	National Environmental Standard on assessing and managing contaminants into soil to protect human health
NIMT	North Island Main Trunk Railway line
NoR	Notice of Requirement
NPS-FM	National Policy Statement on Freshwater Management 2020
NPS-UD	National Policy Statement for Urban Development 2020
NZUP	New Zealand Upgrade Programme
OSIR	Open Space – Informal Recreation zone
PPC48	Private Plan Change 48
RLTP	Regional Land Transport Plan
RMA	Resource Management Act 1991
RPS	Regional Policy Statement (e AUP)
SEA	Significant Ecological Area
SGA	Te Tupu Ngātahi / Supporting Growth Alliance
SH	State Highway

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SMAF1	Stormwater Management Area Control – Flow 1
SMP	Stormwater Management Plan
TOD	Transit Orientated Development
THAB	Residential – Terrace Housing and Apartment Buildings zone
WK / NZTA	Waka Kotahi NZ Transport Agency

EXECUTIVE SUMMARY

- 1. Kiwi Property No 2 Ltd seeks to rezone 95 hectares of land in Drury, South Auckland, generally in the area bounded by Great South Road, Waihoehoe Road, Fitzgerald Road and the Hingaia Stream, from Future Urban to approximately 35 hectares of Business: Metropolitan Centre zone, approximately 51.5 ha of Business: Mixed Use zone surrounding the Metropolitan Centre and approximately 8.5ha Open Space: Informal Recreation zone adjoining the Hingaia Stream. The plan change request seeks to introduce a new Drury Centre Precinct.
- 2. The normal plan change process set out in Schedule 1 of the Resource Management Act 1991 ('RMA') was adhered to in the processing of Proposed Private Plan Change 48 (PPC48). PPC48 is a private plan change request (that included a section 32 evaluation report) that was made to the Council by Kiwi Property No. 2 Ltd on 22 December 2019 in accordance with Clause 21 of Schedule 1 RMA.
- 3. Further information was sought in accordance with Clause 23 to Schedule 1 RMA. PPC48 was subsequently accepted by the Council under clause 25(2)(b) of Schedule 1 of the RMA by Council's Planning Committee on 2 July 2020.
- 4. PPC48 was notified for public submissions on 27 August 2020. The notification period was doubled to 40 working days. 35 submissions were received, raising 267 submission points.
- 5. The Summary of Decisions Requested was notified for further submissions on 11 December 2020. 10 further submissions were received before the closing date of 29 January 2021. There were no late submissions.
- 6. This hearing report has been prepared in accordance with section 42A of the RMA. The report provides an assessment of the plan change request against relevant statutory tests taking into account the issues raised by submissions and further submissions on the plan change request.
- 7. The discussion and draft recommendations in this report are intended to assist the Hearing Commissioners, the requestor and those persons or organisations that lodged submissions on PPC48. The recommendations contained within this report are not the decisions of the Hearing Commissioners.
- 8. Note: This report was prepared on the basis of the proposed plan change as notified and taking into account resulting submissions. As discussed in this report, the notified plan change request assumed that the Mill Road extension would be in place by 2028, based on the timing set out in the 2020 NZ Upgrade Programme (NZUP). On the 4 June 2021 the Government announced a review of NZUP which involved a downgrading of the Mill Road project. It has not been possible in the time available to understand the substantial implications for the plan change request of this reprioritisation of the Mill Road project to a focus on safety issues. This is a matter that the requestor needs to address and it is possible that substantial revisions will be needed, which if not clarified, would lead to significant uncertainty over the likely effects of the plan change request, sufficient to justify refusal of the request. The following assessment should be considered in this context.
- 9. At a strategic level, the Private Plan Change request is in accordance with the land use mix and intensity proposed for the Drury area (as set out in the Auckland Plan and Council's Drury-Opāheke Structure Plan). The intention is to enable a large commercial and employment centre in the southern part of the region, co-ordinated with regional road

- and rail access, and supported by a high intensity of housing. A transit-oriented form of development is proposed. I support this high-level outcome.
- 10. However, realisation of this outcome is dependent upon substantial investment in supporting infrastructure, particularly transport infrastructure. The Council's Future Urban Land Supply Strategy indicates that the land subject to the plan change requests should be urbanised from 2028 onwards. Rezoning ahead of this timeframe creates a potential for a degree of misalignment between development and infrastructure provision. Having said that, there is some certainty over the funding and provision of key public transport infrastructure such as a new train station and electrification as set out in the Government's NZUP programme (as updated) and the recently released Auckland Transport Alignment Project 2021-31 update.
- 11. Submitters have sought refusal of the plan change until funding and provision of infrastructure has been determined. The requestor proposes that funding uncertainties can be resolved by way of Precinct provisions (land use thresholds, which when exceeded require local road upgrades). These would provide a 'back stop' to development occurring before necessary road-based infrastructure is in place.
- 12. My assessment of these issues is that ensuring public transport services are in place from day one is critical to land use outcomes. In my view there is sufficient certainty that key public transport infrastructure, being the Drury Central station, will be provided for the rezoning to proceed. However, the link between land use development and public transport infrastructure needs to be strengthened. I have proposed a revised approach to the triggers set out in the plan change request to ensure that train station is operational prior to development being occupied, and that as development occurs, necessary walking, cycling and bus linkages to the train station and the wider regional network are provided from the start (for example, if the first stage of development is remote from the train station, then safe and direct linkages need to be provided).
- 13. In relation to road upgrades for vehicle traffic, whether Mill Road extension is operational is critical to likely traffic flows through Great South Road / Waihoehoe Road. My opinion is that the rezoning can proceed without certainty over the timing of Mill Road extension, but there will need to be a revised approach to assessment of traffic impacts at the time of each subdivision and development, taking into account the existence or not of Mill Road.
- 14. A transit-orientated form of development leads to recommendations to amend the proposed zoning, as a consequence of the likely future station location. In my judgement, sub-precinct E should be zoned Business: Metropolitan Centre zone and sub-precinct B should be zoned Business: Mixed Use zone, with an increase to building height (for example to 50m). This would then create a pattern of metropolitan centre zoning focused on the immediate station environs, wrapped around with a mixed use zoning, transitioning to residential in the associated plan change areas (PPC 49 and 50). This means that the metropolitan centre zoning would be spread over a number of different landholdings. I see this as being beneficial in the long term.
- 15. Other issues raised by the request and submissions relate to protection of stream corridors, mitigation of flooding effects, urban design and open space provisions. These issues can be resolved to a satisfactory level through amendments to the proposed plan change provisions. In particular, the open space elements of the future urban form will be critical to the long-term success of the intensive environment envisaged for the area. The blue-green corridors will be important, along with appropriate open spaces. I would recommend that the streams that traverse the area be identified on the precinct plan and the two key corridors of the Hingaia and Fitzgerald Streams be identified as important

- 'green corridors'. Indicative open spaces (such as neighbourhood parks) should be identified for sub-precincts C, E and F.
- 16. It is my assessment that PPC48 requires substantial re-working for it to be able to meet the various statutory tests under the RMA. In particular are significant amendments to policies and zonings that I consider are necessary to ensure that the objectives of the Precinct (and the National Policy Statement for Urban Development (NPS-UD) and Regional Policy Statement of the Auckland Unitary Plan (RPS)) are effectively and efficiently implemented. These relate to public transport accessibility, increased intensity around the proposed train station and enhanced urban realm outcomes.
- 17. It is recommended that PPC48 be approved with modifications in response to submissions. Section 10 sets out a range of possible amendments to the plan change to better align the plan change with the RPS and NPS-UD. I have not provided a comprehensive 'track changes' version of the plan change due to the extent and interrelated nature of the changes that I have recommended.

1. BACKGROUND

1.1. Plan Change Purpose

- 18. Proposed Private Plan Change 48 (PPC48) to the Auckland Unitary Plan Operative in Part (AUP) is a private plan change request from Kiwi Property No 2 Ltd which seeks to rezone 95 hectares of land in the area generally bounded by Great South Road, Waihoehoe Road, Fitzgerald Road and the Hingaia Stream, from Future Urban Zone (FUZ) to approximately 35 hectares of Business: Metropolitan Centre zone (BMC), approximately 51.5 ha of Business: Mixed Use zone (BMU) surrounding the Metropolitan Centre and approximately 8.5ha Open Space: Informal Recreation zone (OPIR) adjoining the Hingaia Stream. It also seeks to introduce a new Drury Centre Precinct plan and related provisions.
- 19. The purpose of PPC48, as outlined in the request documents, is to enable the development of a new, comprehensively planned and transit-orientated centre at Drury that supports a quality compact urban form. The plan change request also seeks to provide additional opportunities for housing along with a network of open spaces.¹

1.2. Associated Plan Changes

20. PPC48 is one of three private plan change requests to the AUP received simultaneously from Kiwi Property No 2 Ltd, Fulton Hogan Land Development Ltd. and Oyster Capital Ltd. that collectively seek to rezone 330 hectares of land in the Drury East area from FUZ to a mix of residential, business and open space zones. The overall zoning pattern sought is shown on Figure 1 below.

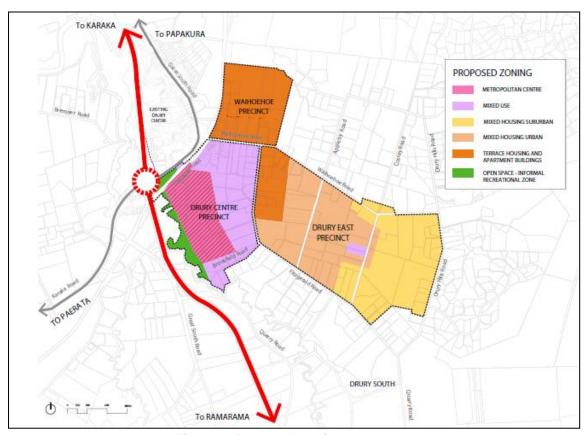


Figure 1: Proposed zoning pattern

¹ Section 5.3 of the s32 report

1.3. Location and Land Ownership

21. A locality map for PPC48 is included as Figure 2 below (plan change area outlined in blue). The requestor has large landholdings covering about half of the plan change land area, outlined in red, with the other properties within the area in private ownerships.



Figure 2: Locality Plan

1.4. Existing Environment

- 22. The proposed plan change area is situated in close proximity to the Southern Motorway's Drury interchange. The North Island Main Trunk (NIMT) railway line is located to the immediate north of the plan change area. High power transmission lines are located close to the banks of the Hingaia Stream.
- 23. The overall topography of the area is relatively undulating with several elevated ridgelines. The western boundary of the plan change area is traversed by the Hingaia Stream, and the northern extent of the plan change area is traversed by the Fitzgerald Stream, both draining ultimately to the Manukau Harbour via Pahurehure Inlet and Drury Creek. Across the plan change area there are permanent and intermittent stream tributaries of the Hingaia and Fitzgerald streams, as well as three small wetlands.
- 24. Vegetation within the plan change area is characterised by exotic pasture and trees and shrubs planted for shelter, amenity or as part of gardens. Mature native and exotic trees with a well-developed understorey have been identified on the site at 120 Flanagan Road. Riparian vegetation along identified streams comprises mainly grasses and weed species, with little continuity.

- 25. The plan change area is currently used primarily for farming activities as well as rural lifestyle blocks.
- 26. To the north of the plan change area lies the existing Drury township and business area, while to the south is the developing Drury South industrial area. The Drury township and business area north of the plan change area is subject to flooding from the Hingaia Stream.
- 27. The upper reaches of the Drury Creek, into which the Hingaia and Fitzgerald streams discharge to, is classified as a Significant Ecological Area (SEA) - Marine 1, under the AUP² due to the presence of marsh land. The classification also recognises the area as a migration path between marine and freshwater habitats for a number of native freshwater fish. A terrestrial ecology SEA³ applies to the fringes of the Drury Creek. The AUP notes that the receiving environments downstream of the plan change sites are highly sensitive to additional contaminants.
- 28. Relevant features of the plan change area are shown in Figure 3, based on Council's GIS information. Shown are streams and estimated flood plains, as well as the National Grid transmission corridor to the west. The land north of Flanagan Road and the NIMT (at 105 Flanagan Road) is designated by Watercare Services for Water supply purposes - pump station and associated structures (designation 9566).

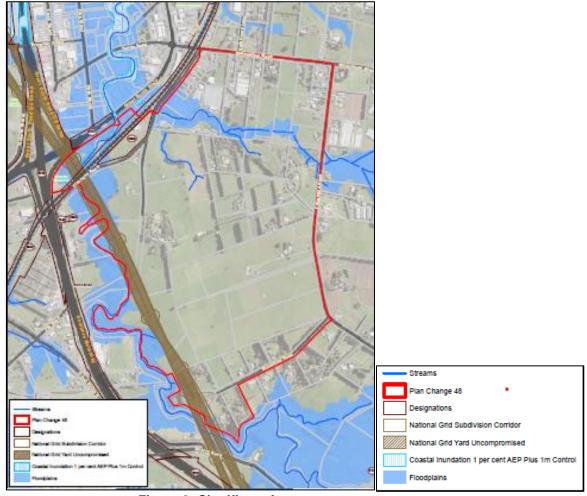


Figure 3: Significant features

² (SEA-M1-29b)

³ (SEA T 530)

1.5. Notices of Requirements and Drury Central Station

29. Auckland Transport (AT) and Waka Kotahi NZ Transport Agency (Waka Kotahi), as requiring authorities under the RMA, issued Notices of Requirements (NoRs) in January 2021 for a number of new designations for future strategic transport corridors in the area. These designations are to support the planned urban growth in the Drury-Opāheke area. Of relevance to PPC48 are the following three NoRs:

D2 Jesmond to Waihoehoe West Frequent Transit Network (FTN) Upgrade ·

Widening of Waihoehoe Road from the Norrie Road/Great South Road intersection to Fitzgerald Road to a four-lane FTN urban arterial with separated active transport facilities.

D3 Waihoehoe Road East Upgrade ·

Widening of Waihoehoe Road east of Fitzgerald Road to Drury Hills Road to a twolane urban arterial with separated active transport facilities.

D4 Ōpāheke North South FTN Arterial ·

A new four-lane FTN urban arterial with separated active transport facilities from Hunua Road in the north to Waihoehoe Road in the south.

30. These routes are shown in Figure 4 (sourced from the NoR documents).

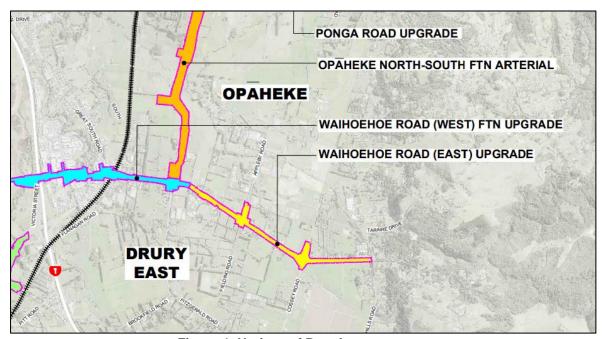


Figure 4: Notices of Requirements

31. As described in the NoR documents, the purpose of the NoRs is to reserve land for future implementation of the strategic transport corridors needed to support urban development in the area. The NoRs note that although developer plans aim to accelerate growth in Drury, funding of the Drury Arterial Network is currently uncertain and construction staging and timing has yet to be confirmed. As such the proposed transport corridors need to be protected so that they can be implemented in the future when required. A lapse period of 15 years is proposed for NoR D2 and D3 as they are predicted to be implemented by 2028.

A lapse period of 20 years is proposed for NoR D4 as this is predicted to be implemented after 2028.⁴

- 32. Submissions on the NoRs closed on 21 May 2021.
- 33. In addition, KiwiRail are progressing plans for a new Drury Central train station. This station would be located south of Waihoehoe Road, further north than indicated in PPC48 precinct plans. The RMA processes associated with authorising the works to establish the station are in progress. I understand that KiwiRail are seeking to have the station operational in late 2025.

1.6. Lodged Documents

34. The requestor has provided the following reports and documents to support its request:

Section 32 assessment report – Drury – Kiwi Property Holdings No. 2 Limited Private Plan Change Request, prepared by Barker & Associates, dated August 2020

Appendix 1: Drury Centre Plan Change

Appendix 2: Plan Change Zoning Map

Appendix 3: List of Properties within the Plan Change Area

Appendix 4: Drury-Opāheke Structure Plan

Appendix 5: Analysis of Alternative Staging

Appendix 6: Auckland Unitary Plan Objectives and Policies Assessment

Appendix 7: Urban Design Assessment, prepared by Barker & Associates, dated 12 December 2019

Appendix 8: Drury Centre Economic Assessment, prepared by Market Economics, dated 20 March 2020

Appendix 9: Papakura Metropolitan Centre Household Sector Activity - Land Use Survey Analysis, prepared by Market Economics, dated 16 September 2019

Appendix 10: Integrated Transport Assessment, prepared by Stantec, dated 30 March 2020

Appendix 11: Ecological Assessment, prepared by Tonkin + Taylor, dated 17 September 2019

Appendix 12: Stormwater Management Plan, prepared by Tonkin + Taylor and Woods, dated 30 June 2020

Appendix 13: Engineering and Infrastructure Report, prepared by Blue Barn Consulting Engineers, dated 9 September 2019

Appendix 14: Archaeological Assessment, prepared by Clough & Associates Ltd, dated September 2019

Appendix 15: Heritage Assessment, prepared by Matthews & Matthews Architects Ltd, dated August 2019

Appendices 16-19: Cultural Value Assessments prepared by Ngāti Te Ata, Ngāi Tai ki Tāmaki, Te Ākitai Waiohua, and Ngāti Tamaoho respectively

Appendix 20: Geotechnical and Contamination Report, prepared by ENGEO Limited, dated 13 August 2019

Appendix 21: Air Quality Assessment, prepared by Tonkin + Taylor, dated 8 August 2019

Appendix 22: Acoustic Assessment, prepared by Marshall Day, dated 13 September 2019

Appendix 23: Soils Assessment, prepared by AgFirst, dated 20 October 2019

Appendix 24: Iwi Consultation Summary

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⁴ Drury Arterial Network, Assessment of Effects on the Environment, page 17.

Appendix 25: National Policy Statement for Freshwater Management and Auckland Unitary Plan Comparative Analysis

Appendix 26: Comparison of Auckland-wide and Precinct Provisions

Appendix 27: Pukekohe Economic Assessment, prepared by Market Economics, dated 20 March 2020

Appendix 28: Landscape and Visual Effects Assessment, prepared by Boffa Miskell, dated 5 February 2020

1.7. Clause 23 Requests for Further Information

- 35. The private plan change request was lodged with the Council on Tuesday 22 December 2019. A Clause 23 Request for Further Information was sent to the requestor on 5 March 2020. The purpose of the request was to enable Council to better understand the effects of the plan change on the environment, the ways in which adverse effects may be mitigated, the benefits, costs, efficiency and effectiveness of the plan change and any possible alternatives to the request. The key information sought related to the following matters:
 - Transit-orientated development
 - Co-ordination / integration across the three plan changes
 - Staging of development and infrastructure
 - Urban form and rail station location
 - AUP objectives and policies
 - Implementation methods
 - Section 32 assessment
 - Urban design
 - Streams and riparian margins
 - Stormwater and flooding
 - Ecological effects
 - Transportation effects
 - Landscape and visual effects.
- 36. A series of meetings and discussions were then held with the requestor to clarify various points and amended plan change provisions were supplied by the requestor, along with a range of additional information.
- 37. A second clause 23 request was sent to the requestor on 21 April 2020 in relation to stormwater/flood hazards, transport and economic matters, and a response was received on 28 April 2020.
- 38. The requests for further information and responses are attached in full in Appendix 3 to this report.
- 39. The plan change request was accepted by the Council under clause 25(2)(b) of Schedule 1 of the RMA by Council's Planning Committee on 2 July 2020.

2. STRATEGIC CONTEXT

40. This section of the report sets out the strategic context to the plan change request. The section discusses non-statutory documents like the Auckland Plan, the Future Urban Land Supply Strategy and the Drury-Opāheke Structure Plan. The NPS-UD, which is a statutory document, is also addressed at a high level.

2.1. Auckland Plan

- 41. The Auckland Plan 2050 is prepared in accordance with sections 79 and 80 of the Local Government (Auckland Council) Act 2009.
- 42. In terms of the form of future urban development, the Auckland Plan takes a quality compact approach to growth and development. The Auckland Plan defines quality as:
 - most development occurs in areas that are easily accessible by public transport, walking and cycling;
 - most development is within reasonable walking distance of services and facilities including centres, community facilities, employment opportunities and open space;
 - future development maximises efficient use of land; and
 - delivery of necessary infrastructure is coordinated to support growth in the right place at the right time.
- 43. The compact aspect of this approach means that:
 - future development will be focused within Auckland's urban footprint, with most of that growth occurring in existing urban areas
 - by 2050, most growth will have occurred within this urban footprint, limiting both expansion into the rural hinterland and rural land fragmentation.
 - This approach contributes to investment certainty by understanding where and when growth is likely to occur.
- 44. The Auckland Plan's Development Strategy shows a number of urban expansion areas in the southern sector, including Drury East (the location of the plan change request) see Figure 5. Papakura is shown as a redevelopment area from 2021.

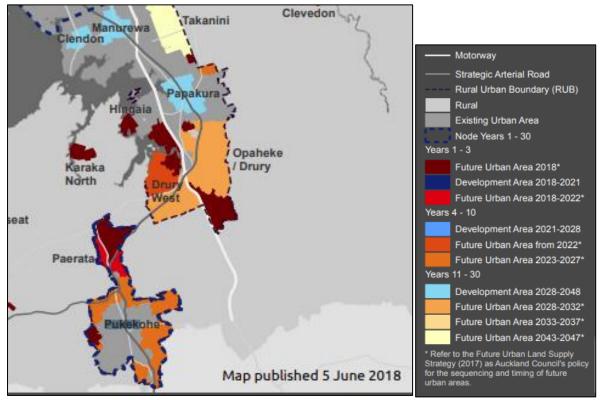


Figure 5: Auckland Plan Development Strategy Map

2.2. Drury-Opāheke Structure Plan

- 45. The Council's Drury-Opāheke Structure Plan (or Structure Plan) see
- 46. Figure 6 below adopted by the Council in August 2019, sets out a pattern of land use and a network of infrastructure for the FUZ land at Drury and Opāheke (covering 1,921ha). The structure plan is intended to be the foundation to inform future plan changes to rezone the land and is a requirement under the AUP before FUZ areas can be 'live' zoned and urbanised. The structure plan is not part of the AUP.

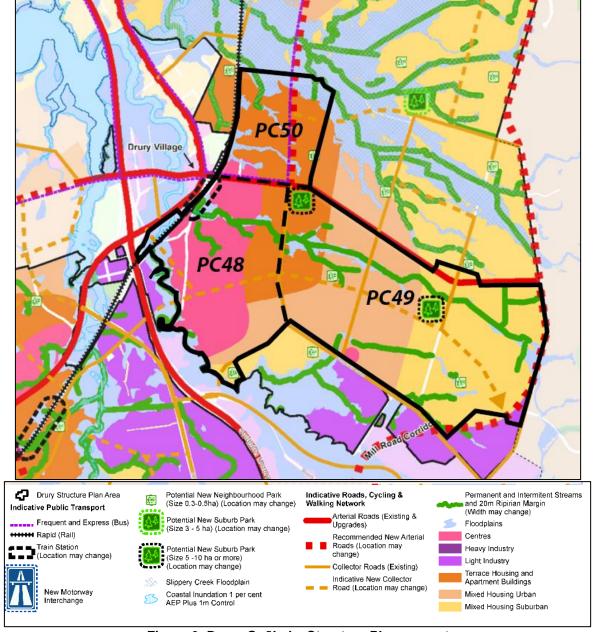


Figure 6: Drury-Opāheke Structure Plan excerpt

47. The structure plan indicates a substantial centre at Drury East and large areas of housing to the east and west of the motorway. Housing development that has commenced to the north-west of the motorway in the Bremner Road area is anticipated to be served by transport infrastructure that will be developed in the Drury East area, such as the proposed Drury Central train station. To the east and north-east of the combined plan change request areas lies further FUZ land which are the subject of Plan Changes 52 and 56, with

- residents of these future housing areas also wishing to access the jobs and amenities to be developed in the plan change request area.
- 48. Over 30 years the structure plan is estimated to provide space for about 22,000 houses and 12,000 jobs, with a build out population of about 60,000 people.
- 49. The land use zonings proposed in PPC48 are largely consistent with the land use pattern set out in Council's structure plan. The structure plan shows a non-specific 'centre' zoning over much of the land, where BMC and BMU zoning is sought to be applied by PPC48. BMU zoning is also sought to be applied to areas of residential zoning shown on the structure plan. The precinct provides for an 'enhanced' BMU zone intended to accommodate intensive residential activities, with provisions aimed at protecting residential amenity (see section 4.2 below).
- 50. The structure plan does not make any specific comment on timing of development. The structure plan states that work is ongoing to develop a staging plan.

2.3. Future Urban Land Supply Strategy

- 51. The Council's Future Urban Land Supply Strategy 2017 (FULSS) sequences the release of future urban land with the supply of infrastructure over 30 years for the entire Auckland region. The FULSS has a regional focus and attempts to provide a sustainable path for greenfields expansion to the north, west and south of the Auckland urban area. The FULSS strategy sits alongside council's (and central government's) aspirations for considerable brownfields redevelopment.
- 52. The intended staging of growth in Drury-Opāheke set out in the FULSS is:
 - (a) Drury west of SH1 and north of SH22 is to be development ready from 2022
 - (b) the remainder of the Drury-Opāheke structure plan area (including all three Drury East plan change areas) is to be development ready by between 2028 and 2032.
- 53. In this context development ready means that urban zoning and bulk infrastructure is provided.
- 54. The FULSS (and the Structure Plan Guidelines of the AUP) seek that structure planning that occurs in accordance with the timing of the FULSS will be accompanied by a funding plan that is co-ordinated with the timing of rezonings. The funding plan will see funding commitments made in the Council's Long Term Plan, the Regional Land Transport Plan and where relevant, Development Contributions policy. This is to ensure infrastructure is co-ordinated with development.
- 55. The plan change request, if made operative, would likely result in development occurring earlier than the 2028 timing set out in the FULSS.
- 56. The FULSS timing for Drury East reflects a range of matters, including uncertainties as to infrastructure funding of upgrades of key regional transport networks (State Highway 1, Mill Road extension, rail network) when the strategy was refreshed in 2017, as well as staging the release of greenfields land in a manner that enables efficient provision and funding of network infrastructure (which is financed and funded by public agencies).
- 57. The Drury area is one part of a wider programme of facilitating managed urban expansion. In the first decade of the Auckland Plan's 30-year time horizon, the FULSS identifies a capacity of 22,000 dwellings in greenfields growth areas of Warkworth North, Paerata, Whenuapai Stage 1, Drury West Stage 1, Pukekohe and Cosgrave Road Takanini.

- 58. The 22,000 dwellings to be enabled in decade one comes on top of capacity which is already live zoned. For example, in the south this includes the Bremner Road Special Housing Area (1,350 dwellings); Wesley (Paerata) (4,550 dwellings); and Belmont areas. Large areas are also being urbanised in Redhills and Wainui in the north-west and north of the region (areas that were live zoned during the AUP development process by the Independent Hearings Panel).
- 59. In the Drury area, in 2016 the Council approved a plan change request by Karaka and Drury Limited to rezone 84.6 hectares of land in a Special Housing Area at Bremner Road (Auranga A). In 2018 a plan change request by Karaka and Drury Limited to rezone an additional 83 hectares of land adjacent to Auranga A was approved. A further private plan change request (PPC 51) was notified at the same time as this plan change (August 2020), seeking to further extend the Drury West development area by creating a town centre (north of State Highway 22). The centre is intended to serve the growing Auranga community. Overall, the Drury West area north of SH22 could have capacity for up to 7,500 dwellings (more than the 5,500 anticipated by the FULSS and existing zonings).

2.4. Infrastructure Funding

- 60. The urbanisation of the Drury-Opāheke area requires a number of transport infrastructure upgrades to support the planned growth. This is in terms of infrastructure needed to mitigate direct effects of the new housing and businesses on the local transport network, as well as the cumulative impact of growth on the strategic network.
- 61. Te Tupu Ngātahi / Supporting Growth Alliance (SGA) has identified a range of public transport and arterial roading projects for the wider Drury area needed to support growth in the area, with work progressing on business cases and designations for these projects, but not all of the projects have secured funding. The SGA work has identified the importance of a 'public transport first' approach to transport investments. A transit-orientated form of growth is needed to address the limited capacity of the strategic road network.
- 62. SGA modelling assumes very high take up of public transport use by workers and residents. For example, for high density residential development, modelling assumes a start value of 23% of trips by public transport, increasing by 100% of that by full development (i.e. 23% point increase over 40 years) ending in upwards of 40 to 50% of trips by 2048.
- 63. In addition to transport, there is other infrastructure that requires funding for the three Drury East plan change areas, including stormwater upgrade to culverts under the rail line and Great South Road. Extensive restoration works may be needed in the main stream corridors to address stream bank erosion.
- 64. Since the FULSS and Drury-Opāheke Structure Plan were prepared, Council, Central Government and key parties have been working on a Drury Transport Investment Programme (DTIP) to identify required funding and financing of necessary 'network' transport infrastructure in the wider Drury area.
- 65. The 2018 Regional Land Transport Plan (RLTP) made no specific provision for transport investment in the Drury East area, reflecting the timing of urbanisation of Drury East as set out in the FULSS, which identified that urban development of this area is to occur in the 2nd decade of the strategy (2028 to 2038). The 2018 RLTP has committed most funds to works in the north and north-west of the Region.

- 66. In January 2020, central government announced the New Zealand Upgrade Programme (NZUP) package of investments. This covers core transport infrastructure in the Drury area. The following infrastructure is proposed:
 - Upgrading Mill Road to four lanes and connecting Manukau to Drury.
 Construction on the first stages is expected to start in late 2022 with the full project complete in 2027/28.
 - Widening SH1 from Papakura to Drury and building a cycleway alongside it. Construction has started and is expected to take until late 2025 to complete.
 - Electrifying the railway track between Papakura to Pukekohe with space for additional lines for future growth.
 - Two new railway stations in Drury Central and Drury West, along with 'park and ride' facilities. Construction of these is expected to start in 2023 and be completed by late 2024.
- 67. In June 2021, the Government announced a reset of the NZUP. In particular Mill Road extension was downgraded to safety improvements, and the new motorway interchange at Drury South was removed from the package of works.
- 68. The NZUP does not address all transport needs in the Drury area, although central government funding of some of the projects may release funds for other Council-led projects, since budgets for these projects were previously set aside in Council's Long Term Plan.
- 69. Projects identified by SGA not covered by the NZUP package (discussed later in sections 8.2 and 8.7) include:
 - A new north-south arterial road connection from Hunua Road in the north to Waihoehoe Road in the south, which will provide a link between the Opāheke industrial area and Drury East (Opāheke north-south connection). The plan change provisions only provide for a 'collector' type road.
 - An upgrade to the section of Waihoehoe Road between the proposed Opāheke north-south connection and Mill Road extension (Waihoehoe Road south upgrade).
 - Bus priority measures on Waihoehoe Road west of the Opāheke north-south connection, along with likely replacement of the Waihoehoe Road overbridge.
 PPC48 as notified assumes that these works will be delivered by other parties.
 - Pitt Street extension involving a bridge over the southern motorway, providing for an alternative east-west link.
 - Upgrade of Great South Road to a FTN Standard
 - Walking and cycling links between east and west Drury.
- 70. Some of these projects (e.g. Waihoehoe Road and Opāheke North-South route) are the subject of Notices of Requirement issued by SGA agencies (Auckland Transport and Waka Kotahi). Completion of the Opāheke North-South Road is dependent upon urban development to the north of the plan change request areas, which may not occur until 2038+, while the benefits of the Pitt Street connection are uncertain (although this would provide for a useful walking and cycling link between east and west Drury).
- 71. The SGA projects are therefore important to local connectivity, safe walking and cycling, bus priority and access to local employment and amenities.
- 72. The Drury infrastructure requirements sits alongside other region wide funding commitments associated with urban development to the north and west, as well as the Auckland Housing Programme.

- 73. The Auckland Transport Alignment Project (ATAP 2021 to 2031) was released in April 2021. This is an agreement between central government and Auckland Council over transport projects. The investment programme has provided some further detail in funding for supporting growth projects. Along with the NZUP projects, ATAP provides for the following:
 - "Drury & Paerata Growth Area Funding for transport infrastructure in the Drury area to support the NZUP investment. \$243m".
- 74. However, actual funding commitments will need to be made in the next iteration of the RLTP. The Draft 2021-2031 RLTP states that almost \$250 million is proposed to support the accelerated development of the Drury growth area through public transport links, including to the new Drury rail stations. This is in addition to the new stations themselves, the Mill Road Corridor, SH1 widening to Drury South, and new SH1 Drury South Interchange funded through NZUP.⁵
- 75. The draft RLTP notes that with limited funding available, the priority is route protection, property purchase and infrastructure to support the effective operation of rapid transit and bus links for these areas, rather than additional road capacity.
- 76. Council's draft 2021 Long Term Plan (LTP) identifies that the Council is investigating additional infrastructure requirements to support a large number of growth areas across Auckland. However, funding and financing new infrastructure in all of those areas is a major challenge. The LTP states that the focus of limited infrastructure investment capacity will be in a few key areas:
 - areas agreed with the government as part of the Auckland Housing Programme, including Mt Roskill, M\u00e4ngere, T\u00e4maki, Oranga and Northcote
 - where significant government investment has been made, such as Drury in Auckland's south, and areas in Auckland's north-west
 - where investment in significant projects, such as the City Rail Link, is being made.
- 77. The draft LTP states that the Council is not in a position to cover all the potential costs in the focused areas, and there will need to be prioritisation of projects within these areas. This focused approach will mean that the Council will not be heavily investing in infrastructure to support other growth areas in the short to medium term beyond that which is already committed. The plan notes that the Council will continue to work with central government and private sector developers to explore alternative ways to progress development. This could include using the new Infrastructure Funding and Financing Act 2020.

2.5. National Policy Statement on Urban Development

78. The National Policy Statement on Urban Development (NPS-UD) came into force on the 20 August 2020, after PPC48 was accepted by the Council, and post the Auckland Plan and FULSS being prepared. The details of the policy statement are addressed below. At a strategic level, the Statement reinforces the need for RMA plans to provide sufficient capacity to accommodate the next 10 years growth, taking into account what is feasible and likely to occur. Infrastructure must be co-ordinated with this capacity. The Statement (Objective 3) expects that Regional Policy Statements and district plans will enable more people to live in, and more businesses and community services to be located in or near a

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⁵ DRAFT Auckland Regional Land Transport Plan 2021–2031, page 58.

centre zone or other area with many employment opportunities that is well-serviced by existing or planned public transport and there is high demand for housing or for business land in the area, relative to other areas within the urban environment.

3. EXISTING PLAN PROVISIONS

- 79. The land subject to the plan change is zoned Future Urban Zone (FUZ) under the AUP. The FUZ is a transitional zone applied to greenfield land that has been identified as suitable for urbanisation. Land in the FUZ may be used for a range of general rural activities, with urban activities either enabled by a plan change that rezones the land for urban purposes, or which are authorised by resource consent.
- 80. The area surrounding PPC48 to the north and east is zoned FUZ. To the south is Drury South industrial precinct, zoned Business Light Industry. To the north-west across the railway line is the existing Drury Centre with a range of zones.
- 81. The land is also subject to the following AUP overlays and controls:
 - High-Use & Quality-Sensitive Aquifer Management Area Drury Sand Aquifer
 - Macroinvertebrate Community Index Rural and Urban
 - Infrastructure: National Grid Corridor Overlay National Grid Yard Uncompromised
 - Infrastructure: National Grid Corridor Overlay National Grid Subdivision Corridor.

4 PROPOSED PLAN CHANGE PROVISIONS

82. The approach of the proposed plan change is to rely largely on standard AUP zones and Auckland-wide provisions to manage the way in which the plan change area is to be used and developed. The plan change seeks to introduce a precinct to "enable local differences to be recognised by providing detailed place-based provisions which can vary the outcomes sought by the zone or Auckland-wide provisions and can be more restrictive or more enabling" as per A1.6.5 of the AUP.

4.1 Proposed Zones and Overlays

- 83. The proposed zoning layout is shown on Figure 7 below. PPC48 seeks to rezone 95 hectares of FUZ land for urban development, which will comprise:
 - 35 Ha Business Metropolitan Centre (BMC) zone;
 - 51.5 Ha Business Mixed Use zone (BMU); and
 - 8.5 Ha Open Space Informal Recreation (OSIR) zone.
- 84. The BMC zone is applied to centres located in different sub-regional catchments of Auckland which are second only to the city centre in overall scale and intensity. The BMC zone is proposed to apply to the western portion of the plan change area.
- 85. The BMU zone is typically located around centres and along corridors served by public transport. It is intended as a transition area, in terms of scale and activity, between residential and centre zones. The BMU zone is proposed to apply to the north, east and south of the BMC zone, providing a transition to the residential areas in the other two adjoining Drury East private plan changes.
- 86. The OSIR zone is applied to open spaces that range in size and are used for a variety of outdoor informal recreation activities and community uses. The OSIR is proposed on the western boundary of the plan change area adjacent to the Hingaia Stream, to provide a

buffer between the centre and the stream/SH1. The boundary between the BMC and OSIR also aligns with the location of National Grid transmission lines.

87. In addition, it is proposed to apply the Stormwater Management Area Control – Flow 1 (SMAF1) overlay to the entire plan change area. All other existing controls and overlays identified in the AUP will continue to apply to the plan change area.



Figure 7: Proposed Zoning Plan

4.2 Precinct Provisions

88. A new 'Drury Centre Precinct' is proposed to be applied to the plan change area, with corresponding plan provisions added to Chapter I of the AUP, as set out in Appendix 1 to the plan change documentation. The precinct provisions are described in section 5.1.7 of the section 32 evaluation report. Three precinct plans are proposed showing subprecincts, building heights, spatial features (including future roads, train station and selected open spaces), and transport staging boundary.

- 89. The precinct is described as providing for the development of a new, comprehensively planned and transit-orientated centre at Drury that supports a quality compact urban form. There will be a core centre, anchored by a future train station in the north, a retail main street and a number of open spaces. The main street will seek to provide a pedestrian orientated experience, typically with fine grain retail frontages and a high amenity street environment. The core centre will be surrounded by supporting activities, including high density residential to the north and east, and large format retail and associated activities to the south. The streets through the high density residential areas to the north and south of the centre will aim to offer a high quality pedestrian environment, while allowing some residential activities to locate at ground floor.
- 90. The precinct seeks to create a unique sense of place for Drury, by integrating existing natural features with development. The precinct also seeks to maintain and enhance waterways and integrate them with the open space network as a key feature. It also seeks to ensure that the development of land for business and housing is coordinated with the construction of the transport network upgrades necessary to support it.
- 91. Six sub-precincts are proposed as follows (see Figure 8):
 - Sub-precinct A (with underlying BMC zone) will contain the primary retail area, Main Street and civic and green open spaces. The sub-precinct is expected to be the focal point for intensive retail, commercial and civic development and pedestrian activity:
 - Sub-precinct B (BMC zone) is intended to be the primary location for large format retail, while also providing for other commercial and residential activities;
 - Sub-precinct C (BMU zone) provides for high density residential and a range of commercial activities. Six to eight storey buildings are enabled;
 - Sub-precinct D (BMC zone) provides for the establishment of the Drury Central Train Station, associated Park-and-Ride and transport interchange, and a public plaza;
 - Sub-precinct E (BMU zone) provides for high density residential and a range of commercial activities. Eight to ten storey buildings are enabled, and flexible ground floor designs are encouraged:
 - Sub-precinct F (BMU zone) applies to the south-eastern part of the Drury Centre Precinct. Additional assessment criteria apply to the staging of pedestrian and cycle connections to the Drury Central Train Station in sub-Precinct F and additional residential standards apply.

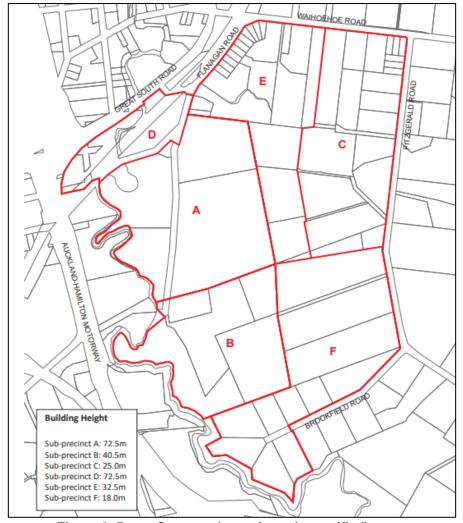


Figure 8: Drury Centre sub-precincts (as notified)

- 92. Seven precinct-specific objectives and twenty precinct-specific policies are proposed. Objectives include that Drury Centre is a transit-orientated development and the preeminent centre serving Drury and the wider area. Drury Centre is to be developed to create a distinctive sense of place, and provide a high quality pedestrian experience.
- 93. Policies set out the intended land use pattern with the greatest density of retail and commercial activities being in sub-precinct A, the primary location for large format retail being sub-precinct B, and high density residential and intensive employment in sub-precincts C, E and F.
- 94. Street network and built form policies describe the street layout connectivity and design outcomes sought, with a focus on sub-precinct A.
- 95. Infrastructure and staging policies address the coordination of development with necessary local transport infrastructure upgrades, pedestrian and cycling connections to the Drury Central train station, and the provision of stormwater, wastewater and water supply infrastructure.
- 96. Ecology policies address stream health and values, the need for diversion and possible reclamation of streams, and riparian margin planting.

- 97. Key differences introduced by the precinct rules in comparison to the standard Aucklandwide and zone rules, as notified, include:
 - The precinct includes staging provisions for development and subdivision to coordinate these with required transport infrastructure upgrades. The precinct rules replace the Auckland-wide trip generation rule (E27.6.1) with customised thresholds linked to required transport upgrades, and also link those upgrades to number of dwellings and commercial/retail Gross Floor Area. A discretionary activity status applies to non-compliant (out-of-stage) development and subdivision.
 - All new buildings and alterations/additions to buildings not provided for are restricted discretionary activities with discretion over design, layout/appearance, and servicing.
 - The precinct rules replace the zone building height standards (H9.6.1 and H13.6.1) which are 72.5m in the BMC zone, 18m in the BMU zone, or a specified Height Variation Control. This is replaced with height limits varying by sub-precinct, from 72.5m in sub-precincts A and D to 18m in sub-precinct F (see Figure 8).
 - Daylight and outdoor living space standards are applied to residential activities within sub-precincts C, E & F (applying the standards from the Terrace Housing and Apartment Building Zone (THAB zone).
 - Stormwater quality rules from Chapter E9 apply, but all roads need to meet the standards, rather than just high use roads.
 - A standard is included requiring riparian margin planting of 10m width on all permanent and intermittent streams, and a 20m building setback from any stream of 3m or more in width.
 - Restricted discretionary activity status applies to all new public or private roads, with discretion over location, design, cycling and pedestrian networks, connections to the Drury Central train station. Appendix 1 to the precinct provisions contains customised cross sections for the roads within the precinct.
 - Restricted discretionary activity status applies to public open spaces greater than 1,000m² with discretion over location and design.
 - A 6m building line restriction applies along Waihoehoe Road to allow for future road widening.
 - Within Sub-precincts C and E, several activities are made non-complying activities (department stores, drive through restaurants, motor vehicle sales, service stations with no frontage to arterial road, trade suppliers, repair and maintenance services, storage and lockup, warehousing and storage), and industrial laboratories and light manufacturing and servicing are made discretionary activities. This relates to their potential lack of compatibility with the residential activities anticipated and the high level of amenity sought.

5 PLAN CHANGE REQUEST CONSULTATION

98. A Consultation Report is attached to the plan change request as Appendix 24 and outlines consultation undertaken with Mana Whenua and others.

5.1 Mana Whenua

- 99. The Mana Whenua groups identified by Auckland Council whose rohe covers the plan change area include:
 - Ngāti Te Ata
 - Ngāi Tai ki Tāmaki
 - Te Ākitai Waiohua
 - Ngāti Tamaoho (also with Statutory Acknowledgement across the area)

- Ngaati Whanaunga
- Waikato Tainui
- Ngāti Maru
- Te Ahiwaru Waiohua
- 100. The consultation report documents the meetings, correspondence and site visits carried out with Mana Whenua. The first five Mana Whenua groups listed have attended a number of hui to discuss the plan change. These have been to introduce the plan change / structure plan, visit the site, and discuss key elements such as transport, cultural heritage, stormwater, streams and ecology.
- 101. The requestor reports that Waikato Tainui has not attended any hui on this plan change, but has been sent draft specialist reports. It is understood from the Consultation Report attached to PPC48 that Ngāti Maru had verbally advised that they did not intend to engage on that plan change. Te Ahiwaru Waiohua had also advised that they would not engage. However, no written advice has been documented from these two Mana Whenua groups that relates specifically to this plan change and whether or not they wish to engage.
- 102. CVAs were prepared by the first four Mana Whenua groups listed in April 2019 and the key concerns are summarised in section 8.13 below.
- 103. The first six Mana Whenua groups listed were sent final draft specialist reports to review in July 2019.
- 104. A pre-lodgement hui was held in November 2019. While many issues were still under discussion, and the engagement will be ongoing as future applications are made for the plan change area, it appears from the meeting minutes that the iwi in attendance generally supported the plan change in principle.
- 105. Although not documented in the consultation report, the requestor agreed that the proposed precinct provisions would also be sent to the interested iwi for review and input before notification. There is no record of any feedback being received.
- 106. Two submissions from Mana Whenua on the notified plan change were received (Ngāti Te Ata and Ngāti Tamaoho). These are addressed in section 9 below. Both stated that there has been no meaningful engagement with Mana Whenua and sought ongoing participation, consultation and engagement.

5.2 Local Boards

- 107. A briefing by Auckland Council staff on the three private plan changes occurred with the Papakura Local Board (due to close proximity to the sites) on 14 May 2020 and the Franklin Local Board on 26 May 2020.
- 108. Following notification, Auckland Council Plans and Places met with Franklin and Papakura Local Boards again in September/October 2020.
- 109. Franklin Local Board's finalised views on PPC48 were set out in a memo dated 29 April 2021. The Local Board:
 - note that the majority of public submissions (25) support this plan change or support with amendments

- acknowledge public concerns around the funding and timing of infrastructure upgrades required to support urbanisation of these sites, particularly transport and note that these concerns reflect concerns consistently raised by communities within the Franklin Local Board area regarding green-field development
- support iwi submissions seeking ongoing iwi participation, consultation and engagement in the project, mauri of wai in the area, use of native trees, incorporation of Te Aranga design principles, riparian margin width, stormwater treatment and capture, accounting for natural and cultural landscaping
- acknowledge that designation as a metropolitan centre is likely to have a negative impact on metropolitan centres at Papakura and Pukekohe and that there is general support gained through consultation in acknowledgement of the growth in the area, but is based on development of the area as a potential centre for highvalue employment and community activity, that complements existing centres and serves emerging communities i.e. is not predominantly big-box retail
- considers it critical that local input is enabled in the development of this green-field development to ensure development creates a positive local social, environmental and economic legacy.
- 110. Papakura Local Board's finalised views on PPC48 were set out in meeting minutes dated 5 May 2021. In summary, the Local Board:
 - does not support another Metropolitan Centre in a neighbouring suburb adjacent to the existing Papakura metropolitan centre area due to economic and social cost to Papakura
 - believes the plan change land should be released in line with FULSS timing to ensure the council can manage the infrastructure costs
 - considers that the plan change must align with the already consulted on Drury-Opāheke Structure Plan
 - considers green space provision is imperative for both passive and active recreation and needs to take into account the wider parks and reserve network. The plan change appears to have very limited green space. Suitable types of open space need to be ensured (e.g. informal recreation). Connected path/cycle ways linking to reserves and key infrastructure need to be planned for
 - would like to see significant planting of trees to increase canopy coverage in the
 - is concerned about lack of off-street parking and considers two onsite car parks for every unit should be required and on street visitor parking should also be made available. Roads should be wide enough for emergency service vehicles and rubbish trucks
 - notes that public transport does not work for everyone and there is a need to cater for cars as well
 - encourages consultation with Mana Whenua and implementing recommendations into the design of the development
 - recommends appropriate stormwater treatment to ensure the optimum to the receiving environment, and rain harvesting/stormwater recycling.

5.3 Landowners / Community

111. The section 32 evaluation report states that sites within the plan change area were individually visited with an information letter delivered or contact details gathered for each owner. The letter informed of the intention to undertake a private plan change and enable a town centre, and included a draft zoning and masterplan.

112. An open day was held on 20 March 2019 with more than 300 people in attendance. The majority are documented as being receptive of a Town Centre in the proposed location. In general, the main concerns coming out of the event were the need for upgraded servicing, improved recreation and community facilities, and better public transport links.

6 HEARINGS AND DECISION-MAKING CONSIDERATIONS

- 113. Clause 8B (read together with Clause 29) of Schedule 1 of RMA requires that a local authority shall hold hearings into submissions on a proposed private plan change.
- 114. The Regulatory Committee has delegated to the Hearings Commissioners authority to determine Council's decisions on submissions on PPC48, under section 34 of the RMA. Hearing Commissioners will not be recommending a decision to the council but will be making and issuing the decision directly.
- 115. This report summarises and discusses submissions received on PPC48. It makes recommendations on whether to accept, in full or in part; or reject, in full or in part; each submission. This report also identifies what amendments, if any, can be made to address matters raised in submissions. Any conclusions or recommendations in this report are not binding on the Hearing Commissioners.
- 116. In accordance with Clause 10 Schedule 1 of the RMA, the Commissioner's decision must:
 - (a) include the reasons for accepting or rejecting the submissions and, for that purpose, may address the submissions by grouping them according to—
 - (i) the provisions of the proposed statement or plan to which they relate; or
 - (ii) the matters to which they relate; and
 - (ab) must include a further evaluation of the proposed policy statement or plan undertaken in accordance with section 32AA; and
 - (b) may include—
 - (i) matters relating to any consequential alterations necessary to the proposed statement or plan arising from the submissions; and
 - (ii) any other matter relevant to the proposed statement or plan arising from the submissions.
- 117. Clause 10(3) of Schedule 1 clarifies that to avoid doubt, a decision that addresses each submission individually is not required.
- 118. This report relies on the reviews and advice from the following experts on behalf of the council and specialist Auckland Council officers. These assessments are attached in Appendix 4 to this report.

Matter	Reviewing specialist
Transportation	Terry Church, Flow Transportation Specialists
Urban Design, Visual and Landscape	Rebecca Skidmore, R.A. Skidmore Urban Design Ltd
Economics	Tim Heath, Property Economics
Stormwater	Trent Sunich, 4sight Consulting
Ecology	Jason Smith, Morphum Environmental

Archaeology	Robert Brassey, Principal Specialist Cultural
	Heritage, Auckland Council
Built Heritage	Cara Francesco, Principal Specialist Built
	Heritage
Geotechnical	Claudia Harford, Senior Geotechnical & Natural
	Hazards Engineer, Auckland Council
Contamination	Andrew Kalbarczyk, Senior Specialist –
	Contaminated Land, Auckland Council

119. Preparation of this report has also involved attendance at three facilitated conferencing sessions covering stormwater, transport and planning matters. I refer to the outcomes of these sessions where relevant. Joint Witness Statements are attached in Appendix 5 of this report.

7 STATUTORY FRAMEWORK

- 120. 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 of the RMA (clause 22(1), Schedule 1, RMA). Clause 29(1) of Schedule 1 provides "except as provided in subclauses (1A) to (9), Part 1, with all necessary modifications, shall apply to any plan or change requested under this Part and accepted under clause 25(2)(b)".
- 121. The RMA requires territorial authorities to consider a number of statutory and policy matters when assessing proposed plan changes. The key directions of the RMA with regard to consideration of private plan changes are set out in Table 1 below.

Table 1 Sections of the RMA relevant to private plan change decision making

RMA Section	Matters
Part 2	Purpose and principles of the RMA
Section 31	Functions of territorial authorities in giving effect to the Resource Management
	Act 1991
Section 32	Requirements preparing and publishing evaluation reports including
Section 32	consideration of the alternatives, costs and benefits of the proposal
Section 67	Sets out required contents of regional plans
Section 72	Sets out that the purpose of district plans is to assist territorial authorities to
	carry out their functions in order to achieve the purpose of this Act.
Section 73	Sets out Schedule 1 of the RMA as the process to prepare or change a district
	plan
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 statement, other regulations and other matters
Section 75	Outlines the requirements in the contents of a district plan
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.
Sobodulo 1	Sets out the process for preparation and change of policy statements and plans
Schedule 1	by local authorities and private plan change applications

122. For the sake of brevity, Appendix 6 provides a full list of relevant RMA matters that need to be taken into account in decision making. 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)⁶, and subsequently updated in more recent decisions. This is outlined in Box 1.

Box 1

A. General requirements

- 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) give effect to 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 Historic Places Register 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

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⁶ Subsequent cases include Colonial Vineyard v Marlborough District Council [2014] NZEnvC 55.

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;
 - the Local Government (Auckland) Amendment Act 2004.

8 ASSESSMENT OF EFFECTS ON THE ENVIRONMENT

- 123. 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 clauses 6 and 7 of Schedule 4 of the RMA.
- 124. An assessment of actual and potential effects on the environment ("AEE") is included in the Plan Change request and supporting documents. The submitted Plan Change request identifies and evaluates the following actual and potential effects:
 - Urban form
 - Quality of built environment effects
 - Open space and community facilities effects
 - Economic effects
 - Transport effects
 - Vegetation and ecological effects
 - Flooding and stormwater management effects
 - Servicing effects
 - Heritage and archaeological effects
 - Effects on Mana Whenua values
 - Land contamination effects
 - Geotechnical effects
 - Air quality impacts
 - Noise effects
 - Effects on versatile soils
 - Landscape and visual effects.
- 125. A review of the AEE and supporting documents, taking into account further information provided pursuant to Clause 23 to Schedule 1 RMA, is provided below. In addition to the topics addressed in the AEE, I consider it also necessary to review strategic planning issues associated with capacity for development and funding and delivery of core infrastructure.

8.1 Strategic Planning: Capacity

126. Policy B2.2.2 (1) of the AUP Regional Policy Statement (RPS) requires there be sufficient land within the Rural Urban Boundary that is appropriately zoned to accommodate at any one time a minimum of seven years' projected growth in terms of residential, commercial and industrial demand and corresponding requirements for social facilities, after allowing for any constraints on subdivision, use and development of land. In a similar vein, the NPS-UD requires that there be sufficient land zoned to accommodate the next 10 years' growth.

- 127. Both the NPS-UD and RPS require this capacity to be integrated with infrastructure capacity.
- 128. On the housing capacity to be provided, Council's overall forecast of population growth and related housing demand at a city wide level (as of 2017) is assessed to be between 239,000 (low) and 397,000 (high) dwellings over the period 2016 to 2046. Under a medium growth scenario, additional demand is projected to be 319,000 dwellings. In addition to population driven demand, a shortfall of 35,000 dwellings has been added. These projections are pre Covid-19 and it is likely that, in the short term at least, population growth will be slower than forecast due to reduced inward migration.
- 129. Estimated feasible dwelling development capacity in the existing Auckland urban area (business and residential zones) is 140,000 residential dwellings. Additional feasible capacity of 15,000 dwellings in the rural areas is assumed. Feasible dwelling development capacity in the future urban areas is 146,000 residential dwellings, assuming a Mixed Housing Suburban zoning on all non-business areas. Much of this capacity is dependent upon rezoning of FUZ land to various live zonings.
- 130. Overall, currently feasible supply is expected to be sufficient to meet forecast demand for the short and medium terms (next 10 years). In the longer term, currently feasible supply is less than demand. Council has a number of options to address the long-term capacity shortfall. In particular it is anticipated that redevelopment will become more prevalent as the up-zoning undertaken by the AUP takes effect.
- 131. Over the 30 years 2018 to 2048, the Auckland Future Development Strategy (developed under the National Policy Statement on Urban Development Capacity) anticipates the following level of housing development in Future Urban Areas:

• Decade One: 2018-2028: 29,150 dwellings

Decade Two: 2028-2038: 42,800 dwellings

Decade Three: 2038-2048: 27,020 dwellings.

132. The Drury area is one part of a wider programme of facilitating managed urban expansion. In the first decade of the Auckland Plan's 30-year time horizon, the FULSS identifies the following greenfields growth areas:

Table 2: FULSS Capacities to be enabled 2018-20287

FULSS Timing	Future Urban	Capacity	Notes
	Area	(dwellings)	
First half – Decade	Warkworth	2,300	Warkworth Structure Plan adopted
one (2018 to 2023)	North		June 2019
			Warkworth North
			PC25 (private, around 1000
			dwellings) – decision appealed.

⁷ Page 18. Development Strategy Monitoring Report (2019): https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plansstrategies/auckland-plan/about-the-auckland-plan/Documents/ap-ds-monitoring -report.pdf

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FULSS Timing	Future Urban	Capacity	Notes
	Area	(dwellings)	PO40 (aritizata) Olavidas Pid
			PC40 (private) – Clayden Rd,
	Paerata	1,800	Pukekohe-Paerata Structure Plan
	(remainder)		adopted August 2019.
			No Council PC proposed
	Whenuapai	6,000	On hold. Variation notified in early
	(Stage 1)		2021
	Drury West	4,200	Drury-Opāheke Structure Plan
	Stage 1		adopted August 2019.
			PC6 (Auranga B1) made operative in
			full 14 Feb 2020.
			Proposed Plan Change Request
			(Auranga B2) 33.6ha, lodged May
			2020.
Second half	Pukekohe	7,000	Pukekohe-Paerata Structure Plan
Decade Two (2023			adopted August 2019.
to 2028)			3.5.
,			No plan changes lodged.
	Cosgrove Road,	500	No plan changes lodged.
	Takanini		
Total		22,000	

- 133. In addition to the above, there are a number of live zoned future urban areas, such as Redhills and Wainui which, combined with the areas identified in the table above, meet the FULSS decade one target of just under 30,000 dwellings.
- 134. The southern growth areas are anticipated to provide capacity for 13,000 extra dwellings in the period 2018 to 2028.
- 135. To date, there has been a low uptake of urbanisation and housing development within growth areas in the southern sector of Auckland compared with the FULSS projections. Council estimate that:
 - Between 2012-2017, 400 dwellings have been consented in Drury-Ōpāheke (15.1% of FULSS projections) and 899 dwellings consented in Pukekohe-Paerata (17.1% of FULSS projections). This reflects development in Stage 1 of Auranga/Drury West and the Wesley College area in Paerata, both identified as Special Housing areas.⁸
 - For Decade 1, 2018 to 2028, (1st half), 40 dwellings have been consented in Drury-Ōpāheke (1.0% of FULSS projections) and 27 dwellings consented in Pukekohe-Paerata (0.3% of FULSS projections).
- 136. There is a degree of uncertainty around the timing of plan changes relating to Pukekohe.
- 137. The requestor contends that if there is a concern over 'excessive' capacity and associated timing, then the rezoning of Drury East could be advanced by deferring:

⁸ Through the Housing Accords and Special Housing Areas Act 2013

- development to the west of Jesmond Road to Decade 2 of the FULSS;
- rezoning of land to the south, west and east of Pukekohe to Decade 2
- rezoning of land within the major flood plains in the Slippery Creek catchment in Decade 3+.
- 138. In terms of employment, a large southern hub will have multiple benefits (and effects). Table 1 in Council's Drury-Opāheke Structure Plan estimates around 22,000 houses across the structure plan area housing around 60,000 people and providing around 12,000 jobs. In my view, the jobs to housing ratio could be higher. The proposed Drury Centre could play a big role in supporting more local employment opportunities across the southern fringe of Auckland. This is due to the location of the PPC48 area at the confluence of motorway, railway and arterial road corridors.
- 139. The plan change request document assumes that the future Drury Centre would accommodate approximately 5,400+ jobs in 2048. It is noted that the ultimate employment density and mix will be variable and importantly, the plan change provides significant capacity for intensive employment activities, with buildings ranging from 25m to 72m enabled throughout the plan change area.
- 140. The masterplan for the plan change area that was prepared by Civitas shows one way in which the Drury Centre and surrounds could be developed. The masterplan assumes lower densities than that enabled by the PPC48 provisions. This masterplan indicates that even at lower densities, approximately 6,000 jobs could be provided within the Drury Centre and surrounds, based on the following:
 - Approximately 60,000m² of office based on 17.6m² per person, which converts to ~3,400 jobs
 - Approximately 100,000m² retail based on 64m² per person, which converts to ~1,700 iobs
 - Potential for a 300+ bed hospital, which converts to ~1,000 jobs based on 4 jobs per bed.
- 141. Much of this capacity is in BMU zones, which could develop as residential, business or a mix of activities. There is a risk that short term demands may favour residential development, reducing business opportunities.

Analysis

- 142. The NPS-UD classifies Auckland Council as a tier 1 local authority and requires that every tier 1 local authority must provide at least sufficient development capacity in its region or district to meet expected demand for housing in existing and new urban areas; and for both standalone dwellings and attached dwellings; and in the short term, medium term, and long term.
- 143. In order to be sufficient to meet expected demand for housing, the development capacity must be: plan-enabled (clause 3.4(1) of the NPS-UD); infrastructure-ready (clause 3.4(3)); feasible and reasonably expected to be realised (clause 3.26); and for tier 1 local authorities only, meet the expected demand plus the appropriate competitiveness margin (clause 3.22).
- 144. Sufficient development capacity must also be provided for business activities.
- 145. Development capacity is plan-enabled for housing or for business land if:

- (a) in relation to the short term, it is on land that is zoned for housing or for business use (as applicable) in an operative district plan
- (b) in relation to the medium term, either paragraph (a) applies, or it is on land that is zoned for housing or for business use (as applicable) in a proposed district plan
- (c) in relation to the long term, either paragraph (b) applies, or it is on land identified by the local authority for future urban use or urban intensification in a Future Development Strategy or, if the local authority is not required to have an FDS, any other relevant plan or strategy.
- 146. The NPS-UD notes the benefits of planning decisions that are responsive to unanticipated or out-of-sequence developments in clause 3.8:
 - (1) This clause applies to a plan change that provides significant development capacity that is not otherwise enabled in a plan or is not in sequence with planned land release.
 - (2) Every local authority must have particular regard to the development capacity provided by the plan change if that development capacity: would contribute to a well-functioning urban environment; and is well-connected along transport corridors; and meets the criteria set under subclause (3):
 - (3) Every regional council must include criteria in its regional policy statement for determining how plan changes will be treated, for the purpose of implementing Policy 8, as adding significantly to development capacity.

Note: the Auckland Council is yet to develop the criteria referred to in Clause (3).

- 147. The AUP RPS policies on development capacity and supply of land for urban development (B2.2.2) require sufficient land within the Rural Urban Boundary that is appropriately zoned to accommodate at any one time a minimum of seven years' projected growth in terms of residential, commercial and industrial demand and corresponding requirements for social facilities, after allowing for any constraints on subdivision, use and development of land.
- 148. Under section B2.5 Commercial and Industrial Growth, the AUP outlines key objectives to be met. They include:
 - The need for employment and commercial and industrial opportunities to meet current and future demands.
 - Commercial growth and activities be primarily focused within a hierarchy of centres and identified growth corridors that supports a compact urban form.
- 149. At a strategic level, the provision of additional business land provided by PPC48 is of regional benefit. Space for retail, commercial and service activities needs to be provided, and outcomes around employment options secured. The residential component of PPC48 is less important at a strategic level (although beneficial to the vitality of the centre).
- 150. In summary, there are strategic planning reasons to support the early rezoning of Drury Centre, but the decision to do so rests on whether infrastructure funding and delivery can be appropriately co-ordinated with the development in a way that does not entail a substantial re-prioritisation of funding and growth from other areas, or cause significant disbenefits to future residents or workers in the area from late delivery of needed projects (and thereby slowing the uptake of employment opportunities that might otherwise be provided).

8.2 Strategic Planning: Infrastructure

- 151. Strategic planning for the Drury area, including the Auckland Plan's Future Development Strategy, work by SGA and NZUP all emphasise the need for development to be anchored on public transport (transit-orientated development) because of the limited capacity of key roading networks, as well as wider concerns over car dependent urban form and greenhouse gas emissions.
- 152. This emphasis is consistent with key policy documents, including:
 - The Auckland Plan
 - Supporting Growth Alliance Integrated Transport Assessment
 - The Auckland Transport Alignment Project's Auckland mode shift plan: 'Better Travel Choices'.
 - The New Zealand Transport Agency's plan Keeping cities moving.
- 153. Common themes cover investing early in public transport infrastructure to help shape urban form, making shared and active modes more attractive, and influencing travel demand and transport choices from the start.
- 154. A lack of integration between land use and transport can see:
 - Development proceeding ahead of any transport upgrades, creating safety and congestion issues and leaving residents with no options to utilise public transport alternatives (e.g. Kumeu/Huapai)
 - Land use patterns that may not suit long term conditions, such as development based initially on car-based access, when long term, much greater use of public transport is needed (e.g. North-west / Addison)
 - Confusion over timing and funding of infrastructure, and as a result delayed urbanisation (e.g. Whenuapai)
 - Inefficient urbanisation as infrastructure issues are addressed development-bydevelopment (e.g. Redhills).
- 155. Lack of integration can therefore see long term; often cumulative impacts being felt across the region. These effects are significant and are of a large scale and order, but they cannot be easily quantified. They are effects that may be able to be borne or tolerated in the short term, but in the longer term, adverse effects on the efficiency of the urban area mount.
- 156. The two important RMA planning documents relevant to land use and infrastructure integration are the AUP RPS and the NPS-UD.
- 157. The AUP RPS refers to land use and infrastructure integration in a number of objectives and policies. Objective B2.2.1. refers amongst other aspects of a quality compact urban form to:
 - (c) better use of existing infrastructure and efficient provision of new infrastructure;
 - (d) improved and more effective public transport;
- 158. This approach to efficiency is reflected in policy B2.2.2(7)(c) of the AUP RPS:

Enable rezoning of land within the Rural Urban Boundary or other land zoned future urban to accommodate urban growth in ways that ...integrates with the provision of infrastructure.

159. Policy B4.2.4(6) is also relevant in relation to residential growth:

- Ensure development is adequately serviced by existing infrastructure or is provided with infrastructure prior to or at the same time as residential intensification.
- 160. In relation to business activities, Policy B2.5.2 (4) enables new metropolitan centres having regard to:
 - (f) a safe and efficient transport system which is integrated with the centre;
- 161. The importance of transport infrastructure to land use integration is further reinforced by Policy B3.3.2(5) which seeks to improve the integration of land use and transport by:
 - (a) ensuring transport infrastructure is planned, funded and staged to integrate with urban growth.
- 162. As noted, the AUP was notified in September 2013 before the NPS-UD was in force (August 2020), and any plan changes to the AUP must give effect to the NPS. The NPS-UD seeks 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.
- 163. Objective 6 of the NPS-UD requires that 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.
- 164. Clause 3.2(2) of the NPS-UD provides that in order to be sufficient to meet expected demand for housing, development capacity must, among other things, be plan-enabled and <u>infrastructure-ready</u>. Clause 3.4(3) of the NPS-UD says that development capacity is infrastructure-ready if:
 - (a) in relation to the short term, there is adequate existing development infrastructure to support the development of the land
 - (b) in relation to the medium term, either paragraph (a) applies, or funding for adequate infrastructure to support development of the land is identified in a long-term plan
 - (c) in relation to the long term, either paragraph (b) applies, or the development infrastructure to support the development capacity is identified in the local authority's infrastructure strategy (as required as part of its long-term plan).
- 165. In addition to the above, local authorities must be satisfied that the additional infrastructure⁹ to service the development capacity is likely to be available.
- 166. The NPS-UD arguably imposes a higher standard than the AUP in relation to the link between funding of infrastructure and development of land. The NPS requires land use

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..g. ...

⁹ Additional infrastructure is defined as public open space; community infrastructure as defined in section 197 of the Local Government Act 2002; land transport (as defined in the Land Transport Management Act 2003) that is not controlled by local authorities; social infrastructure, such as schools and healthcare facilities; a network operated for the purpose of telecommunications (as defined in section 5 of the Telecommunications Act 2001); a network operated for the purpose of transmitting or distributing electricity or gas

- planning to be integrated with funding decisions, and in the medium term, for adequate infrastructure to be identified in Council's Long Term Plan, whereas the AUP refers to integration between infrastructure and land use.
- 167. As noted, policy 8 and clause 3.8 of the NPS-UD provides some support for plan changes that would add significantly to development capacity and contribute to well functioning urban environments, even if the development capacity is 'unanticipated by RMA planning documents' or 'out-of-sequence with planned land release'. While the clauses enable the benefits of out of sequence development to be considered, they do not override the injunctions under Objective 6 and Policy 3.4.3 for infrastructure to be 'funded' for land to be considered development ready.
- 168. In considering the benefits of the capacity to be provided by PPC48, I recognise that the NZUP commitment to extend the electrification of the Southern rail service from Papakura to Pukekohe, removing the need to transfer at Papakura, and the intention to develop a new station at Drury Central is a new factor since the FULSS strategy was prepared. There is obvious benefit from capitalising on this investment by central government.
- 169. I also accept that under the NPS-UD, there are benefits from additional capacity over and above planned capacity, provided that the additional capacity does not come at the expense of realising the planned capacity.
- 170. Council has not indicated any willingness to amend the timing of other greenfields areas in the southern sector of Auckland, as suggested by the requestors, and commitments to fund extensions of network infrastructure to these areas remain. However, it is possible that early development of Drury East will slow uptake of other development options and therefore delay some investment demands.
- 171. The wider infrastructure funding and delivery issues raised by the plan change fall under four headings:
 - 1. What is adequate infrastructure?
 - 2. To what extent is agreement needed on the funding of this infrastructure for rezoning to proceed?
 - 3. Can precinct-based triggers and thresholds deal with uncertainties over funding and delivery and multiple land holdings?
 - 4. Does the NPS-UD support for 'out of sequence development' change any of the above assessments?

Adequate infrastructure

- 172. While there is general agreement that provision of infrastructure is necessary to avoid or mitigate adverse effects of urban development and to enable well-functioning urban environments, the issue is the extent to which required 'network' infrastructure upgrades are needed to support particular developments (when these developments may have only a marginal impact on the wider network). In particular, what 'off-site' infrastructure is needed to serve the development (with infrastructure within the plan change area generally the responsibility of the subsequent developer), when that off-site infrastructure is likely to serve the needs of a range of other developments.
- 173. The AUP does not stipulate 'how much' infrastructure is needed to ensure integrated outcomes, nor does it make a distinction between infrastructure to mitigate the direct effects of development versus cumulative effects on wider networks. The NPS-UD requires that district plans provide adequate development infrastructure-ready land to

- meet short to medium term demands, but the NPS does not define what it means by 'adequate'.
- 174. Under the NPS-UD, 'Development Infrastructure' is defined under clause 1.4 and means network infrastructure for water supply, wastewater, stormwater and land transport as defined in section 5 of the Land Transport Management Act 2003 to the extent that it is controlled by local authorities or a council-controlled organisation. The Land Transport Management Act defines land transport as being transport on land by any means. This is wide ranging.
- 175. The definition of 'development infrastructure' in the NPS-UD is intentionally different from the definitions of 'infrastructure' in the RMA and the Local Government Act 2002. The narrow definition of development infrastructure is limited to that which local authorities control and is used to ensure that local authorities can comply with the requirements of the NPS-UD. For example, State highways and rail are not controlled by local authorities, and so are not included in what may be considered adequate development infrastructure.
- 176. The NPS-UD also defines additional infrastructure, being public open space; community infrastructure as defined in section 197 of the Local Government Act 2002; land transport (as defined in the Land Transport Management Act 2003) that is not controlled by local authorities; social infrastructure, such as schools and healthcare facilities; a network operated for the purpose of telecommunications (as defined in section 5 of the Telecommunications Act 2001); and a network operated for the purpose of transmitting or distributing electricity or gas.
- 177. As noted, the NPS-UD refers to 'adequate development infrastructure' without defining what it means by adequate. It is presumed that adequate means sufficient to meet needs (that is infrastructure ensures safety and efficiency) but not oversupplying infrastructure, or perhaps 'gold plating' what is to be provided. Infrastructure needs to be adequate for the long term and address local and strategic needs.
- 178. In my opinion, what is adequate must also reflect the AUP's overt support for public transport. In my assessment, there is a strategic need to ensure that public transport (rail and bus) and active modes are supported by appropriate infrastructure. The extent to which road-based infrastructure must be adequate to meet needs is more flexible. The term 'adequate' may imply that a degree of congestion and delay, commensurate with current conditions, could be tolerated. To an extent, some short term misalignment can be tolerated (e.g. infrastructure being provided 2 to 3 years after development proceeds). In contrast, some forms of infrastructure, such as a train station and associated connections and bus priority measures on arterial roads should be in place from day one due to their place and behaviour shaping properties.
- 179. Safety is likely to be considered by all parties as being a core requirement of what is considered adequate. Consideration of what is adequate should also take into account the nature of the land uses to be enabled. What is adequate for residents is likely to be different to what is adequate for retail or employment activities.
- 180. In my opinion, the SGA work has generally defined what is necessary (adequate) transport infrastructure to meet future needs in Drury East. From a land use (zoning perspective), in my opinion the following 'off-site' infrastructure is required for there to be adequate infrastructure for PPC48:

NZUP

- Mill Road extension
- Widening SH1 from Papakura to Drury and building a cycleway alongside it.
- Electrifying the railway track between Papakura to Pukekohe
- New railway stations in Drury

SGA

- Waihoehoe Road upgrade to accommodate bus priority, including Great South Road intersection
- New Opāheke North-South arterial (longer term)
- Walking and cycling links between Drury East and West.
- 181. In relation to the above projects, I note that there is no detail on walking and cycling links. In particular would be links to the existing Drury township and to Drury West, where schools are planned.
- 182. NZUP provides a strong signal that key public transport infrastructure will be in place early in the development phase, helping to shape people's and business's travel choices and as a consequence, wider urban form. However, there is still a question around the level of certainty for the provision of local transport infrastructure to support safe access to the train station.
- 183. The Mill Road extension has a range of uncertainties associated with it, given the scale and complexity of the project¹⁰.
- 184. The funding of the SGA projects (and the size of the associated funding gap) remains unclear at this stage. The NoRs issued by AT and Waka Kotahi are a further step forward in terms of the provision of adequate infrastructure for the area (while noting that the NoRs only seek to protect the routes).

Nature and extent of agreement on funding

- 185. Current council policy is that Drury East is 'long term' capacity. In the normal course of events, development infrastructure would be identified via the Supporting Growth Alliance work. Once plans are settled, then the required infrastructure will be incorporated into the Infrastructure Strategy, and as time gets closer to the defined timeframe for development, allocations made in future LTPs. Funding of that allocation may take a variety of forms.
- 186. The plan change requestors seek to shift the status of the land from long term to short to medium-short term. Under the NPS-UD this can only be achieved if either the development infrastructure is provided, or funding is identified in the Council's long term plan. In response to NZUP, the Council has identified a funding allocation for the wider Drury area that may meet some short to medium term needs, but not all.
- 187. The question here is what level of agreement is needed over infrastructure funding for live zoning to proceed?
- 188. In the strict terms of the NPS-UD, existing infrastructure is not adequate to meet short term needs, while not all medium term investment is identified in the Council's LTP. However, the intent that funding and development are broadly aligned is set out in two

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¹⁰ The 4 June 2021 reset of NZUP creates significantly more uncertainty over Mill Road project.

important strategies: NZUP and ATAP 2021-2031. Ideally, to address the funding shortfall of network infrastructure (where there are many beneficiaries) Council would use a number of tools to cover the capital costs of providing infrastructure including general or targeted rates, development contributions, network connection and service charges, user charges, central government funding and, potentially new tools like those enabled by the Infrastructure Funding and Financing Act 2020. These measures tend to push costs onto the users of the infrastructure, but still require council to borrow to fund necessary works and expose councils to risks that growth rates (and hence contributions) may not be at the level anticipated. The tools should be in place at the time of rezoning.

- 189. From the point of view of a rezoning decision, which always involves a degree of uncertainty over the nature and pace of subsequent development and associated demands, I consider that there is now sufficient certainty that adequate public transport related network infrastructure can and will be delivered over the medium term. However, there is a degree of risk that not all of the 'SGA level' DTIP projects may get funded in the shorter term. The NoRs issued by SGA further reduce this risk to an extent.
- 190. In short, my assessment is that the strategic land use benefits of the rezonings are likely to outweigh the risks flowing from the uncertainty over funding of planned roading projects. However, steps should be taken to further reduce these risks.

Thresholds, triggers and staging

- 191. In the absence of a firm commitment to funding in the Council's LTP (but within the context of increasing alignment of funding strategies), it is necessary to consider to what extent AUP provisions could be used to stage the development of the land to be rezoned so as to bridge the gap between live zoning and infrastructure funding.
- 192. Methods to address infrastructure integration include:
 - Funding agreements
 - District plan triggers
 - Staging of growth
 - Reliance upon subdivision provisions.
- 193. The requestor has indicated a desire to develop a funding agreement with Council, but as I understand it, they have not achieved agreement. Furthermore, they dispute that the development that will be enabled by PPC48 needs to contribute to wider upgrades. While funding agreements are helpful, there is a risk that the private parties to the agreement will not honour their commitments or may otherwise no longer be able to meet them (such as if they go into receivership).
- 194. Other plan changes have sought to address the gap between zoning coming on stream and funding of transport networks by reference to various plan-based standards, triggers or thresholds. These type of 'gap fillers' are proving to be complex and difficult to administer. This is particularly so where the triggers apply across many landholdings and require works to be in place that serve many activities.
- 195. Otherwise, regional and district policy also comes into play when assessing resource consents, and it is feasible that subdivision or development consents could be refused on the basis of insufficient infrastructure capacity. For example, Objective E38.2 (4) of the Subdivision Urban chapter of the AUP states:

Infrastructure supporting subdivision and development is planned and provided for in an integrated and comprehensive manner and provided for to be in place at the time of the subdivision or development.

- 196. However, such a development-by-development appraisal of infrastructure demands is not always an efficient method of managing growth. In the case of Drury, and the large-scale growth planned for, reliance upon subdivision consents to integrate infrastructure delivery is a piecemeal approach that is likely to frustrate subdividers and Council.
- 197. Other options include staging the implementation of the 'live zoning' sought by the plan change request. For example, only half the land could be rezoned to a business zone, with the rest remaining future urban (and subject to subsequent plan change processes). An emphasis on employment activities in the first phase of Drury Central (rather than residential or retail) may help to moderate concerns over the impact of commuting on regional transport networks and assist with meeting the transport demands of the related plan change requests. Retail development tends to attract a high number of trips, so another option may be to restrict the retail floor area in the first 3 to 5 years of operation, thereby possibly delaying the need for some upgrades.
- 198. To address potential integration issues the requestors have proposed a series of triggers or thresholds development cannot exceed the floorspace thresholds unless specified infrastructure is in place. In my opinion, the method presented by the requestors will be cumbersome to administer and implement and unlikely to achieve the outcomes sought.
- 199. Having said that, the concept of a series of 'thresholds or check points' is valid for a greenfields area where there is a degree of uncertainty over the actual timing of infrastructure versus growth.
- 200. I consider that there is justification to require development to be staged with the provision of key public transport infrastructure (for example the Drury Central rail station being operational and walking and cycling access to it being in place, bus priority measures provided along Waihoehoe Road). I would support a series of 'prerequisite standards' to be set out, the presence of which are needed before buildings can be occupied, for example. The emphasis on public transport both rail and bus recognises the strategic drivers discussed above, as well as the greater certainty that is attached to these projects. Even if wider roading networks take time to be upgraded, visitors, workers and residents have the option of accessing public transport.
- 201. On the related issue of the uncertainty of the Mill Road extension, I consider that the uncertainty around the delivery of this facility can be addressed by a modified trigger provision. Essentially, prior to this road-based facility being operational, larger activities (subdivision or development) would need to assess their impact on the local roading network (particularly the Great South Road / Waihoehoe Road intersection, but also Quarry Road / Great South Rd) and whether measures need to be taken to mitigate potential effects and ensure public transport facilities are connected and reliable (see transport assessment in section 8.7 for details).

Out of sequence development and infrastructure

202. It is acknowledged that Policy 8 of the NPS-UD provides some support for plan changes that would add significantly to development capacity and contribute to well functioning urban environments, even if the development capacity is 'unanticipated by RMA planning documents' or 'out-of-sequence with planned land release'. The plan changes are 'out of sequence' development in the context of the FULSS (as discussed in section

- 2.3) and in accordance with Policy 8 of the NPS-UD decision makers are required to be responsive to the significant development capacity provided.
- 203. The residential development capacity provided by the plan change is not required in order to meet the NPS-UD requirements at this time; there is capacity under current AUP zonings for almost 2 million dwellings and over time, a proportion of that capacity will become feasible. In addition, the council has a range of options with regard to further brownfields rezonings. Having said that, additional greenfields land supply enabled by the plan change requests could assist with housing supply and managing land cost pressures through competitive land markets, provided that required infrastructure can be funded without drawing away funding from other, already committed projects such as the housing being delivered under the Auckland Housing Programme.
- 204. The business development capacity to be provided by the plan change request is of more benefit. The 80 hectares to be provided is a sizeable contribution to meeting employment demands. This area helps give effect to the NPS-UD.
- 205. Taking into account the issues of capacity and demand, as well as the outcomes of the Drury-Opāheke Structure Plan I consider that there is merit in advancing the business component of the plan change request. The early establishment of business and commercial activities will be of benefit to the wider southern sector.

Summary

- 206. Slow delivery of transport infrastructure (public transport and road-based) relative to housing growth is being experienced in the north-west (Kumeu/Huapai). This slow delivery has seen congestion grow along with community frustration. In particular the slow roll out of public transport can see car dependent patterns get entrenched, creating long term costs.
- 207. The Auckland Unitary Plan Independent Hearings Panel, when discussing infrastructure stated that:
 - The Panel wishes to emphasise that notwithstanding any zoning that provides potential opportunities for development, such development should be restricted or deferred unless necessary infrastructure services are able to be provided before or contemporaneously with that development. To realise the opportunities provided in the Unitary Plan the Council, infrastructure providers and landowners/developers will need to work together constructively¹¹.
- 208. In a similar vein, the Environment Court has clearly stated that rezoning land for urban activities, where there is no commitment or mechanism to fund necessary infrastructure can result in the absence of integrated management of resources. 12 Councils cannot be placed in a position where they have to rejig priorities that have consequences for other parts of a district or community.
- 209. Having said that, through the NZUP programme and the draft RLTP and LTP, council and government have signalled significant investment in core public transport infrastructure. Importantly, while there may be some uncertainty over the timing of

¹¹ IHP Panel report to AC Overview of recommendations 2016-07-22, page 61.

¹² It is lawful to refuse a plan change on the grounds that it would cause unnecessary expense to ratepayers, for example through creating a need to provide additional infrastructure: Norsho Bulc Ltd v Auckland Council [2017] NZEnvC 109, (2017) 19 ELRNZ 774; Prospectus Nominees v Queenstown Lakes DC EnvC C074/97; Bell v Central Otago DC EnvC C004/97.

- projects like Mill Road extension, there is substantial certainty over the provision of rail-based services. This is a different context from North-West Auckland mentioned above, which involves both restricted public transport and road-based investment.
- 210. Taking into account the above points, in my opinion there is now sufficient certainty over funding of key public transport infrastructure to say that integration between land use and infrastructure can be achieved. However, modifications to the proposed precinct provisions are needed to strengthen the connections between land use and transit (this being the most certain of the transport investments signaled, and the mode of transport most important to long term sustainability outcomes).
- 211. Sitting alongside these measures would be actions that manage retail pressures in the short to medium term, and policies that shift the emphasis of the BMU zone towards employment with some supportive residential (rather than the other way around). The range of employment activities possible in the BMU zone should not be further constrained by the Precinct provisions.

8.3 Urban Form

Application

- 212. Sections 5.1.3 and 5.1.4 of the s32 report explain the reasoning behind the size and location of the proposed centre and section 5.1.5 discusses the preferred location of the train station.
- 213. The plan change request essentially seeks the application of two zonings BMU and BMC zoning to support a transit-orientated form of development. The Metropolitan Centre zone is proposed to apply to land to the west (controlled by Kiwi Property). The land to the east is proposed to be BMU zone.
- 214. The rationale for this layout is not well explained in the application material, beyond references to integration of urban form with the train station. In particular, the Metropolitan Centre zoning will provide for a vertical node to the south of the train station as proposed by Kiwi Property and provide for a main street retail area. The mixed use fringe will provide for apartments, offices and other employment activities. However, this pattern may no longer be appropriate in light of the amended rail station location and the NPS-UD.

Analysis

- 215. PPC48 proposes a land use pattern that is largely in accordance with the Drury-Opāheke Structure Plan. Since the structure plan and plan change request was prepared, the NPS-UD 2020 has come into force which has an influence on the intensity and mix of development in the walkable catchments of rapid transit stops.
- 216. Policy 1 of the NPS-UD sets out that planning decisions must contribute to well-functioning urban environments. This is described as urban environments that, as a minimum: have or enable a variety of homes that:
 - meet the needs, in terms of type, price, and location, of different households; and
 - 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

- 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
- support, and limit as much as possible adverse impacts on, the competitive operation
 of land and development markets; and
- support reductions in greenhouse gas emissions; and are resilient to the likely current and future effects of climate change.
- 217. The most significant aspects of the request in relation to the NPS-UD relate to the position and size of the proposed BMC zone and the extent of support for 'transit-orientated' development to be found in the precinct provisions.
- 218. I support the establishment of a large centre. The economic effects of a large Metropolitan Centre on the amenity, social and economic values of centres like Pukekohe and Papakura are addressed in section 8.6 below. The issue addressed here is whether there are any fundamental reasons why a large metro centre should not be enabled, and the appropriate spatial form of this centre.
- 219. Current strategic policy as set out in the Auckland Plan (which constitutes a Future Development Strategy under the NPS-UD) shows metropolitan centres at Manukau and Papakura in the southern sector. However, there is no explicit limitation in the Auckland Plan as to the number of metropolitan centres. Policies support making effective use of existing business areas, but also recognise the potential for new growth areas to add to employment options.
- 220. The AUP RPS envisages new centres. Policy B2.5.2(4) enables new metropolitan centres following a structure planning process and plan change process in accordance with Appendix 1 Structure plan guidelines, having regard to all of the following:
 - (a) the proximity of the new centre to existing or planned medium to high intensity residential development;
 - (b) the existing network of centres and whether there will be sufficient population growth to achieve a sustainable distribution of centres;
 - (c) whether the new centre will avoid or minimise adverse effects on the function, role and amenity of the city centre, metropolitan and town centres, beyond those effects ordinarily associated with trade effects on trade competitors;
 - (d) the form and role of the proposed centre;
 - (e) any significant adverse effects on existing and planned infrastructure;
 - (f) a safe and efficient transport system which is integrated with the centre; and (g) any significant adverse effects on the environment or on 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 or special character.
- 221. In my opinion, a large employment centre is needed. The specific issues of whether the new centre may harm other centres is addressed in the section on economics. Provided some form of staging over retail floorspace is agreed, then development of a centre at Drury will not undermine the role and function of Papakura and Pukekohe. A large centre will help to internalise some commuting trips and assist with wider social and economic outcomes for the southern Auckland area.
- 222. The next question is therefore the appropriate form of this centre. If the KiwiRail / SGA preferred train station location is ultimately adopted, then, as notified, the station will sit adjacent to a sub-precinct that is focused on enabling high density residential development in a mixed use environment, with the main shopping/retail area to the west.

A more business focused land use adjacent to the train station is likely to be a better planning outcome, given the likelihood of Drury developing over time into a major sub regional centre.

- 223. A transit-orientated form of development means that built form and zoning must be integrated with the station, with the station being at the centre of the most intense development. To this end, in my judgement, sub-precinct E should be zoned BMC (with building heights up to 72m) and sub-precinct B should be zoned BMU, with a height variation control of 50m. This would then create a pattern of metropolitan centre zoning focused on the immediate station environs, wrapped around with a mixed use zoning on the periphery. This pattern would also mean that the metropolitan centre zoning would be spread over a number of different landholdings. I see this as being beneficial in the long term, a point supported by the NPS-UD's references to competitive land markets.
- 224. Through submissions, as discussed more fully below, the requestor has sought to amend the height limits that would apply to sub-precincts C and F. They propose 40.5m for C and 26m for F. I note that the NPS-UD requires that there be a minimum of 6 storeys height limit within the walkable catchment of Metropolitan Centres. These height limits accommodate this direction.
- 225. The other element of a transit-orientated form of development is the mix of activities to be provided. The NPS-UD, the Auckland Plan and the Drury-Opāheke Structure Plan all identify the need for a strong employment role for the centre. I have concerns that the employment potential of the BMU zone will be eroded through residential development. I consider this to be a significant issue that needs to be addressed in some way. My suggestion would be that residential at ground floor be controlled in sub-precincts B, C and F (noting that if sub-precinct E is zoned Metropolitan Centre, then dwellings are subject to AUP standard H9.6.5 Residential at ground floor which provides "dwelling units within an integrated residential development must not locate on the ground floor of a building where the dwelling or unit has frontage to public open spaces including streets").

8.4 Quality of Built Environment Effects

Application

- 226. Urban design effects of PPC48 are summarised in section 10.1 of the s32 evaluation report and discussed in more detail in the Urban Design assessment prepared by Barker & Associates (Appendix 7 to the application).
- 227. The assessment states that the Plan Change provisions facilitate the development of the plan change area in a way that is consistent with the outcomes sought within the RPS in relation to a quality-built environment and the Council's Neighbourhood Design Statement for the Southern Structure Area. Specifically, the plan change:
 - facilitates the provision of varied neighbourhoods and a mix of uses;
 - achieves good access to services and amenity and safe choices of movement;
 - provides for a wide range of choices of use and activity that reflect the needs of the community and sub-region;
 - enables a strong local identity and promotes legible, safe, inclusive and accessible environments;
 - protects and enhances riparian margins of permanent and intermittent streams while enabling urbanisation.

228. The assessment states the proposal will result in positive effects and will achieve a quality compact urban development and a successful urban form with a suitable level of amenity.

Peer Review

- 229. The review conducted by Rebecca Skidmore (Appendix 4) supports the intensity of development proposed and the intention to develop a 'street-orientated' form of development. She acknowledges that a sound design process has been followed in the preparation of the masterplan that supports the zoning. In her opinion, the suite of provisions proposed raise a number of urban design issues that require further resolution. These relate to:
 - Ensuring integration of transit infrastructure and land-use;
 - Provision of open space as an urban structuring element; and
 - Creating a distinct sense of place.
- 230. The review supports the outcome of the area being developed on the principles of transit-orientated development. With some uncertainty over the final location of the Drury Central Station, the review recognises the need to tie together three key elements around the station environment that need to be seamlessly connected and integrated, these being the train station and particularly its entrances; the adjacent plaza; and the key retail street. This relationship is diagrammatically depicted in Precinct Plan 2, but with the potential for the train station to move, it is important that the detailed precinct provisions support the delivery of these three components in an integrated manner. Ms Skidmore also identifies the poor design outcomes likely to transpire if the direct connection to the Southern Motorway is put in place. This connection would considerably undermine the intention to develop a transit-orientated centre.
- 231. The importance of the Fitzgerald and Hingaia Streams as structuring elements is noted. The potential width and nature of the Hingaia Stream corridor is an important design matter that needs further attention (given the likelihood that Council will not accept vesting of land as open space beyond the 20m esplanade reserve requirement). The design challenges achieving a high amenity environment that are created by the topography, powerlines and relationship to the motorway will need to be addressed at the development stage, and the Precinct provisions should include suitable guidance to ensure this occurs. Ms Skidmore also recommends that the green corridor and valley park to be provided along the Fitzgerald Stream be indicated on the Precinct Plan. I agree that this is necessary to achieve good urban design outcomes. While the actual stream channel is protected by virtue of the AUP and NPS-FM, the integration of the associated stream bank and riparian yard with surrounding development is of the utmost importance to long term outcomes.
- 232. With regard to sense of place, the review notes the need for:
 - detailed design of both buildings and open spaces in all sub-precincts to consider and reflect distinctive features of the location.
 - wider application of Te Aranga Maori Design Principles. The use of these design principles is referred to in the assessment criteria for new buildings. However, it is the public realm, including parks, plazas and streets that the most meaningful integration of these principles could be achieved.
- 233. The report notes that the provision of a 'town square' (as indicated in their requestor's masterplan) will be an important part of the public realm and will provide a civic open

space focus within the Centre. Such democratic gathering spaces are valuable within large urban centres.

Analysis

- 234. The RPS describes a quality-built environment as one that displays the following characteristics:
 - (a) respond to the intrinsic qualities and physical characteristics of the site and area, including its setting;
 - (b) reinforce the hierarchy of centres and corridors;
 - (c) contribute to a diverse mix of choice and opportunity for people and communities;
 - (d) maximise resource and infrastructure efficiency;
 - (e) are capable of adapting to changing needs; and
 - (f) respond and adapt to the effects of climate change
- 235. The plan change contains some provisions that support early access to the rail station by walking, cycling and bus. However, in my view, they should be stronger given the importance of a public transport first approach, I agree that the location of the station should strongly determine the density and type of land uses in the immediate catchment, as well as the nature and extent of connectivity. In short, in my opinion the objective of a transit-orientated development is not well implemented in the proposed private plan changes through associated policies and methods.
- 236. I agree with Ms Skidmore that the precinct provisions need to make a stronger statement over open spaces and their integration into the built environment. This is a matter that is addressed in the next section of this report. The streams in the area are one of the key natural features and should be better incorporated into the design. However, sense of place needs to expand beyond the stream fingers, and incorporate a strong urban place making component. There are elements of this in the request, such as the station plaza, mainstreet, reference to a civic plaza and identification of a 'Homestead Park'. These are positive features, but their interrelationships need to be reviewed in the light of the amended station location.
- 237. I would also support greater attention to urban quality in the BMU zoned areas, consistent with the objective for a 'street-based environment'. This could be achieved through appropriate provisions relating to open spaces and key public/private interfaces, such as along the proposed Drury Boulevard and the two new east-west collector roads. For example, buildings along the frontage of the Boulevard and the two east-west Collector roads should be subject to the 'General Commercial Frontage Control'. This triggers assessment of matters such as street activation, building continuity along the frontage, pedestrian amenity and safety and visual quality. Car parking, if to be provided, should be located to the side, rear or underground. I agree with Ms Skidmore that Access A (direct access from the southern motorway) should be deleted due to its incompatibility with a transit-orientated form of development.
- 238. I also agree that the Precinct provisions should be expanded to better address issues of sense of place, while noting that these are not easy matters for district plan provisions to specify.

8.5 Open Space and Community Facilities Effects

Application

- 239. Open space and community facilities effects of PPC48 are described in section 10.2 of the s32 evaluation report, and open space is also assessed in the urban design assessment prepared by Barker & Associates (Appendix 7 to the application). This outlines that the Drury-Opāheke Structure Plan identifies one neighbourhood park within the plan change area, and that several open spaces are proposed within the plan change area, including the proposed Open Space Informal Recreation (OSIR) zone adjacent to Hingaia Stream (approx. 8.5ha), and Station Plaza and Homestead Park marked as indicative open spaces on proposed Precinct Plan 2. Other public open spaces are expected to be determined through future subdivision applications, including greenways.
- 240. The urban design assessment states that the precinct promotes the protection and enhancement of riparian margins throughout the site. A standard IX.6.4 is included in the proposed precinct provisions requiring planting of the margins of permanent and intermittent streams to a minimum width of 10m. An assessment criterion IX8.2(2) (j) seeks that pedestrian and cycle paths, where proposed, are adjacent to the 10m planted area rather than within it.
- 241. The proposed precinct provisions contain assessment criteria relating to the interface between public open space and surrounding buildings (sunlight access to parks over 3,000m², and design of retaining walls adjoining open space in sub-precincts A, B and D) (IX.8.2(3)(b) and (h)).
- 242. Community facilities are expected to be provided within the proposed BMC zone. The Ministry of Education will designate land for future schools as required.
- 243. The requestor concludes that the proposed open space, amenities and social facilities, are and will be accessible by active and public modes of transport, and are or will be of a sufficient size to cater for the social and cultural needs and well-being of future residents of the PPC48 area.

Peer Review

- 244. The plan change documentation has been reviewed by Ashleigh Richards, Parks, Sport and Recreation, Auckland Council with regards to open space (Appendix 4).
- 245. Ms Richards does not support the plan change as it does not provide sufficient assurance that the open space outcomes anticipated by the RPS, AUP and associated Auckland Council policies and plans will be achieved.
- 246. Ms Richards states that the indicative locations of open spaces need to be shown spatially on a precinct plan. She recommends that two indicative neighbourhood reserves of 3,000-5,000m² are shown on a Precinct Plan, as illustrated on Figure 9 below. One of these (Station Plaza) is as proposed by the requestor, and already shown on Precinct Plan 2, but the proposed location of Homestead Park is not supported as it is not far south enough to meet Council's open space acquisition criteria and serve the plan change catchment. An alternative location for a neighbourhood reserve is recommended in blue on Figure 9.

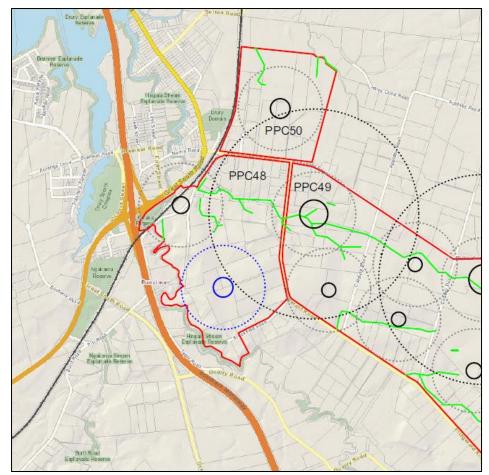


Figure 9: Open space recommended locations

247. Ms Richards also assesses that the plan change does not provide a clear network of walkways within the proposed open space and riparian reserve network. In her experience, relying on the AUP subdivision provisions in Chapter E38 is insufficient to ensure the outcomes sought around greenways are secured, and maintenance and enhancement of permanent and intermittent streams is more likely to be achieved if these are shown indicatively on precinct plans. She therefore recommends that the indicative locations of wetlands and streams to be retained, riparian areas to be enhanced and indicative greenway routes (walkways/cycleways) are shown on the precinct plan as shown on Figure 10 below. The confirmed locations of the wetlands and streams can be identified through future consent applications, and Ms Richards recommends a special information requirement to this effect.

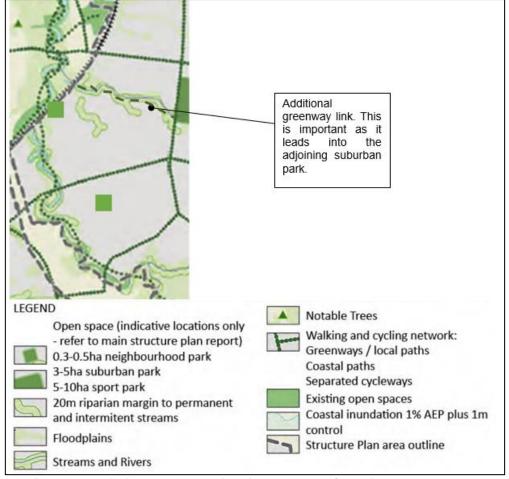


Figure 10: Recommended greenways to be shown on precinct plan

- 248. In terms of the proposed zoning, Ms Richards does not support the full extent of the OSIR zone identified adjacent to Hingaia Stream. It exceeds the standard 20m width required under s230 of the RMA, and neither the floodplain land nor the transmission corridor land beyond the 20m width meet the Council's open space acquisition criteria. In her view an alternative zoning needs to be identified for this land.
- 249. Ms Richards opposes any revised wording implying that any of the indicative open space shown on the precinct plan will be acquired by the Council. For riparian margins where a walkway is to be provided, she recommends that these should be offered at no cost to Council for vesting.
- 250. Ms Richards recommends that the assessment criterion around sunlight access to parks applies to all open spaces, as the minimum 3,000m² area specified has the potential to exclude esplanade reserves. She also recommends that the assessment criterion for retaining walls applies to sub-precincts C, E and F as well as A, B and D, as these sub-precincts contain permanent streams which could be affected by height and dominance effects of retaining walls. She recommends a new standard for maximum fence height for sites adjoining public space.
- 251. Ms Richards also recommends several additions and amendments to the proposed objectives and policies for the precinct to address the issues identified above, including provision of greenways networks and interfaces of sites/dwellings with open space. She recommends that all public open spaces are a restricted discretionary activity, rather than just those over 1,000m². She seeks additions to the matters of discretion and

assessment criteria applicable when the proposed riparian margins standard is infringed. She also seeks amendments to the riparian margin standard to specify required widths and require walkways/cycle paths within greenways, with new assessment criteria for providing greenways.

252. Without these changes Ms Richards concludes that there is insufficient assurance that the AUP open space outcomes will be achieved in later resource consent processes, and that appropriate parks infrastructure will be provided.

Analysis

- 253. In terms of AUP policies, the following is relevant:
 - B2.7.2 (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
 - (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
 - E38.3(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
- 254. I recommend in section 8.8 below that streams are shown on a precinct plan in relation to ecological effects. I agree that greenways along stream corridors need to be shown on the precinct plan to better secure these being delivered through future subdivision and to give effect to RPS Policy B2.7.2(2) - promoting the physical connection of open spaces. This will not prevent the adjustment of the locations through the development process once further detailed planning and stream surveys are completed. I support amendments to the precinct provisions to specify required locations of walkways/cycleways within these corridors in relating to riparian planting. 13
- 255. I accept that the extent of OSIR zone needs to be reduced along the Hingaia Stream as it is not all suitable for acquisition by Council. This land would be most appropriately zoned BMC zone, but subject to the National Grid Corridor Overlay.
- 256. I support provisions being amended / added to manage the quality of the interface between open space and built development. This gives effect to RPS Policy B2.7.2(7) requirement to avoid or mitigate adverse effects of land use and development on open space facilities. I agree that there is a need for a specific fencing rule; that an assessment matter relating to retaining structures should apply to all sub precincts; and that the performance standard relating to 4 hours of sunlight access to public open spaces be applied across the Precinct (while maintaining the 3,000m² site area threshold).

¹³ I understand from the planning conferencing statement that the requestor is proposing amended precinct plans which will show indicative open spaces, streams and green corridors.

8.6 Economic Effects

Application

- 257. Economic effects of PPC48 are summarised in section 10.3 of the s32 evaluation report and discussed in more detail in the Economic Assessment prepared by Market Economics (Appendix 8 to the application). Separate sub-reports have also been prepared on Household Sector Activity for Papakura Metropolitan Centre (Appendix 9 to the application) and Pukekohe Centre (Appendix 27 to the application).
- 258. The assessment states that PPC48 enables the provision of a Metropolitan Centre within the southern Auckland catchment. The Plan Change will affect the role of Papakura as a Metropolitan Centre, however this is a role that Papakura is currently struggling to fulfil. As this is unlikely to change in the future, reliance on Papakura to fulfil the southern Auckland catchment's needs for a Metropolitan Centre will see people traveling outside of the catchment to access amenities and employment opportunities. Conversely, the Pukekohe Town Centre is performing well and effectively meeting the needs of its catchment. The development of the Drury Centre will affect the Pukekohe Town Centre to a modest degree in the short term, however, this will be quickly compensated for by the demand created by the growth expected in the surrounding Future Urban areas. Based on the above, it is the requestor's opinion that the development of a Metropolitan Centre at Drury would not adversely affect the function, role and amenity of the Pukekohe Town Centre.
- 259. The assessment sets out that central Drury is considered an appropriate location for a Metropolitan Centre because it is easily accessible within the catchment it would serve and there are large greenfield sites available to provide unconstrained development potential to enable a centre of an appropriate size to be constructed. Overall, the assessment finds the proposed size, location and function of the Drury Centre is likely to have a positive effect on the ability of the existing and future community to provide for their own economic and social well-being.

Peer Review

- 260. Tim Heath from Property Economics has reviewed the PPC48 request documents (Appendix 4). While supportive of the intention to develop a large centre, his review raises potential risks to the social and economic wellbeing of Pukekohe Town centre, should Drury's retail component develop quickly. A staging mechanism is suggested as one way to address this risk (and essentially putting into a regulatory framework the staging assumed by the requestor in their analysis of retail impacts). The Drury Centre will also impact on Papakura's future, but the effect will likely be one of cementing in Papakura's current focus on serving a (growing) local market, rather see a negative decline in fortunes.
- 261. Mr Heath suggests that based on Figure 6.4 of the requestor's economic report (prepared by Market Economics), retail GFA thresholds of no more than 20,500m² retail GFA prior to 2033, and no more than 40,000m² retail GFA prior to 2038 would be an appropriate approach that represents a fair balance of adverse impact risks and growth in retail demand.
- 262. The review questions assumptions around employment, particularly if a Transit Orientated Development (TOD) is to be advanced. It supports an expanded Metropolitan Centre zoning to the north, along Flanagan Drive as one way to secure long term capacity for employment related activities.

<u>Analysis</u>

- 263. The AUP clearly anticipates new Metropolitan Centres being established. Policy B2.5.2.(4) enables new metropolitan centres having regard to all of the following:
 - (a) the proximity of the new centre to existing or planned medium to high intensity residential development;
 - (b) the existing network of centres and whether there will be sufficient population growth to achieve a sustainable distribution of centres:
 - (c) whether the new centre will avoid or minimise adverse effects on the function, role and amenity of the city centre, metropolitan and town centres, beyond those effects ordinarily associated with trade effects on trade competitors;
 - (d) the form and role of the proposed centre
 - (e) any significant adverse effects on existing and planned infrastructure;
 - (f) a safe and efficient transport system which is integrated with the centre; and
 - (g) any significant adverse effects on the environment or on natural and physical resources (that have been scheduled).
- 264. The policy provides a degree of support to existing centres. New centres should 'avoid' or minimise adverse effects on existing centres. This is an appropriate proposition given the public resources (and associated social and economic wellbeing benefits) that exist in existing centres, and is the basis for a staging mechanism.
- 265. The Figure below is from the Market Economics assessment of retail floorspace demand, as referred to by Mr Heath. In the early stages of the new centre, demand is sourced from across the southern area, with approximately 30% of demand coming from Franklin. By 2038 this has dropped to 25% as the population base of Drury East and West increases.

Catchment	2016	2018	2023	2028	2033	2038	2043	2048
Pukekohe	0	0	0	0	0	0	0	0
Franklin	3,120	3,478	4,611	6,214	8,102	10,036	11,665	13,431
Drury West	451	690	1,327	2,027	5,164	8,615	15,695	23,475
Drury East	1,662	2,481	4,670	7,077	10,191	13,605	20,457	27,973
Drury South	218	519	1,324	2,210	2,542	2,902	3,180	3,478
Papakura	1,684	1,899	2,443	3,015	3,553	3,948	4,372	4,829
Total	7,136	9,066	14,375	20,543	29,551	39,106	55,369	73,187

- 266. I acknowledge that the Market Economics analysis of impacts on Pukekohe, based on the above figures, suggest a possible short term, 7.5% reduction in growth of turnover, compared to the 'without Drury Centre' scenario, should Drury Centre open in 2023. Opening the Drury Metropolitan Centre in 2028 generates an 8.9% impact on sales performance in that year at Pukekohe. This reduction is on the edge of what is often taken to be the boundary between trade and non-trade effects. It is also a short-term impact.¹⁴.
- 267. However, if retail development in Drury Centre occurs faster than that set out and population growth is slower in Drury East and West, then there is the potential for greater

¹⁴ Pukekohe Centre Household Sector Activity, Land Use Survey Analysis, Retail Impact Assessment , 20 March 2020 – FINAL Page 33.

- impacts on Pukekohe. Equally, fast population growth in Drury East and West may bring forward demand for retail activities in Drury Central, the absence of which may harm some aspects of social and economic wellbeing.
- 268. In my view, there is justification to add in a staging control so as to give Pukekohe (and possibly Papakura) time to adapt, and to ensure that the short-term impacts identified by Market Economics are not exceeded. In an RMA context, I consider that a single step standard is sufficient, covering the first decade, rather than a double step as proposed by Mr Heath. This will allow time for Pukekohe centre to adjust and allow for its catchment to build up sufficient base to support its vitality.
- 269. I would suggest the following:

Prior to 2033 retail floorspace shall not exceed 20,000m² GFA.

- 270. The standard will provide for a reasonable level of retail activities that will help other employment related activities to establish in the area.
- 271. Exceedance of the standards should trigger a discretionary activity consent and specific assessment of non-trade impacts on the social and economic wellbeing generated by existing centres. I acknowledge that there will be complexities in applying the standard across multiple land holdings (as I have acknowledged for the transport triggers proposed by the requestors) but consider that a single parameter of retail floorspace should be easier to manage than tracking, housing, office and retail floorspace.

8.7 Transport Effects

<u>Application</u>

- 272. Transport effects of PPC48 are summarised in section 10.4 of the s32 evaluation report and discussed in more detail in the Integrated Transport Assessment (ITA) prepared by Stantec (Appendix 10 to the application). This ITA builds on an ITA prepared by the Strategic Growth Alliance in support of the Drury-Opāheke Structure Plan.
- 273. It is proposed to provide staged accesses to the plan change area in response to the level and rate of development and required roading infrastructure. Direct access to the Drury Interchange is the desired outcome, however, the ITA also identifies an alternative access location at Firth Street. Initial access to the plan change area is envisaged to be via a new road, "Drury Boulevard" which will connect via a new intersection at Waihoehoe Road. For full development, in 2048+ it is anticipated that there will be multiple access options to/from the plan change area, including a potential Pitt Road Overpass, Station Road, Waihoehoe Road, Fitzgerald Road and a potential connection to Quarry Road.
- 274. Traffic modelling has been undertaken to assess the effects on the external transport network, taking into account PPC48 (as well as PPC 49 and 50). The modelling has assumed several funded infrastructure upgrades will be delivered within the Waka Kotahi timeframes which coincide with likely time frames for development being occupied, including Mill Road sections, Drury central and west train stations, rail electrification, State Highway 1 widening and interchange works. With these delivered, the modelling has found that the Drury East developments can be accommodated by the surrounding transport network, with several targeted local upgrades required within the first two decades (all relating to the Waihoehoe / Great South Road intersection).

- These local upgrades have been included as requirements in the staging provisions for the precinct, triggered by both dwelling numbers / GFA and trip generation.
- 275. In terms of the internal road network, the indicative location of collector roads and where these will intersect with the existing road network is shown indicatively on proposed Precinct Plan 2. The Plan Change includes provisions to guide the location and layout of local roads and indicative road cross sections to ensure that the road network within the precinct integrates with the surrounding development within the neighbouring plan change areas.
- 276. The ITA identifies the Drury Central train station and public transport hub as a critical component to ensuring that Drury Centre is a Transit Orientated Development. The train station and public transport hub (allowing for bus connections) are to integrate multiple modes of transport that link the local network with the wider, regional network. It is noted that the ITA undertaken by the Strategic Growth Alliance indicated the preferred potential location for the train station to be further north than the proposed Metropolitan Centre.

Peer Review

- 277. A peer review undertaken by Terry Church of Flow Transportation Specialists (Appendix 4) has raised a number of fundamental issues with the PPC48 plan change request.
- 278. Mr Church supports the intensity and mix of land-uses proposed by the plan change request as the Drury Station presents a relatively unique opportunity to enable development consistent with Transit Oriented Development (TOD) principles. However, his assessment is that unless amendments are made to the provisions, PPC48 is unlikely to result in integrated land use and transport outcomes as required by the AUP, and development within PPC48 is unlikely to satisfactorily address safety and efficiency effects on the transport network. There is a sizeable risk that there will be consequential adverse outcomes for economic well-being (in terms of transport network efficiency) and social well-being (including road user safety). This may result in Auckland Transport and Waka Kotahi (as road controlling authorities) being left to address substantial off-site cumulative safety and efficiency effects on the transport network, beyond what would be expected from normal development or business as usual upgrades to the network, due to uncertainty around infrastructure scale, funding and timeframes.
- 279. Mr Church notes that the traffic modelling uses low traffic generation rate due to the Transit Orientated Development outcomes being sought. As such, the traffic modelling and mitigation projects identified inherently assume a high public transport mode share, either by train or bus. It is therefore essential that any mitigation measures or triggers considered for the development connect people to public transport services and protect the performance of corridors in which public transport services operate. Not doing so will fundamentally alter the traffic outcomes assumed in the assessment and result in a car dependent suburb.
- 280. It is his view that the train station should be open and operating prior to any development being occupied. Supporting connections should be provided for from the outset, such as:
 - the 'Key Retail Street' which provides an essential connection between the rail station and the wider site, namely sub-precinct B for active modes and those connecting with the rail station

- The collector road network, being the sections that connect to the train station and any land being developed, again ensuring connectivity with the train station is available
- Corridors that cater for bus services ensure bus priority is provided to ensure bus service reliability and service times are protected
- Sub-precinct D and the desire for Park-and-Ride should be reviewed in light of a train station shift further to the east.
- 281. Mr Church suggests a range of standards be introduced that tie land use development to the train station being operational and satisfactory access to the station being available. The Precinct provisions should include Standards relating to the early provision of walking and cycling connectivity between development and the Drury Central train station, and a continuous collector road network to enable Auckland Transport to provide bus services as staged development occurs. With bus services operating on Waihoehoe Road, it is essential that priority measures are provided for buses so that reliability and service times are protected, noting the underlying reliance of high mode share and therefore use of public transport.
- 282. The review identifies substantial concern that 'other' transport infrastructure needed to support PPC48, such as the Waihoehoe Road upgrade and Mill Road (between Manukau and Drury South), may not be delivered in a manner that integrates with development in PPC48. Given the uncertain development programme for the PPC area, Mr Church is of the view that the prescriptive nature of the transport upgrade provisions in the Precinct is not appropriate due to impracticalities of administering and monitoring the thresholds proposed by the applicant. Further, he has significant concerns about the assumptions and methodology used in the traffic modelling, which the applicant has relied upon in setting these thresholds. To address the uncertainty in development programmes and third party infrastructure provision (including that contained within ATAP 2021 2031), and concerns about the traffic modelling relied upon by the applicant, he considers that Standards IX.6.2 and IX.6.3 should be replaced in their entirety.

283. On a more detailed level:

- Confirmation is needed as to whether the layouts proposed by the applicant for Great South Road/ Waihoehoe Road allow for bus priority (as per the Auckland Transport Supporting Growth network) and provide the necessary facilities to ensure the corridor operates safely and efficiently for all transport modes.
- The thresholds set out in the notified Provisions for upgrading the Great South Road/Waihoehoe Road intersection are not robust as he considers there are underlying flaws in the modelling assumptions used to set these thresholds. Further, the upgrades of this intersection as proposed in IX6.2 and IX6.3 have the potential to cause ongoing disruption to the transport network during works and will require the acquisition of third party land and widening/replacement of the Waihoehoe Road rail overbridge, which is not identified in the Precinct Provisions.
- The notified Provisions fail to address likely safety effects on existing rural roads. He considers that existing rural roads, including Waihoehoe Road, Fitzgerald Road, and Brookfield Road should be upgraded to urban standard prior to each respective road experiencing an increase in traffic due to occupied development within PPC48.
- He has concerns that the assumptions made as part of the applicant's traffic modelling have led to an underestimation of potential traffic effects, including:
 - under estimation of vehicle trips through the Great South Road/Waihoehoe Road intersection, in the instance that Mill Road (between Waihoehoe Road and Manukau) is not in place;

- under estimation of the number of vehicle trips generated by PPC48, due to assumed high uptake of walking, cycling and public transport, although the surety that infrastructure to support high non-car based travel will be delivered in conjunction with development is lacking in the precinct provisions.
- The thresholds linked to transport infrastructure identified in the provisions lack robustness and will be unwieldy and impracticable to monitor. Further, the provisions lack sufficient evidence as to how thresholds have been determined and acknowledgement of safety effects on existing rural roads, and enablement of active modes and public transport (bus and rail).

284. In response to these concerns he recommends that:

- Standard IX.6.2 and Tables IX.6.2.1 and IX.6.2.2 are replaced, in their entirety, with thresholds to support transit orientated development outcomes (high bus, rail and active mode share and safety interventions).
- Standard IX6.3 Trip Generation Limit and Tables IX.6.3.1 and IX.6.3.2 are replaced in their entirety with a Standard that adopts performance-based thresholds for key intersections.

Analysis

285. AUP RPS specific objectives for transport include:

B3.3.1. (1) Effective, efficient and safe transport that:

- (a) supports the movement of people, goods and services;
- (b) integrates with and supports a quality compact urban form;
- (c) enables growth;
- (d) avoids, remedies or mitigates adverse effects on the quality of the environment and amenity values and the health and safety of people and communities; and
- (e) facilitates transport choices, recognises different trip characteristics and enables accessibility and mobility for all sectors of the community.
- 286. Under the heading Integration of subdivision, use and development with transport; policy B3.3.2 (5) refers to:

Improve the integration of land use and transport by:

- (a) ensuring transport infrastructure is planned, funded and staged to integrate with urban growth;
- (b) encouraging land use development and patterns that reduce the rate of growth in demand for private vehicle trips, especially during peak periods;
- (c) locating high trip-generating activities so that they can be efficiently served by key public transport services and routes and complement surrounding activities by supporting accessibility to a range of transport modes;
- 287. I concur with Mr Church's assessments that as presented, the plan change request may not give effect to key AUP RPS objectives and policies relating to land use and transport integration. I generally agree with the amendments proposed by Mr Church, but with some modifications to them to address compatibility with the AUP.
- 288. On the issue of transit-orientated development, while a substantial intensity of development is possible as enabled by the proposed zonings, buildings should only be occupied once the Drury Central train station is operational and connections to the train station are provided to allow safe and convenient access for active modes of transport and by bus. In the case of Waihoehoe Road, this includes bus priority measures to

ensure buses are not held up by queued traffic. In my opinion the train station needs to be in place from 'day one' so as to influence people's travel choices, with connecting routes being upgraded to ensure safe, reliable and attractive routes exist for those who walk, cycle and use public transport. As is the train station is timed for the next couple of years, this should not present a significant issue in terms of development.

- 289. In my view the 'internal' roading pattern set out in the Precinct Plan needs to be amended. The roading reflects Kiwi Property's preferred rail station location and provides for a direct access off the Southern motorway. The pattern is not appropriate if the station is located further to the north-east. It will also be important to transit-orientated outcomes that there be some 'public amenity' at the station concourse. This is in terms of the safety of users after hours and in the weekends. I would support a requirement that a station plaza with supporting retail activities be delivered by a set period of time. For example, within 2 years of the train station becoming operational. I consider that the delivery of this requirement should fall upon the developers, as a significant part of the justification for the new centre is the link to public transport.
- 290. With regards to walking, cycling and bus access to the Drury Central train station (which based on SGA work to date, will likely be located on land outside of the control of the requestor), PPC48 proposes a number of assessment matters to guide development in sub-precincts including sub-precincts that are not adjacent to the train station. These assessment matters require attention to be paid to providing physical access to the station. That is, should development proceed some distance from the train station, the precinct provisions encourage access to the station by walking and cycling. However, I have concerns that these assessment matters may lead to interim or piecemeal provision of linkages. In my view standards are required, and I agree with the approach set out by Mr Church. I have made some modifications to better align the standards with the outcomes sought.

Table IX.6.2: Transit Orientated Infrastructure

Threshold	Transport and Land use Required to Exceed the
	Thresholds
Prior to any new buildings	Drury Central train station is operational
being occupied	
	Waihoehoe Road is upgraded to an urban standard
	between the Waihoehoe rail overpass and
	Fitzgerald Road, with westbound bus priority
	measures being provided
Prior to any buildings being occupied in Precinct A; Drury	<u>Direct, safe and separated pedestrian and cycle</u> <u>connections are provided from the Key Retail</u>
<u>Central</u>	Street (Main Street) to the Drury Central station
	<u>concourse</u>
Prior to any buildings being	Direct, safe and separated pedestrian and cycle
occupied in sub Precincts B	connections are provided to the Drury Central
and F; Drury Central	station concourse via the Key Retail Street or Drury
	<u>Boulevard</u>
Prior to any buildings being	Direct, safe and separated pedestrian and cycle
occupied in sub Precincts C	connections are provided to the Drury Central
and E; Drury Central	station concourse via the Drury Boulevard

No more than 2 years after the Drury Central train station is made operational	A publicly accessible station plaza of at least 2000sqm in area is provided adjacent to the station concourse along with a minimum of 500 sqm of fronting commercial floorspace (in temporary or
	permanent buildings).

- 291. These standards may involve some implementation risks, for example if they require access over third party land, such as if development begins in the north-eastern corner of the precinct area, remote from the station. While I accept that there will be issues for development that wishes to proceed in this manner, I consider it very important to long term outcomes that effective linkages be provided from the start. I also note that in the normal course of events (such as a Council-initiated plan change with funding attached), the Council may secure direct and safe links by way of precinct plan provisions and/or by way of acquisition. In the absence of such detail in the plan change request, I consider the standards to be justified, as well as the responsibility being placed on the developer if they wish to proceed early.
- 292. As noted by Mr Church, it is also important that the 'rural roads' in the area be upgraded to an urban standard early in the development process. This is to provide a safe environment, as well as to support walking, cycling and bus services. Development should not provide piecemeal upgrades of the main roads in the plan change area. I would support the following standards being introduced. These may be seen to 'front load' much investment in upgraded road environments, but given the proposed timing of development versus council resources, I consider it is necessary to set out a very clear standard to be achieved. The implication is that if one of the landowners in the precincts wishes to push ahead with development that triggers one of the thresholds, then they may be expected to fund the upgrade (and reach agreement amongst the parties as how to fund the works).

Table IX.6.3: Rural Road Upgrades

<u>Threshold</u>	Transport and Land use Required to Exceed the Thresholds
Prior to any development fronting	Urbanisation of Fitzgerald Road between the new
Fitzgerald Road, or any new road	access and Waihoehoe Road.
connection to Fitzgerald Road	
Prior to any development fronting	Urbanisation of Brookfield Road from the new
Brookfield Road, or any new road	access to Fitzgerald Road, Fitzgerald Road to
connection to Brookfield Road	Waihoehoe Road.

Note: The term 'urbanisation' would need to be defined but would likely involve works within the current road reserve to incorporate walking and cycling facilities, kerb and channel, lighting, services, stormwater management and pavement approvements.

293. I would also agree that some form of assessment of transport implications is required in the absence of any certainty as to the timing of Mill Road extension, given that this road has a major influence on travel patterns, and prior to implementation of the NoRs issued by AT and Waka Kotahi. I prefer the proposal put forward by Mr Church, as follows:

IX.6.3 Transport network performance

<u>Prior to Mill Road connecting to Waihoehoe Road and 4 Laning of Waihoehoe</u> Road between Fitzgerald Road and Great South Road:

- (1) <u>Any development of more than 50 dwellings or 1000 sqm of non-residential</u> floorspace must meet the following standard:
 - a. Waihoehoe Road / Great South Road intersection traffic performance:
 - i. <u>95th percentile queues (not average queues) for each movement at intersections do not</u>
 - a. extend to and through upstream intersectionsb.queues shall not extend beyond dedicated storage lanes
 - ii. no individual traffic movement shall have a level of service (LOS) worse than LOS E, or have a degree of saturation higher than 95%
 - iii. <u>movements where buses operate shall have a LOS no worse</u> than LOS <u>D</u>
 - iv. The overall intersection LOS shall be no worse than LOS D.
 - b. a safety review of the Great South Road / State Highway 22

 Intersection, Great South Road/Pitt Road Intersection, and Great South

 Road/Quarry Road Intersection at that time and assessment of the

 predicted safety risk resulting from the development traffic
 - c. <u>identification of any necessary upgrade to the Great South Road / State Highway 22 Intersection, Great South Road/Pitt Road Intersection, and Great South Road/Quarry Road Intersection to accommodate development traffic, and timing of its implementation, to address any adverse effects on the safety and efficiency of the intersection.</u>

A traffic assessment shall be prepared by a suitably qualified and experienced traffic engineer or transportation planner demonstrating compliance with the above must be submitted with any resource consent application for subdivision or development and must utilise traffic data no older than 6 months at the time that a resource consent application is lodged for the development proposal.

Note: Degree(s) of saturation is defined to be the proportion of actual traffic movements using the intersection to the theoretical maximum capacity of the intersection.

<u>Level of Service (LOS) is defined by Auckland Transport guidance or, in its</u> absence, by Austroads guidance.

Traffic generation from parallel, lodged, or consented stages that are not yet operational are to be included in the traffic assessment

Note: Standard iX6.2(1)(c) is not required once Drury South "link road" as shown on I410.10.2 Drury South Industrial Precinct plan 2, and Sh1 Drury South Interchange is constructed.

- 294. While these standards cover access to the train station, safety of rural roads and Great South Road intersection performance, they do not address the upgrade/replacement of the Waihoehoe Road rail overbridge and Waihoehoe Road to Fitzgerald Road to provide for 4 lanes of traffic and separated walking and cycling facilities. In my view, there should be a date by which this work is in place, given its importance in linking the new suburbs to the existing Drury village (and associated community activities), as well as in providing for continuous bus priority. I suggest a date-based approach to its provisions, rather than a floorspace threshold, or number of dwellings.
- 295. I would suggest that a standard be added requiring that this work be in place by 2028, giving time for the funding to be identified. For example:

By 2028 the Waihoehoe rail overbridge and Waihoehoe Road to Fitzgerald Road shall be upgraded to a four lane format with separated walking and cycling facilities. If this upgrade is not in place by this date, no further subdivision or development shall occur until the upgrade is operational.

- 296. Such a standard may prompt a rush of consents prior to the date, but in my view, a date is a much more effective means of managing infrastructure co-ordination than reliance on floorspace thresholds or similar.
- 297. I would recommend that infringement of these standards would trigger a Discretionary resource consent application. This would allow for a full assessment of effects and possible mitigations.
- 298. My assessment is that unless significant amendments are made to the plan change along the lines outlined, the plan change will not give effect to the NPS-UD or the RPS provisions of the AUP as they relate to promoting public transport use and active modes.

8.8 Ecological Effects

Application

- 299. Ecological effects of PPC48 are summarised in section 10.5 of the s32 evaluation report and discussed in more detail in the Ecological Assessment prepared by Tonkin & Taylor Ltd (Appendix 11 to the application).
- 300. Key aquatic habitat features across the plan change site include the Hingaia Stream along the western boundary of the PPC48 plan change area, other permanent and intermittent streams labelled A-G, and two seepage wetlands. Most streams were identified as modified and degraded. The Hingaia Stream is an important migratory pathway for native fish. The Ecological Assessment considered the ecological values of the watercourses to be low to moderate.
- 301. The application states that the Plan Change presents an opportunity to restore and enhance the aquatic and freshwater quality values in the plan change area. The Hingaia Stream and some tributaries are to be retained and enhanced. However some streams and wetlands may need to be modified and Stream D is expected to be reclaimed. The proposed precinct contains specific provision for stream works to construct the Drury Boulevard (Policy 19, with associated rules and standards proposed via the requestor's submission).
- 302. The earthworks consenting process is proposed to manage the potential effects of sediment discharge on the water quality of watercourses. The urbanisation of the area will also change the type of contaminants entering the stream environment; these effects are addressed in the requestor's stormwater assessment discussed separately.
- 303. Terrestrial vegetation on the plan change site is considered to be of low to moderate value located within isolated pockets across the site, with the area of highest value located in the future Homestead Park (being mature native and exotic trees with a well-developed understory). Existing vegetation on site is identified as being a potential habitat and food source for native avifauna, bat, and lizard populations, as well as common non-native bird species. The Plan Change will result in loss of vegetation to facilitate land development; however, the report states this will be kept to a minimum and will be avoided where possible.

304. There will be changes in stream erosion effects due to urbanisation. The change in hydrological regime may result in streambank sediment entering the receiving environment at times (e.g. after heavy rain). However, the report states this will be balanced in part by the effective removal of contributing sediment loads from agricultural land use and the future potential benefits associated with planting along the blue-green network throughout the plan change area.

Peer Review

- 305. Jason Smith, Morphum Environmental, has reviewed the freshwater and terrestrial ecological aspects of the proposal (Appendix 4). Generally, he considers the ecological effects are adequately assessed and the measures proposed to address those effects are appropriate. Notwithstanding this, he recommends some amendments to the proposed plan change provisions.
- 306. Mr Smith's position is that the precinct map should show all freshwater watercourses (permanent and intermittent streams as well as wetlands) based on the best available information, with a footnote that clarifies the need for site-specific watercourse classification and delineation assessments to be undertaken and accompany any future resource consent application. The mapping of watercourses and inclusion in precinct plans is considered standard practice and in accordance with the NPS-FM clauses 3.22-3.24, and will provide guidance for giving effect to AUP RPS Policy B7.3.1(1).
- 307. Mr Smith does not oppose specific precinct provisions for stream works such as Policy 19 in PPC48, but considers the proposed wording is too prescriptive, given the lack of design details for the works. He considers the provisions in AUP Chapter E3 contain sufficient provision to address these issues through normal resource consenting.
- 308. In Mr Smith's view the restoration of 20m riparian margins along streams, rather than the 10m proposed by the requestor, better aligns with RPS Objectives B7.2.1(2), B7.3.1(1) and B7.3.1(3). He states that the ecological functions provided by riparian vegetation including: the filtration of contaminants, habitat provision, organic matter input and supports connectivity and buffering functions, as well as influencing water quality, correspondingly increase with the width of the riparian vegetation. Furthermore, 20m riparian buffers are thought to be self-sustaining for indigenous vegetation, with buffers of lesser extent being subject to a greater degree of 'edge effects' leading to an increased prevalence of weed species and associated increase in maintenance activities required to establish and maintain a self-supporting system.
- 309. All planting is recommended to be protected by a suitable legal mechanism. There is limited scope for low impact activities such as paths within the 20m riparian margin; this will need to consider site-specific ecological values.
- 310. Mr Smith also seeks that the riparian planting rules apply to wetlands as well as intermittent and permanent streams. The buffering of wetlands would enhance ecological functions and give effect to RPS Objective B7.2.1(2) and Policies B7.3.1(1) and B7.3.2(2, 3, 5 and 6).
- 311. Mr Smith also supports amendments to the riparian planting standards to cross reference to Appendix 16 of the AUP and require the planting plan be prepared and implemented by a suitably qualified and experienced person.

Analysis

- 312. AUP RPS objective B7.3.1 seeks that:
 - (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.
- 313. I adopt Mr Smith's recommendations and consider the riparian margins for permanent streams and wetlands should be 20m in width either side with legal mechanism in place to protect the planting in perpetuity.
- 314. I also consider that the watercourses should be shown on a precinct plan. This will not prevent the adjustment of the locations through the development process once further detailed planning and stream surveys are completed.
- 315. I consider these amendments give effect to the above-stated RPS objectives and policies relating to indigenous biodiversity and freshwater management.

8.9 Flooding and Stormwater Management Effects

Application

- 316. Flooding effects of PPC48 are summarised in section 10.6.1 of the s32 evaluation report and stormwater management effects in section 10.6.2. These are discussed in more detail in the Stormwater Management Plan (SMP) prepared by Tonkin & Taylor Ltd (Appendix 12 to the application).
- 317. A Flood Risk Assessment was carried out taking into account the adjoining Drury East private plan change 49 area. The model assumes that there will be an upgrade of the Great South Road culvert. The results of the model showed that development will result in localised increases and decreases to flood levels within the plan change area. Locations where flood level increases were observed outside the plan change area for a 10 year CC storm scenario included:
 - the main Hingaia Stream branch to the south and west of the plan change area near Brookfields Road (increases up to 60 mm);
 - the confluence of the minor tributaries to the west of the Cossey Road and Fitzgerald Road intersection (increases up to 150mm); and
 - the existing Drury Township downstream of the plan change area (increases up to 80 mm).
- 318. Following lodgement of the plan change request, additional flood modelling was undertaken to assess the potential flooding mechanisms and effects caused by a "development only flood' scenario. This scenario assumes extreme rainfall (2, 10, 100 year ARI rainfall) in the lower catchment only (over existing Drury and plan change areas). As reported, the analysis showed that the total number of properties flooded are unchanged, for the 'Development only' as well as the scenarios already analysed. This confirms there is no additional flood risk to habitable floor or properties with the proposed development in place.
- 319. The s32 evaluation report states that standard flooding provisions in Chapter E36 of the AUP would sufficiently manage the effects of development in identified flood plains and/or overland flowpaths.

- 320. In terms of stormwater management, the SMP prepared aims to align with the requirements of the AUP and be consistent with the requirements of the Auckland Council Network Discharge Consent (NDC). The SMP will either be certified under the NDC and the discharges from the site authorised that way, or a separate stormwater discharge consent will need to be obtained.
- 321. The SMP sets out that green infrastructure will be used to treat stormwater contaminants at source, including bio-retention devices, use of inert building materials and erosion protection at stormwater discharge points. Stormwater quality provisions in Chapter E9 of the AUP will apply across the plan change area (all roads, not just high use roads).
- 322. The SMAF1 overlay to be applied across the plan change will require hydrological mitigation measures for the effects of stormwater runoff generated by increased impervious areas. The SMP considers that this will be sufficient to mitigate such effects.
- 323. Stormwater is to be conveyed through a combination of piped networks (10year ARI event capacity) and swales to discharge to streams. Excess or secondary flows will be conveyed using roads and overland flow paths.

Peer Review

- 324. Trent Sunich, 4sight Consulting, has reviewed the stormwater and flooding effects of the proposal (Appendix 4). In his view, at a high level, there is alignment between the proposal (including SMP and associated precinct provisions relating to stormwater) and the applicable objectives and policies in the RPS and Regional Plan of the AUP. Mr Sunich generally supports the stormwater contaminant treatment; hydrological mitigation including application of SMAF1 overlay; and flood hazard management proposed, noting that Chapters B7, E1, E8, E9, E10 and E36 of the AUP will apply at development stage.
- 325. Notwithstanding the flood modelling findings of the requestor, the SMP indicates the capacity of the existing Flanagan/Railway and Great South Road culverts is inadequate to support future development of the PPC48 and PPC49 areas. The culverts will need to be upgraded to provide additional capacity before flows from the full development are able to be "passed forward". The upgrades require coordination between multiple stakeholders. Temporary onsite attenuation devices may be an acceptable interim solution. An assessment criterion IX.8.2(3)(n) is proposed to ensure this is addressed at development stage.
- 326. The SMP for the PPC area is expected to be eventually adopted into the Auckland Council Stormwater NDC. Mr Sunich considers that it would be appropriate to include a reference to the SMP and compliance with the associated NDC within the precinct provisions. This would be consistent with other precincts in the region and provide a helpful linkage to assist in achieving the specific outcomes sought by the precinct.
- 327. Mr Sunich also recommends various edits to the stormwater provisions in the precinct
 - Amend objective 4 so that it refers to improving freshwater quality rather than progressively improving freshwater and sediment quality
 - Other amendments recommended in response to submissions to strengthen the objective and policy framework and implementation of the SMP are addressed in section 9.18 of this report.

328. Objective 4 reads as follows:

- (4) Freshwater and sediment quality is progressively improved over time in the Drury East Precinct.
- 329. It is unclear why the term 'progressively improved' is used in this objective which in the context of Chapter E1 relates to existing stormwater discharges and brownfield redevelopment. Further, improvement to sediment quality is typically not an outcome which can be directly influenced by a change in land use. Therefore, Mr Sunich recommends the following edits to this objective:
 - (4) Freshwater quality is improved in the Drury East Precinct.
- 330. Policy 6 of the proposed plan change is as follows and emphasises the capacity issues associated with the receiving culverts:
 - (6) Ensure that development in Drury East Precinct is coordinated with supporting stormwater, wastewater and water supply infrastructure, having particular regard to the capacity of the Fitzgerald culvert and culverts under Great South Road.
- 331. So that there is consistency with the culverts discussed in the SMP document Mr Sunich recommends the following edits to Policy 6:
 - Ensure that development in Drury East Precinct is coordinated with supporting stormwater, wastewater and water supply infrastructure, having particular regard to the capacity of the Fitzgerald culvert and culverts under Great South Road the Flanagan/Railway and Great South Road culverts.
- 332. It is noted future stormwater diversions associated with the development would be permitted activities under Chapter E8 (A1) providing the development demonstrates compliance with the SMP document. Other land use stormwater rule chapters in the AUP being E9 (Stormwater quality - High contaminant generating car parks and high use roads) and E10 (Stormwater management area - Flow 1 and Flow 2) any associated land use consent requirements will still apply.
- 333. With these amendments, Mr Sunich can support the stormwater aspects of the PPC48.

Analysis

- 334. Based on Mr Sunich's assessment, I consider that the stormwater and flooding provisions may not give full effect to RPS Objectives B7.3.1(1)-(3), B7.4.1(2), (4) and (5), and be consistent with Auckland wide objectives and policies for stormwater, including Policies E1.3(8) and (11).
- 335. Generally, I accept that the NDC process for adopting the SMP will be sufficient to ensure the stormwater and flooding effects of the PPC48 are adequately avoided, remedied or mitigated, provided that some adjustments to the provisions to strengthen them are made:
- 336. I have concerns about the adequacy of standard Auckland wide AUP methods to address specific issues and effects relating to:
 - stream retention and off setting
 - riparian margins
 - contaminant treatment

- flood hazard management.
- 337. In relation to possible stream reclamation, this is a matter that is addressed by the AUP. However, it could be clarified that if any reclamation is justified, then off-setting should result in no net loss on ecological function. Currently the AUP expresses a preference for no net loss (Policy E3.3.4). For example, I would support the following wording being inserted (with reference to being an additional matter to those set out in E3.3.13):

<u>Ensure that if stream reclamation occurs, then there is no net loss in ecological</u> function and preferably a net gain.

- 338. Planting of riparian margins is supported. I agree that it would be desirable to cross reference to AUP replanting Schedule and to clarify that infrastructure such as walking tracks should be located outside the minimum 10m planted width.
- 339. Water quality is an important issue, given the quality of the receiving environment, and further detail is required around treatment of impervious surfaces (including buildings), including the principle of a treatment train.
- 340. The outcome for flood hazard management could be more explicitly stated, and this is a particular point raised by submitters.
- 341. These matters are addressed further in the section that responds to submissions.

8.10 Servicing

<u>Application</u>

- 342. The proposed servicing of the plan change area is summarised in section 10.7 of the s32 evaluation report and discussed in more detail in the Infrastructure report prepared by Blue Barn Consulting Engineers (Appendix 13 to the application).
- 343. There is currently no water or wastewater reticulation to the PPC48 plan change area. Watercare Services Limited has confirmed that there are solutions for wastewater within the area which can be sized to accommodate the additional discharge from the planned growth within the wider Drury East area. An infrastructure funding agreement has been reached between the requestor and Watercare.
- 344. Watercare has also confirmed that the watermain and Bulk Supply Point associated with the Drury South Ltd land to the south of the PPC48 area is sufficiently sized to accommodate the required supply of potable water for domestic and firefighting purposes for the plan change area. This local water reticulation would be fully funded by the landowners within the subject area as part of the normal land development process.
- 345. In terms of power, telecommunications and gas infrastructure, the plan change area can be serviced with overhead reticulated telecommunications infrastructure, as well as piped underground gas reticulation. Network upgrades will be required to fully service development within the plan change area, however, Utility Supply Authorities have confirmed that there are no constraints or issues with undertaking these upgrades progressively as development occurs.
- 346. There are two Transpower Transmission Lines which traverse the western portion of the plan change area adjacent to the Hingaia Stream. These lines are covered by the

National Grid Yard Overlay under the AUP which will restrict the location of structures, extent of land disturbance, including earthworks and the operation of construction machinery in relation to those transmission lines.

Analysis

- 347. Watercare's submission confirms the requestor's assessment that water and wastewater servicing for the PPC area is technically feasible and the proposed servicing arrangements, including funding agreement, are acceptable in principle. I also note Counties Power's submission that it is well positioned to deliver power to the area, and Transpower's submission that it is neutral on the plan change on the basis that the National Grid Corridor Overlay provisions continue to apply to the site.
- 348. Spark's submission expresses concerns that telecommunications infrastructure has not been adequately considered and planned for within the development. Early and ongoing consultation is requested, however Spark does support the PPC and no changes to provisions are requested. Spark states that telecommunications facilities need to be incorporated at the early stages of development.
- 349. In my view it has been demonstrated that the PPC48 area can be adequately serviced for water supply, wastewater, power and telecommunications.

8.11 Landscape and visual effects

Application

- 350. Landscape and visual effects of PC48 are summarised in section 10.15 of the s32 evaluation report and discussed in more detail in the Landscape and Visual Effects Assessment prepared by Boffa Miskell (Appendix 28 to the application).
- 351. The landscape assessment identifies that any urban development of this area will alter the existing landscape, but the change is generally anticipated by the Future Urban zoning of the land and the Drury-Opāheke Structure Plan. While substantial landscape change will occur, the report states the Plan Change and AUP provisions will sufficiently provide for the landscape attributes of the Plan Change area. In particular:
 - The Plan Change provides for the retention, restoration and enhancement of the main watercourses as natural features of the urban landscape that will structure the form of development and establish linear, connected open space;
 - The Height to Boundary Standard within the underlying Metropolitan Centre zone will assist in setting and stepping taller development back from the stream corridor whilst enabling an urban interface;
 - While future earthworks will reduce the more intimate rolling nature of the topography the broad ridge and valley structure of the Plan Change area will be retained;
 - The Plan Change seeks to retain the trees surrounding the Flanagan Homestead which have landscape presence given their high point, age and scale;
 - All other vegetation which will be removed relates to rural/rural lifestyle use and is not
 of sufficient value to warrant protection or retention;

- The positioning of the Main Retail Street to align along the main north / south ridgeline will reflect the site's natural topography in the urban form of the future centre; and
- The positioning of the Homestead Park and Station Plaza open space further reinforce this connection to the site's original topography and natural as well as cultural heritage.
- 352. The landscape assessment further concludes that in terms of the height limits enabled by the Plan Change, the proportional potential future height and scale of the future Metropolitan Centre and Mixed Use zones will sit comfortably away from the Hunua Ranges landscape backdrop.
- 353. The visual effects assessment notes that the specific nature of the visual effects arising from the Plan Change will depend on the future more detailed master planning and design of specific development proposals. Any development proposal will require resource consent and be subject to a range of assessment criteria including those that address visual amenity and interface outcomes.
- 354. The Visual Effects Assessment finds that the primary established viewing audience with the potential to be adversely affected by the introduction of buildings up to the heights enabled by the plan change are those people living in rural residential properties on the west facing slopes of the Hunua Ranges including in Drury Heights and properties located on Elizabeth Place and Taraire Drive as well as, to a lesser extent, further south on Macwhinney Drive. The assessment concludes however, that the separation distance between these established Hunua Foothills / Ranges properties and the future town centre means that potential adverse effects from dominance, loss of privacy or shading will be avoided. It is not considered that simply seeing taller development in the context of their wider views will result in any high degree or even moderate level adverse visual effects.
- 355. In addition, the visual effects assessment finds that the heights to be enabled by the plan change will provide an opportunity for the centre to take on an urban form that signals an urban heart to the wider Drury East community, in terms of future urban form and the declinational nature of the centre relative to its more sub-urban residential surrounds.

Peer Review

- 356. Council's review (by Rebecca Skidmore, Appendix 4) has identified two key issues with regards to the landscape effects of the rezoning:
 - Key structuring elements identified on Precinct Plan 2;
 - Role of views to Hunua Ranges in contributing to distinctive sense of place.
- 357. The review identifies it would be of assistance to future plan users to include the alignment of streams on Precinct Plan 2 with explicit reference made to their role as an important public realm structuring element and amenity feature within the Centre.
- 358. With regards to views of the Hunua Ranges, this is not a matter of defining specific vistas or view shafts. The proposed building heights are likely to close off views from streets and public places, unless roads are orientated to the Ranges. This may be possible in some circumstances.

Analysis

- 359. I agree with these recommendations. One aspect of the quality, compact urban environment sought by the AUP RPS is subdivision and development that responds to the local context:
 - B2.3.2. Policies (1) Manage the form and design of subdivision, use and development so that it does all of the following:
 - (a) supports the planned future environment, including its shape, landform, outlook, location and relationship to its surroundings, including landscape and heritage;
- 360. Clearly the streams present are one of the features that will create a distinctive place. While the AUP seeks to protect streams (a stance strengthened by the NPS-FM), without the identification of streams on a Precinct Plan showing key structuring features, then there can be ambiguity created as to role and importance of the streams in urban form matters (separate to their ecological function). Concerns over not all stream environments being surveyed (and hence some on the ground variability from aerial photo information) could be addressed by the Precinct Plan noting that the stream alignments are indicative (as they are for roads), with final alignment to be determined at consent stage.
- 361. The plan change request includes the following objective:
 - Development of the Drury Centre creates a distinctive sense of place, including by incorporating distinctive natural and built site features, responding to landform and respecting Mana Whenua values.
- 362. This objective mixes an outcome and a number of methods. It could be split into an objective development of the Drury Central creates a distinctive sense of place with a specific policy. For example:
 - A sense of place is provided by development through incorporation of enhanced stream networks, responding to landforms within the site and visual connections to the Hunua Ranges and incorporating mana whenua values into the design of public spaces.
- 363. In my view, the normal subdivision assessment matters are insufficient to address this point, and a specific policy is justified. I note that Policy 14 in Chapter E38 refers to: Encourage the design of subdivision to incorporate and enhance land forms, natural features, and indigenous trees and vegetation. I consider that there is justification, based on the scale of the centre proposed and the importance of the public realm to other objectives relating to amenity and walking and cycling, for there to be a more targeted policy.

8.12 Heritage and archaeological effects

Application

- 364. The archaeological and heritage values of the plan change area are summarised in section 10.8 of the s32 evaluation report and discussed in more detail in the Archaeology Assessment prepared by Clough & Associates (Appendix 14 to the application) and the Heritage report prepared by Matthews & Matthews Architects (Appendix 15 to the application).
- 365. Five recorded archaeological sites were identified within the PPC48 area, none of which are scheduled under the AUP. As shown on Figure 11 below, these are:

- R12/755, the house believed to be used as General Cameron's headquarters during the building of Great South Road and New Zealand Wars (111 Fitzgerald Road)
- R12/967, the Flanagan Mill on the Hingaia Stream
- R12/742, the former Drury Railway Station and Railyard
- R12/1122, the Drury Tramway/Mineral Railway
- R12/1125, the Flanagan homestead.

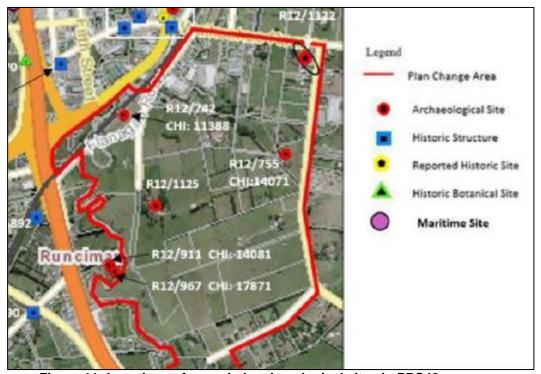


Figure 11: Locations of recorded archaeological sites in PPC48 area

- 366. Additional unrecorded sites of military camps associated with the New Zealand Wars are also identified with the PPC48 area, but their locations and extents are not defined in the report. While the report recommends that development avoid the recorded sites, it states that if they cannot be avoided the adverse effects can be mitigated. Standard accidental discovery protocols are proposed to be implemented in the event that additional unrecorded subsurface archaeological sites are found during future development.
- 367. The Flanagan Homestead at 120 Flanagan Road was assessed to hold "considerable local historical significance". The report states that retaining the homestead would retain an important connection with the history of this area. The plan change intends to retain the Homestead within an open space area referred to as Homestead Park. No formal protection or scheduling of the Homestead is proposed, but an assessment criterion encourages its retention (IX.8.2(2)(b)). If necessary, the building could be relocated to an alternative location nearby.
- 368. The report also notes mature trees to the homestead's east side and ascribes values to this vegetation under the aesthetics criterion. Assessment criterion IX.8.2(2)(c) encourages existing indigenous trees to be retained within Homestead Park where possible.

Peer Review

- 369. The plan change has been reviewed by Robert Brassey, Principal Specialist Cultural Heritage, Auckland Council with regards to archaeology (Appendix 4).
- 370. Mr Brassey notes that some of the information upon which the report is based is now outdated, and several archaeological sites have been recorded or updated within 500m of the PPC48 area since the report was prepared, including Flanagan's Mill now being placed outside of the PPC area. He considers there are significant information gaps in relation to archaeological sites, in particular sites associated with the New Zealand Wars of the 1860s which are likely to be present within the PPC48 area and around General Cameron's residence. There is the potential to reconcile archival photographs with the present landscape in the PPC area to provide information on the potential location of archaeological evidence relating to the New Zealand Wars and the history of Drury, which has not been done. The property at 111 Fitzgerald Road (where the residency is located) was not accessed for the requestor's assessment, which is an information gap.
- 371. Mr Brassey also considers that the significance assessments of the sites provided by the requestor are inadequate.
- 372. In Mr Brassey's opinion, the requestor has not adequately assessed the effects of the PPC related to archaeological sites and the PPC does not give effect to the objectives and policies in the RPS (Chapter B5). There is no explicit evidence to indicate that the PPC has sought to avoid recorded archaeological sites. He is unable to support the PPC without modifications to provisions to require the identification and assessment of archaeological sites prior to land disturbance or planting, or the demolition of pre-1900 buildings. Any identified adverse effects should be managed appropriately. He suggests the inclusion of additional policies and associated rules to achieve this.
- 373. He also supports a minimum 20m riparian margin requirement along the Hingaia Stream to provide enhanced protection for recorded archaeological sites and potentially for unidentified sites along the stream corridor. There is a possibility of such sites, as there is evidence that Māori made use of the Hingaia stream corridor, and the site of the Flanagan mill dam lies within the stream. He considers it essential that archaeological assessment of riparian planting areas takes place prior to planting, and proposes an amendment to precinct provisions to this effect.
- 374. Mr Brassey also supports a notable tree assessment being undertaken prior to development and trees being scheduled as appropriate, as notable trees or features of a scheduled historic heritage place.
- 375. The plan change has been reviewed by Cara Francesco, Principal Specialist Built Heritage, Auckland Council with regards to built heritage (Appendix 4).
- 376. Ms Francesco has undertaken a review of the Flanagan Homestead's values, and in her professional judgement it has overall 'moderate' local historic heritage value, rather than 'considerable'. She does agree that it has considerable local value under the historical criterion. She does not consider the place meets the required overall threshold to be eligible as a category B historic heritage place in the AUP, based on the information currently known.
- 377. Ms Francesco also considers that the PPC material does not provide sufficient information to determine the exact plantings that are of historical association with the homestead, as much of the vegetation present today does not relate to the homestead's formative years. A 1912 photograph shows considerably less vegetation, and may show pines rather than indigenous trees. In principle, she supports the retention of plantings and trees from the homestead's formative years.

- 378. Ms Francesco supports refinements to the precinct provisions to clearly reinforce that retaining, repurposing and incorporating the homestead into the proposed park would be supported. She supports reference being made to the homestead's heritage values, rather than only referring to it as a distinctive site feature. Should relocation be proposed, its heritage values should be clearly considered.
- 379. Ms Francesco has undertaken a site visit to 111 Fitzgerald Road and her observations support the case that the late 1850s residence said to have been used by General Cameron was in the location of the current day residence, and was partially deconstructed in the 1880s and rebuilt as the existing residence. The residence's present outwards exterior fabric does not have a striking resemblance to the photograph of General Cameron's headquarters from the 1850s. In Ms Francesco's opinion, the historical associations of the residence are likely to be moderate, as the residence's outward legibility has changed significantly from the time of the New Zealand Wars.
- 380. Ms Francesco considers that effects on built heritage at 111 Fitzgerald Road could be appropriately addressed through the addition of precinct provisions requiring that a detailed heritage evaluation be undertaken in the event of future development works to the residence (and/or site).

Analysis

- 381. I adopt Mr Brassey's recommendations and consider that, given the limitations on the archaeological assessment provided by the requestor, precinct provisions requiring a detailed archaeological assessment prior to any land disturbance, planting or demolition of pre-1900s buildings are needed in order to give effect to RPS Objectives B5.2.1(1) and (2).
- 382. I consider the requirement for a notable tree assessment is necessary to give effect to RPS Objective B4.5.1(1) Notable trees. In my view the notable tree assessment is best done at the plan change stage because an amendment to AUP Schedule 10 Notable Trees could be undertaken at the same time if any notable trees are identified. However, in this case I recommend a notable tree assessment be required as part of an earthworks or subdivision application, so that any notable trees can be retained as a condition of subdivision and development consents, and they can be included in AUP Schedule 10 in due course through a future plan change.
- 383. I adopt Ms Francesco's recommendations and find that the precinct provisions should be refined and amended to ensure built heritage considerations are taken into account for the Flanagan Homestead and 111 Fitzgerald Road.
- 384. I would recommend that the following be added to the Special Information Requirements of IX.9
 - An assessment of historic heritage prior to any land disturbance, planting or demolition of pre-1900s buildings
 - An assessment of whether any trees met the criteria for Notable Trees under B4.5 2(1).

8.13 Effects on Mana Whenua values

Application

- 385. Cultural values of the plan change area have been assessed in the Cultural Values Assessments (CVA) prepared by four iwi groups being Ngāti Te Ata, Ngāi Tai ki Tāmaki, Te Ākitai Waiohua, and Ngāti Tamaoho (Appendices 16-19 to the application). In addition to these assessments, Ngāti Tamaoho and Ngāti Te Ata have made a number of submissions on specific points.
- 386. There are no known identified sites of Significance or Value to Mana Whenua within the Plan Change area and the CVA's, while identifying a number of values of importance to lwi, have not identified any areas or resources that would be worthy of scheduling under the AUP.
- 387. Section 10.9 of the s32 evaluation report summarises that the CVAs highlighted the following areas of interest to the iwi groups:
 - Ongoing degradation of waterways through further development, loss of habitat and increased stormwater runoff;
 - Loss of mature vegetation and natural habitats for native species;
 - Extent of earthworks and potential to disturb kōiwi, Maori artefacts or archaeological features;
 - Protection of streams including provision for stream management plans and special policy requirements (greenspace, infrastructure, wider riparian margins);
 - Treatment of stormwater prior to discharge;
 - Unforeseen adverse impacts to the environment;
 - Sustainability;
 - Ongoing engagement has been requested;
 - The application of Te Aranga Maori Design Principles; and
 - Meaningful cultural interpretation occurs through incorporation of place names (e.g. streets and parks) and if and as appropriate cultural art and design elements to offset the impacts to the cultural and natural landscape.
- 388. Section 5.1.7.10 of the section 32 evaluation report sets out how outcomes sought by Mana Whenua have been considered when developing the plan change provisions.

Analysis

- 389. The RPS chapter of the AUP has policies that support the input of mana whenua into identifying cultural values in areas subject to development. Schedule 1 of the RMA covers plan change preparation by councils. The Schedule places an obligation on Councils to consult early on Mana Whenua values. While the same consultation obligation does not apply to private plan change proposals, I understand that the requestor has consulted with mana whenua, and that the above list of matters represents an appropriate list of concerns.
- 390. As for how these issues are addressed in the plan change, this is a matter that is considered under a number of topic headings in this report.

8.14 Land contamination effects

Application

- 391. A preliminary site investigation has been carried out for the plan change area, as summarised in section 10.10 of the s32 evaluation report and attached in full as the Environmental Site Investigation prepared by ENGEO (Appendix 20 to the application).
- 392. The preliminary site investigation has not identified any potential soil contamination that makes the plan change land unsuitable for future residential and commercial development. However, several possible contaminant sources were identified, and targeted remediation of some land is likely to be required. Further detailed investigations and resource consents will be required under the NES-CS for future development of this land, and this process is considered to adequately manage the effects.

Peer Review

- 393. The Environmental Site Investigation report has been peer reviewed by Andrew Kalbarczyk, Senior Specialist Contaminated Land, Auckland Council (Appendix 4).
- 394. Mr Kalbarczyk is satisfied with the methodology used in the requestor's report. He concurs that the PPC is generally consistent with the purpose of the NES-CS regulations and the contaminated land-related objectives and policies in the AUP RPS.
- 395. Mr Kalbarczyk concludes that the PPC land is generally suitable for the intended future commercial, recreational and residential development from a contamination perspective. Additional, site-specific investigations will be required at consenting stage for those properties identified to have potential localised contamination.

Analysis

396. I adopt the assessment of Mr Kalbarczyk and consider that no changes to the PPC are required to address land contamination effects. These would be appropriately addressed at consenting stage through the NES-CS and existing AUP provisions.

8.15 Geotechnical effects

<u>Application</u>

- 397. Geotechnical effects of PC48 are summarised in section 10.11 of the s32 evaluation report and discussed in more detail in the Environmental Site Investigation report prepared by ENGEO (Appendix 20 to the application).
- 398. The report concludes that the ground conditions are generally suitable for the type of residential and commercial development proposed, with no obvious significant geotechnical hazards observed. The report does however identify that some localised soft and organic deposits are anticipated within the vicinity of creeks and tributaries on the site, as well as very expansive surface soils on the property at 133 Fitzgerald Road which will require specific foundation design for future buildings. Although geomorphic features were observed on the western slopes of the site towards Hingaia Creek, including toe erosion, local slumping, soil creep and headscarps, the undulating slopes of the Creek do not appear to be subject to slope instability beyond the areas identified in the report.

- 399. The requestor proposes that detailed geotechnical investigations will be required as part of future resource consent applications regarding management of groundwater, earthworks design and building foundation design within the Plan Change area.
- 400. Based on the findings of this analysis, the report author considers that the land conditions are generally suitable for urban development and can be appropriately managed through the resource consent process.

Peer Review

401. Claudia Harford, Senior Geotechnical & Natural Hazards Engineer, Auckland Council has peer reviewed the Environmental Site Investigation report (Appendix 4). Her assessment notes that the applicant has not adequately addressed the potential impacts of ground related hazards (geohazards) on the proposed development. A high-level assessment of liquefaction and consolidation risk, and to consider and discuss the constraints and opportunities associated with geohazards on the site was sought from the requestor in the clause 23 process (request for further information), but one that they elected not to respond to. The requestor anticipates that any geo tech issues will be addressed at the subdivision and development stage.

Analysis

- 402. Geo tech issues were addressed at a high level in the identification of the land as Future Urban and through the development of the Drury-Opāheke Structure Plan. These high-level investigations were considered by the Council to be sufficient to assess the land as meeting RPS Policy B2.2.2(2)(I) relating to the avoiding areas with significant natural hazards.
- 403. In this context, the issue raised in the geo tech report is more to do with what zoning should be applied to the land that has been identified as future urban and whether the relevant Auckland wide and zone-based provisions are adequate to manage subdivision and development. PPC48 proposes to zone land for intense, high rise development. I understand that this form of development should provide opportunities for specific design responses to ground conditions.
- 404. Land instability is identified as a natural hazard under Chapter E36 of the AUP. Policies 32 and 33 of E36 are relevant:
 - (32) Require risk assessment prior to subdivision, use and development of land subject to instability.
 - (33) Locate and design subdivision, use and development first to avoid potential adverse effects arising from risks due to land instability hazards, and, if avoidance is not practicably able to be totally achieved, otherwise to remedy or mitigate residual risks and effects to people, property and the environment resulting from those hazards
- 405. In my view, there is sufficient information to proceed with rezoning, but I recommend that the reference to a land instability risk assessment be added to the Information Requirements. For example:

In relation to the risk assessment required by Policy E36.3.32, provide a high-level (scoping) assessment of liquefaction and consolidation risks prior to subdivision that identifies the nature and magnitude for these constraints and implications for development.

8.16 Air quality impacts

Application

- 406. Air quality impacts of PPC48 are summarised in section 10.12 of the s32 evaluation report and discussed in more detail in the Air Quality Assessment report prepared by Tonkin + Taylor (Appendix 21 to the application).
- 407. The report concludes that effects on local air quality as a result of developing the land for urban activities, including effects from construction earthworks and combustion emissions from both road traffic and domestic residential heating will be minimal. Further, impacts of existing adjacent discharges to air (including surrounding horticultural, agricultural and industrial activities, surrounding road and wastewater infrastructure) on sensitive activities within the Plan Change area should also be minimal.

<u>Analysis</u>

- 408. No peer review of the air quality report has been undertaken. There is nothing to suggest that the AUP's objectives relating to air quality will not be achieved, namely:
 - B7.5.1. Objectives (1) The discharge of contaminants to air from use and development is managed to improve region-wide air quality, enhance amenity values in urban areas and to maintain air quality at appropriate levels in rural and coastal areas.
- 409. Relying on the Tonkin + Taylor report, I consider that any air quality effects of the plan change are sufficiently avoided, remedied or mitigated.

8.17 Noise effects

Application

- 410. Noise impacts of PPC48 are summarised in section 10.13 of the s32 evaluation report and discussed in more detail in the Acoustic Assessment report prepared by Marshall Day Acoustics (Appendix 22 to the application).
- 411. The acoustic report considers that the acoustic controls applying to sites within the Metropolitan Centre and Mixed Use zones are more stringent than those that apply within the Future Urban zone. Therefore, the acoustic effect of the proposed change will be an improvement over the current permitted noise limits and will achieve a level of acoustic amenity typical of centres in Auckland, without compromising the amenity of properties outside of the plan change area. The acoustic effects of the plan change will be appropriately managed through the standard noise controls of Chapter E25.

Analysis

- 412. No peer review of the acoustic assessment report has been undertaken. AUP objectives relating to noise in E25.2 address:
 - (1) People are protected from unreasonable levels of noise and vibration.
 - (2) The amenity values of residential zones are protected from unreasonable noise and vibration, particularly at night.

- (3) Existing and authorised activities and infrastructure, which by their nature produce high levels of noise, are appropriately protected from reverse sensitivity effects where it is reasonable to do so.
- (4) Construction activities that cannot meet noise and vibration standards are enabled while controlling duration, frequency and timing to manage adverse effects.
- 413. The provisions (policies and standards) of E25 will ensure that objectives 1, 3 and 4 of E2.2 are achieved.
- 414. In relation to Objective E25.2.(3), I note that submissions have been received from KiwiRail and Auckland Transport in relation to provisions to address noise received at properties in proximity to the NIMT railway, SH1 and arterial roads. These are addressed in section 9.17 below, and in summary seek a building set back from the boundary of sites with the NIMT and appropriate noise insultation of noise sensitive activities. As discussed, the AUP controls internal noise environments of noise sensitive activities in Business zones. The building set back is not directly aimed at noise issues but will nevertheless have some benefits in terms of the noise environment of future buildings.
- 415. Relying on the Marshall Day report, I consider that any noise effects of the plan change are sufficiently avoided, remedied or mitigated by applying the existing provisions in Chapter E25 of the AUP, subject to amendments set out in relation to building setbacks.

8.18 Effects on versatile soils

Application

- 416. A Versatile Soils Assessment prepared by AgFirst is included as Appendix 23 to the private plan change request.
- 417. The Versatile Soils Assessment concludes that the soil types that are found on the farm property at 120 Flanagan Road have good fertility levels but moderate to poor drainage capacity so that the majority of the property (40ha-46ha) is suitable for dry stock farming only.

Analysis

418. Given the Future Urban zoning of the land, a decision has already been taken in the preparation of the AUP (via the Auckland Plan), that the land will generate greater social and economic returns through urbanisation than retention as rural farmland. Effects on soils and rural production have therefore already been assessed and accounted for.

8.19 Summary

- 419. The above has highlighted a range of issues with the PPC48 plan change request. In summary, my assessment is that in terms of potential adverse effects of the rezoning and the ability of the proposed precinct provisions to manage those effects, significant concerns exist as to:
 - Integration of land use with transport infrastructure
 - Transit orientated development urban form
 - Implementation of threshold and triggers
 - Open space/ green corridors.

9 NOTIFICATION AND SUBMISSIONS

9.1 Notification details

420. Details of the notification timeframes and number of submissions received is outlined below:

Date of public notification for submissions 27 August 2020

Closing date for submissions 22 October 2020

Number of submissions received 35

Date of public notification for further 11 December 2020

submissions

Closing date for further submissions 29 January 2021

Number of further submissions received 10

421. All submissions were received on time. There are no late submissions. Copies of the submissions are attached as Appendix 7 to this report.

9.2 Analysis of Submissions and Further Submissions

- 422. The following sections address the submissions received on PPC48. It discusses the relief sought in the submissions and makes recommendations to the Hearing Commissioners.
- 423. Submissions that address the same issues and seek the same relief have been grouped together in this report under the following topic headings:
 - Submissions supporting PPC48 in its entirety
 - Submissions on Traffic and Transport Effects
 - Submissions on Timing and Funding Issues
 - Submissions on Ecological Effects
 - Submissions on Economic Effects
 - Submissions on Urban Design Effects
 - Submissions on Zoning
 - Submissions on the Proposed Precinct Plan
 - Submissions on Plan Change Boundary
 - Submissions on Stormwater and Flooding Effects
 - Submissions on Open Space
 - Submissions on Archaeological Effects
 - Submissions on Heritage Matters
 - Submissions on Cultural Effects
 - Submissions on Landscape Effects
 - Submissions on Servicing
 - Submissions on Other Infrastructure
 - Submissions on Reverse Sensitivity
 - Submissions on Notification Provisions

- Submissions on Other / General Matters
- 424. A submission must be within the scope of a plan change to be considered. The concept of scope derives from clause 6(1) of Schedule 1 of the RMA which allows a person to make a submission 'on the' plan change. In considering scope, the accepted practice is to consider the following two points:
 - The submission must address the proposed plan change itself, that is it must address the extent of the alteration to the status quo which the change entails and
 - The Council must consider whether there is a real risk that any person who may be directly affected by the decision sought in the submission has been denied an effective opportunity to respond to what the submission seeks.
- 425. In addition to the above, submissions that seek substantial changes to a plan change, even within scope, must be accompanied by sufficient information and analysis to support the requested modification. Section 32AA applies to submissions seeking modifications, and in considering submissions, the Hearings Panel must have regard to the adequacy of information provided.
- 426. I do not respond to every submission point raised. As noted in section 6 above, Clause 10(3) clarifies that a decision that addresses each submission individually is not required. Rather I address the submissions based on common themes and topics. Chapter 10 of this report brings together my recommendations as to possible modifications to the plan change.
- 427. Further submissions have generally not been directly addressed unless containing pertinent new information recommendations are made in accordance with the recommendation on the original submission. Appendix 8 contains a full list of my recommendations to accept, accept in part or reject each submission point and associated further submissions.

9.3 Submissions supporting PPC48 in its entirety

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
1.1	Dannielle Haerewa	Approve the plan change
6.1	Michael and Rachel Gilmore	Approve the plan change
12.1	Oyster Capital	Approve the plan change
13.1	Rodney Bremner	Approve the plan change
14.1	Tony Chien	Approve the plan change
16.1	Fulton Hogan Land Development Ltd	Approve the plan change
18.1	Fletcher Residential Limited	Approve the plan change
26.1	Karaka and Drury Limited	Approve plan change

Discussion

428. The support of these submissions is noted. As covered in the above technical reviews and in response to other submissions (as addressed in the following sections), I consider that the plan change request requires modification to better accord with the objectives of the AUP RPS and NPS-UD. I therefore recommend accepting the submissions in part.

Recommendations on submissions

- 429. Based on the analysis outlined above I recommend that submissions:
 - 1.1; 6.1; 12.1; 13.1; 14.1; 16.1; 18.1 and 26.1 be accepted in part, to the extent that while the plan change request is supported, substantial changes are recommended.

9.4 Submissions on Plan Change Boundary

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
4.1		Extend plan change to cover land an equithern side of Prophiliald Bood
4.1	Jack Philip	Extend plan change to cover land on southern side of Brookfield Road,
	Burton	and rezone this land to Business Mixed Use Zone
7.1	Geoff Yu and	Include the area generally bounded by Fitzgerald Road, Quarry Road
	Rebecca Mao	and Brookfield Road within the plan change, and rezone to Residential
		Urban (with terrace housing / high density residential along Brookfield Road and Fitzgerald Road)
8.1	Phil Hogan	Include the property at 1A East Street Drury, currently zoned Future
		Urban Zone, in the plan change with a zoning of Business - Local
		Centre Zone to match that of the land adjoining at 200 - 212 Great
		South Road.
22.25	Auckland	Delete parts of sub-precinct D and the outer precinct boundary that that
	Council	apply west and on top of the railway.
24.5	KiwiRail	Amend IX.1 Precinct Description by deleting fourth bullet point relating
	Holdings Ltd	to sub-precinct D as follows:
		Sub-Precinct D is zoned Business – Metropolitan Centre Zone and
		provides for the establishment of the Drury East Train Station and
		associated Park-and-Ride and transport interchange. A public plaza is
		provided for that will integrate the train station with the centre and will
		provide a high quality pedestrian experience.
27.44	Auckland	Remove Sub-Precinct D from the plan change area and delete
	Transport	provisions in IX.1 Precinct description relating to Sub-Precinct D as
	•	follows:
		and provides for the establishment of the Drury Central Train Station
		and associated Park-and-Ride and transport interchange. A public
		plaza is provided for that will integrate the train station with the centre
		and will provide a high quality pedestrian experience.

Discussion

- 430. Jack Burton **[4.1]** owns a property on Brookfield Road. The submission notes that the BMU zone boundary on the south side of Brookfield Road includes two sections. There are five other lots on the south side which are not included in the plan change area. Brookfield Road has been proposed to become a main thoroughfare (from its current dead end). Therefore, the submitter states that both sides of Brookfield Road should be zoned BMU zone. By making this change the submitter states that both sides of the road can be developed as a comprehensive 'block'.
- 431. Geoff Yu and Rebecca Mao [7.1] state that it would make better sense and help to 'speed things up' if the current FUZ area generally bounded by PPC48, PPC49 and Stevensons to the south (or in the alternative at least all the properties along Brookfield Road), could be included in the plan change.

- 432. Phil Hogan [8.1] states that parcels of land that exist within or adjoining the existing Drury centre that have not been included in the plan change are resulting in an incoherent land use pattern. Land near the existing Drury centre including 1A East St is more appropriate for smaller neighbourhood businesses and has available infrastructure for immediate take up.
- 433. Auckland Council [22.25] notes that land north-west of the railway under proposed subprecinct D already has an operative urban zoning (it is not Future Urban). There is no practical value in extending the precinct or plan change to cover this area including the railway corridor.

Analysis

- 434. The three submissions seeking to extend the boundary of the plan change area raise issues of scope. As noted in the introduction to this section, submissions need to be 'on the plan change' as notified. I consider that the submission from Phil Hogan seeking rezoning of land in the existing Drury centre is out of scope. The submission involves land that is physically separated from the proposed new development by major infrastructure (the rail line). I note that a submission from Kāinga Ora to Private Plan Change 50 seeks a larger area to the north of the rail line be rezoned, and I address this matter in more detail in the PPC50 s42A report¹⁵. While I agree that the plan change request has implications for the future intensity and mix of land uses in the existing Drury Centre, this is a matter that the Council will need to address through a review of the AUP.
- 435. The submission seeking the inclusion of the 5 lots along the southern boundary of Brookfield Road has some relevance to the plan change as notified, in that Brookfield Road is identified as a Collector type road that may link to the west, across the Hingaia Stream. My understanding is that while Brookfield Road will be upgraded to an urban standard, the proposed Precinct Plan shows Brookfield Road maintaining its current alignment and any upgrading can occur within the current road reserve. In this regard, there is no need to include the five lots so as to implement the Precinct Plan.
- 436. As for the area south-west of Fitzgerald Road, the Structure Plan shows the large area located west of Fitzgerald Road, south of Brookfield Road and east of State Highway 1 as a mixture of residential and industrial land uses. The extent and quality of natural resources in the area and the demands on infrastructure from development in this area have not been assessed as part of the plan change request.
- 437. As an example of the issues to be addressed, Drury South Limited as a further submitter is concerned to ensure that, if this area is rezoned, appropriate provisions are inserted to ensure that any potential adverse effects are appropriately managed, particularly in respect of transport and stormwater. Watercare notes that no assessment has been made as to whether the area could be serviced.
- 438. While the boundary adopted by the request (Fitzgerald Road) does create an 'uncertain' edge to the area to be urbanised, with likely demands for ad hoc resource consents seeking to develop adjacent small parcels of land, I consider that there is no scope, nor evidence, to include the areas identified.
- 439. I agree with the submission from Auckland Council that sub-precinct D should be deleted from the Precinct area, along with the associated changes suggested by the KiwiRail and Auckland Transport submissions. I also recommend that Flanagan Road be

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¹⁵ I understand that Kainga Ora has withdrawn this request.

included in the Precinct. That is, the northern boundary of the Precinct should run along the boundary with the NIMT line. Flanagan Road is affected by the new environment to be created by the Precinct and should not be excluded.

Recommendations on Submissions

- 440. Based on the analysis outlined above I recommend that submissions:
 - 4.1; 7.1 and 8.1 be rejected as being out of scope, as well as not being supported by any analysis of the likely effects of the re-zonings implied by the boundary adjustments
 - 22.25; 24.5 and 27.44 be accepted to the extent that the northern boundary of the Precinct be aligned with the NIMT line. This means that Flanagan Road is included within the boundary, but the land on the northern side of the NIMT, opposite Watercare's site, should be excluded.
- 441. Possible amendments are set out in Chapter 10 to this report.

9.5 Submissions on Ecological Effects

No. Submitter 15.1 Kiwi Property Amend policy 19 as follows: In addition to the matters in Policy E.3.3(13) (a) provide for stream works, including culverting, diversity	
In addition to the matters in Policy E.3.3(13)	
, , ,	
(a) provide for stream works, including culverting, diversi-	
	on and/or
reclamation, required to construct the Drury Boulevard, w	<u>vhere it can be</u>
demonstrated that there is no practicable alternative, and	d where there is a
functional need to construct it in the location generally sh	nown on Precinct
<u>Plan 1.</u>	
(b) enable the planted riparian margins of identified strea	ms to contribute
to offsetting the effects of any stream works assessed un	nder Policy
(19)(a).	
15.2 Kiwi Property Amend IX.4.1 Activity table to add a new discretionary ad	ctivity (A21) for
"Stream works including reclamation and diversion within	n Stream A
required to construct the Drury Boulevard as shown on P	Precinct Plan X
which complies with new standard IX6.9, and which are r	not provided for
as a permitted activity	
under Chapter E3."	
15.3 Kiwi Property Add new standard IX6.9 Stream works for the Drury Boul	levard as follows:
IX6.9 Stream works for the Drury Boulevard	
Purpose:	
• To provide for a limited extent of stream works to consti	ruct the Drury
Boulevard to be assessed as a discretionary activity.	
 Where offsetting is determined to be appropriate in acceptance. 	ordance with the
effects management hierarchy and Policy E3.3(4), enable	e the planted
riparian margins of identified streams to contribute toward	ds it.
(1) The extent of stream works to achieve the construction	on of Drury
Boulevard shall be limited to diversion of Stream A or 60	m of reclamation
along Stream A as identified on IX10.4 Precinct Plan 4.	
(2) For the purpose of calculating the offset required for s	stream works
provided for under IX7.1(1) the SEV and ECR methods w	vill be used.
(3) The area of riparian planting identified on IX10.4 Pred	cinct Plan 4 will
count towards the offset required under IX7.1(2).	_
21.6 Ngāti Te Ata Apply a minimum of 20 metre riparian margin for all wate	erways, especially
Waiohua those to contain walkways / cycleways	

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
21.10	Ngāti Te Ata Waiohua	Use native trees and plants only within the precinct
22.2	Auckland	Include more policies and rules to give full effect to the direction in the
	Council	NPS-FM, including but not limited to Te mana o te wai.
22.7	Auckland Council	Delete policy IX.3 (19).
22.10	Auckland Council	Retain and amend IX.6.4(1) by including a cross reference to the matters in Appendix 15.6(3)(b-f) and (4) of the Auckland Unitary Plan.
22.11	Auckland Council	Replace standard IX.6.4(2) with a new standard and consequential amendments to effect that the riparian yards set for buildings in tables H13.6.5.1 Yards and H9.6.6.1 Yards read as follows: "Riparian - 20m from the edge of all permanent streams and 10m from the edge of all intermittent streams" Other yards in these tables are not amended
22.12	Auckland Council	Add the following matters of discretion to IX.8.1(7):(b) Effects on floodplain management taking into account maximum probable development, climate change and the roughness coefficient of existing and planned planting. (c) Effects on stream bank stability taking into account the cohesiveness of the soil and steepness of the bank angle. (d) Effects on the ability to provide for any proposed paths, cycleways, infrastructure and facilities outside the 10m wide strip of riparian planting. Add related assessment criteria at IX.8.2(6).
22.13	Auckland Council	Include indicative permanent and intermittent streams and wetlands on the precinct plan.
22.14	Auckland Council	Include the indicative blue-green corridor within the precinct plan based on the urban concept in the Urban Design Assessment.
22.15	Auckland Council	Retain policy IX.3(18).
22.16	Auckland Council	Amend policy IX.3(20) and add a new policy as follows, together with any other amendments that may be required to give effect to these matters: (20) Support Ensure improvements to water quality, and habitat and biodiversity, including by providing planting on the riparian margins of permanent and intermittent streams.
		(x) Enable a network of open space, riparian corridors and park edge roads that provides for: • potential ecological corridors along streams between Te-Manukanuka-O-Hoturoa (Manukau Harbour) and the Hunua; • improvement of freshwater and coastal water systems; and • a safe and attractive walking and cycling network.
33.5	Kāinga Ora	Retain Objective (7) as notified.
35.6	Ngāti	Apply a minimum of 20-meter riparian margin for all waterways especially
35.10	Tamaoho Ngāti Tamaoho	those to contain walkways / cycleways Use native trees and plants only within the precinct

Discussion

442. Kiwi Property [15.1-15.3] contends that the proposed alignment of 'Drury Boulevard' necessitates reclamation of part of stream A. Their submission provides a full discussion of why they consider there is a functional need for the Boulevard to cross stream A and as a result, consistency with the NPS-FM and AUP. Auckland Council [22.7] submits

that a precinct specific policy is not required, and reliance can be placed on Chapter E3 of the AUP which acknowledges that infrastructure (such as roading) may need to infill streams. Kāinga Ora supports the Kiwi amendments to policy 19 which they say are aligned with the NPS-FM, as does Auckland Council's further submission that supports retaining reference to 'functional need', for example.

- 443. The ecological value of the headwaters of stream A are currently low due to the land being grazed and stock access not being excluded. Drury Boulevard is an important connecting route and there is some logic to its alignment, however its alignment is not 'fixed'. I support the proposed discretionary activity classification for the possible reclamation activity A21 rather than non-complying, as per the AUP. The discretionary status (sought by submission 15.2) better reflects the balance between infrastructure and ecological outcomes evident in the area. However, I consider that the policies in E3 should be used to guide assessment, and there is no need to add specific matters in the Precinct that essentially repeat existing AUP policies.
- 444. If reclamation of the stream reach affected by the Boulevard is found to be appropriate, then there should be no net loss of ecological function via appropriate off-set mitigation (as is required by the management hierarchy set out in the NPS-FM and referenced in Policy E3(18) of the AUP). Furthermore, I disagree that required riparian planting (as required by proposed standard IX6.4) can count towards the required off-set. The 10m riparian planting along all stream edges has an important ecological purpose in its own right. Any off-set mitigation for the purposes of stream reclamation should be in addition to the required planting.
- 445. Auckland Council **[22.2]** submits that the precinct is not fully consistent with the objectives and policies of the National Policy Statement for Freshwater Management 2020 (NPS-FM). The Council raises issues over:
 - Recognition in policy of the ecological corridor function of the Hingaia and Fitzgerald Streams
 - Amendments to proposed policy IX.3(20) to refer to biodiversity outcomes for riparian planting and recognition of the ecological corridor role of streams.
 - Riparian planting. The submission supports cross-referencing the riparian planting standard (IX.6.4(1)) to Appendix 15 of the AUP to assist in ensuring good outcomes.
 - Riparian yards. The Council seeks 20m wide riparian yards; that is building setbacks from all permanent streams, rather than the 20m proposed by the plan change request on all streams wider than 3m.
 - Additional matters of discretion are requested for assessing infringements of riparian margin and riparian yard standards. Additional matters cover
 - Flood plain management
 - Stream bank stability
 - Accommodation of paths, cycleways and infrastructure.
- 446. These assessment matters would need to refer to an enhanced policy. For example, presently, yard infringements in the BMC and BMU zones refer to generic policies relating to amenity. Given the importance of riparian margins, infringements to margin and yard standards should refer to a specific set of parameters.
- 447. In contrast, Kāinga Ora as a further submitter opposes the Council's submission. It notes that the AUP generally sets a consistent 10m riparian yard requirement for all streams. Increasing this to 20m may have implications on development potential and would therefore need to be justified through a thorough section 32 RMA analysis.

Analysis

448. I agree that biodiversity outcomes should be recognised in the purpose of riparian planting. I also agree with the green corridor role of the Hingaia Stream and the main stem of the Fitzgerald Stream. A policy should refer to this role, for example Policy 20 could be expanded out to cover:

Ensure improvements to water quality, and habitat and biodiversity, including by:

- planting of the riparian margins of all permanent and intermittent streams, and
- creation of a green corridor following the Hingaia and Fitzgerald streams
- 449. In relation to riparian yards, for streams less than 3m wide the plan change request "falls back" to the 10m wide riparian yard in the BMU and BMC zones. Council's submission outlines a range of reasons relating to ecological, water quality and amenity reasons for a wider margin. Ngāti Te Ata Waiohua and Ngāti Tamaoho also support a 20m margin. While I generally agree with wider margins along permanent streams, I note that there are significant stretches of permanent streams that are well under 3ms in width (the trigger point for esplanade reserve requirements). Public access along these streams will not be possible, unless land is acquired, which is unlikely in all cases. 20m wide yards on either side of the smaller permanent streams will mean that considerable areas of land will be unavailable for development. For the main channel of the Fitzgerald Stream, subdivision policies support streets edging the corridor, while natural hazard provisions limit buildings in flood plains. Open spaces (reserves) may also assist in creating corridors. These factors may mean that in some parts of the stream environment, a 20m set back may well be achieved. However, this outcome is not certain.
- 450. Some Precinct Plans vary the width of riparian yards by stream reach based on on-the-ground surveys (and as then notated on Precinct Plans), with width varying due to ecological conditions, as well as amenity and recreational considerations. This approach provides certainty of outcome. In the alternative, reliance on the subdivision and development consent process to determine whether a wider set back than 10m is appropriate may result in an inconsistent approach across sites and landholdings.
- 451. I note that the area of debate involves the permanent stream reaches along the Fitzgerald Stream. In my view, given the importance of this stream corridor in delivering on water quality, biodiversity and amenity outcomes, it is important that space is provided along the edge of the stream for these functions. I would support a 20m set back along the main stem of the stream. This would provide space for 10m of planting and 10m for infrastructure like walkways, streets, and additional planting if warranted. Flood plains may create a wider corridor. To this end I would support amendment to Policy IX.3(20) to read:

Ensure improvements to water quality, and habitat and biodiversity, including by

- planting of the riparian margins of all permanent and intermittent streams, and
- creation of a green corridor following the Hingaia and Fitzgerald streams
- setting back buildings from stream banks to provide space for riparian planting, flood water conveyance, management of potential stream bank erosion and provision of infrastructure including walkways cycleways and local streets, where relevant
- 452. Standard H9.6.6. Yards in the BMC zone and H13.6.5. Yards in the BMU zone would need to be amended by the Precinct, with reference to a 20m riparian yard along the

- main stem of the Fitzgerald Stream. This would also need to be depicted on the Precinct Plans.
- 453. Assessment matters would need to be expanded to cover the riparian yard standard, and I agree with the matters set out by Auckland Council [22.12], namely that the following be in addition to the matters set out in the BMC and BMU zones when considering reductions in riparian yards:
 - (b) Effects on floodplain management taking into account maximum probable development, climate change and the roughness coefficient of existing and planned planting.
 - (c) Effects on stream bank stability taking into account the cohesiveness of the soil and steepness of the bank angle.
 - (d) Effects on the ability to provide for any proposed paths, cycleways, infrastructure and facilities outside the 10m wide strip of riparian planting.
- 454. The Council submits that it has found that maintenance and enhancement of permanent and intermittent streams is more likely to be achieved on development if indicative permanent and intermittent streams are shown on precinct plans. The Drury 1 precinct is an example of this practice. This helps to implement RPS B7.3 Objectives and policies for freshwater and other related regional provisions of the AUP. Streams can be indicatively mapped from the information in the requestor's technical reports, or alternatively, the technical reports prepared for the Drury-Opāheke Structure Plan.
- 455. I agree that the permanent and intermittent streams to be included on the Precinct Plan should be noted as being indicative with final alignment and classification to be confirmed at the time of subdivision, including the possibility of additional streams being identified. Furthermore, including the proposed blue-green linkages as a key urban structuring concept will help to reinforce the importance of these corridors to the overall sense of place.
- 456. Ngāti Te Ata Waiohua and Ngāti Tamaoho seek native trees and plants only to be used in the precinct. Mr Smith does not think the exclusive use of native vegetation should be specified, as exotic vegetation can be preferred in specific circumstances. He considers that the use of the words 'plant species *should* be native' in the riparian planting requirements IX.9(1) is appropriate.

Recommendations on Submissions

- 457. Based on the analysis outlined above I recommend that submissions:
 - 15.1; 15.2 and 15.3 should be rejected on the basis that possible reclamation of the identified stream is a matter most appropriately managed by current AUP provisions.
 - 22.13 and 22.14 be accepted. Streams and associated blue-green corridors should be identified indicatively on the Precinct Plan. This is to give effect to AUP RPS and NPS-FM policies associated with maintenance and enhancement of streams.
 - 22.2; 22.7; 22.10; 22.16; and 33.5 be accepted in part, to the extent that amendments are recommended to policies to better articulate outcomes for ecology in the area.
 - 21.6; 21.10; 22.11; 22.12; 35.6 and 35.10 be accepted in part, to the extent that I would support a 20m wide riparian yard along the main stem of the Fitzgerald

Stream; clarification of the circumstances in which the yard may be reduced, as well as additional guidance associated with riparian planting.

458. Possible amendments are set out in Chapter 10 of this report.

9.6 Submissions on Economic Effects

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
11.1	Papakura	Reject the plan change, or alternatively place a lower order zoning on
	Business	the land identified as Metropolitan Centre to appropriately limit the
	Association	scope of development within the plan change area.
22.23	Auckland	Review the full extent and type of centre zoning to be applied to the
	Council	Drury Centre taking into account the total business capacity available in all proposed and existing centres and business zones and the expected population demand for this capacity.
22.27	Auckland Council	Delete the non-complying status of department stores in sub-precincts C and E and replace with discretionary status.
25.1	Pukekohe Business Association	Ensure there is a catchment to serve the Metropolitan Centre before progressing; stage the centre development as required by residential growth.
25.2	Pukekohe Business Association	Reconsider whether the size and scope of the Metropolitan Centre is necessary
25.3	Pukekohe Business Association	Do not delay development and business live zoning at Pukekohe due to this plan change, and do not prioritise Drury East based on BMC zone classification

Discussion

- 459. The need for a large centre in the southern area of the Region is identified in the Drury-Opāheke Structure Plan and I support the general amount of land to be zoned as BMC, noting my recommendation of an adjustment to the spatial configuration of that zoning. New metropolitan centres are anticipated by the AUP, and a large centre is supported by Mr Heath. The proposed BMU zone also provides substantial capacity for retail development.
- 460. The effects of the new BMC and BMU zones on the social and economic wellbeing of other centres has been addressed in the review of economic effects (section 8.6). In that section, I have recommended a staging provision for the supply of retail floorspace in order to limit economic impacts on Pukekohe. I consider this to be a better strategy than reducing the size of the proposed zone, for example.
- 461. This staging rule would need to be supported by an appropriate policy. As noted, RPS Policy B2.5.2.(4)(c) refers to whether the new centre will avoid or minimise adverse effects on the function, role and amenity of the city centre, and other metropolitan and town centres, beyond those effects ordinarily associated with trade effects on trade competitors.
- 462. To this end I would recommend the following policy:

The amount of retail floorspace in the Precinct is controlled in the period up to 2033 so as to ensure that there are no significant adverse effects on the social and economic function, role and amenity of Papakura and Pukekohe centres.

463. The plan change request seeks to amend the activity classification of department stores in sub-precincts C and E (from discretionary to non-complying). In my opinion, the default BMU zone discretionary activity classification should remain, as this provides an appropriate method of assessing effects on centre dynamics and their associated social, amenity and economic outcomes.

Recommendations on Submissions

- 464. Based on the analysis outlined above I recommend that submissions:
 - 11.1 be rejected on the basis that the proposed BMC zoning is appropriate.
 - 22.23 and 25.2 be accepted in part to the extent that the economic peer review
 has considered the size and scope of the Metropolitan Centre and supports
 modification to the zone shape. Land along Flanagan Road should be included
 in the BMC zoning, but land to the south-west (sub-precinct B) should be zoned
 BMU, better reflecting NPS-UD requirements to zone for intensive
 development close to the train station, with densities 'tapering off' as distance
 increases.
 - 25.3 be rejected on the basis that the plan change cannot control the timing of further business land zoning in and around Pukekohe.
 - 22.27 be accepted, as department stores should be able to locate in subprecincts C and E, provided they comply with relevant AUP policies.
 - 25.1 and 25.2 are accepted in part, to the extent that there is a limit on the amount of retail floorspace able to be built in the first stages of the new Drury Centre, thereby helping to reduce potential (non-trade) adverse impacts on Pukekohe Centre.
- 465. Possible amendments are set out in Section 10 of this report.

9.7 Submissions on Landscape Effects

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
21.5	Ngāti Te Ata Waiohua	Account for natural and cultural landscaping in the project design, identify and preserve landscapes including view shafts, hilltops, tuff rings and ridge lines
21.9	Ngāti Te Ata Waiohua	Confirm park edge design adjacent to all waterways
21.11	Ngāti Te Ata Waiohua	Protect ridgelines, hilltops and wetlands
35.5	Ngāti Tamaoho	Account for natural and cultural landscaping in the project design, identify and preserve landscapes including view shafts, hilltops, tuff rings and ridge lines
35.9	Ngāti Tamaoho	Confirm park edge design adjacent to all waterways

Discussion

466. Ngāti Te Ata Waiohua **[21.9]** and Ngāti Tamaoho **[35.9]** have sought confirmation of park edge road designs adjacent to all waterways. Ms Skidmore's landscape and urban design peer review notes that outcomes sought for stream edges and their integration with adjacent streets and land uses is important. I consider that this matter is covered by existing AUP assessment matters contained in Chapter E38. Park edge road design would therefore be considered for all applications, but a specific design does not need to be mandated through the plan change.

467. In relation to Ngāti Te Ata Waiohua [21.5 and 21.11] and Ngāti Tamaoho [35.5], no particular ridgelines, hilltops, tuff rings or viewshafts have been identified in the submissions or in the landscape reporting that require preservation. Wetlands are already protected by the National Environmental Standard for Freshwater 2020 and AUP provisions.

Recommendations on Submissions

- 468. Based on the analysis outlined above I recommend that submissions:
 - 21.9 and 35.9 be accepted in part, to the extent that park edge road designs will be addressed through the consent process (but designs will not be stipulated in the precinct)
 - 21.5 and 35.5 are rejected on the basis that the features listed are not present in the plan change request area
 - 21.11 be accepted in part to the extent that wetlands are already protected by way of the NES for Freshwater.
- 469. No changes to the provisions are recommended.

9.8 Submissions on Archaeological Effects

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
31.1	HNZPT	Undertake a fulsome archaeological assessment prior to the plan change
		occurring, or if effects on archaeology are to be dealt with during resource
		consenting or subdivision process, include conditions to this effect.
31.6	HNZPT	If general requirement for archaeological assessment prior to subdivision is
		not included within precinct provisions, include a provision to this effect in
		relation to the area surrounding General Cameron's House
31.7	HNZPT	Include within precinct provisions a record of intention for a further
		archaeological survey of the recorded Drury Tramway/Mineral Railway
		R12/1122, and if feasible, include some form of reference to the
		tramway/mineral railway in the future development
31.8	HNZPT	Include within precinct provisions a requirement for archaeological
		assessment of the riparian boundaries to inform plans, including planting
31.10	HNZPT	Include provisions to provide a buffer zone to the reported site of a mill
		associated with the Flanagan family (R12/967) and for any works in the
		reserve to avoid this area

<u>Discussion</u>

- 470. These submissions mirror the points raised by Mr Brassey in his review for the Council. Mr Brassey agrees with HNZPT that a detailed archaeological assessment is required prior to any land disturbance in the precinct, including in riparian margins. I have recommended provisions to this effect.
- 471. The detailed archaeological assessment will recommend any required restrictions in relation to archaeological sites, so a buffer zone to the Flanagan Mill site is not required through the plan change.

Recommendations on Submissions

472. Based on the analysis outlined above I recommend that submissions:

- 31.1, 31.7, 31.8 be accepted to the extent that precinct provisions will require, as an information requirement, archaeological survey as part of any earthworks or subdivision consent.
- 31.6 and 31.10 be rejected on the basis of 31.1 being accepted, while the required archaeological assessment will determine whether a buffer to the mill site is required.
- 473. Recommended amendments are set out in Section 10 of this report.

9.9 Submissions on Heritage Matters

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
22.33	Auckland	Provide a notable tree assessment and schedule any notable trees identified
	Council	in that assessment.
31.2	HNZPT	Retain and re-use Flanagan Homestead R12/1125 in situ on its original site,
		with the park including an appropriate extent of its setting (including plants
		and trees with historical association to the homestead)
31.3	HNZPT	Include Flanagan Homestead within Schedule 14.1 Schedule of Historic
		Heritage as a Category B Historic Heritage place. Alternatively, include
		provisions in the precinct which more accurately reflect the location of the
		homestead and its extent with suitable objectives, policies and rules for its
		ongoing protection.
31.4	HNZPT	Amend IX.8.2(2)(c) to include any non-indigenous trees identified as having
		specific historic heritage association and values in relation to Flanagan
		Homestead.
31.5	HNZPT	Include a condition in the precinct provisions that a heritage evaluation be
		undertaken if General Cameron's House R12/755 is to be affected by future
		development
31.12	HNZPT	Explore the potential of commissioning a heritage interpretation plan for the
		wider Drury area subject to the four jointly notified plan changes

Discussion

- 474. Ms Francesco has responded to built heritage issues in her review, set out in section 8.12 above. She disagrees with the Flanagan Homestead being a Category B place, but recommends encouraging the homestead's retention, and requiring clear consideration of heritage values should relocation be proposed. There is currently a lack of information to establish whether any non-indigenous trees make a heritage contribution to the homestead.
- 475. Ms Francesco agrees that a heritage evaluation would be appropriate if General Cameron's House is affected by future development. However, short of scheduling the building in the AUP, there is no specific AUP method available to trigger such an assessment. The provisions of the HNZPT Act apply.
- 476. In relation to guidance on retention of the homestead, I note that proposed assessment matters refer to encouraging the homestead to be retained and repurposed. I would support the addition of the homestead in policy 14, namely:

In addition to matters (a)-(c) of Policy E38.3.18, ensure that the location and design of publicly accessible open spaces contributes to a sense of place for the Drury Centre, including by

- (a) incorporating distinctive site features;
- (b) reinforcing legibility within the centre;

- (c) integrating with the stream network; and
- (d) retaining the Flanagan Homestead and surrounding mature trees.
- 477. Auckland Council requests a survey for potential notable trees and scheduling of any trees that meet the criteria, noting that this is standard practice for a plan change to urbanise land. The PPC48 request has not undertaken a specific notable tree survey, but it is possible that notable trees are present. For example, the proposed central homestead park does contain some mature trees. It is expected that the subdivision and development process will identify specific vegetation and any notable trees identified could be subject to conditions of consent that require their retention. However, to be placed on the Schedule of Notable Trees, a subsequent plan change will be required. I would recommend that a notable tree assessment be prepared for the first relevant earthworks or subdivision consent application, with the presence of any notable tree being able to be taken into account in the consent conditions.
- 478. I do not see the commissioning of a heritage interpretation plan for the wider Drury area to be within the scope of PPC48.

Recommendations on Submissions

- 479. Based on the analysis outlined above I recommend that submissions:
 - 22.33 be accepted in part, to the extent that a notable tree assessment should be listed as a special information requirement.
 - 31.2; 31.3 and 31.4 be accepted in part to the extent that provisions relating to the homestead's retention are recommended, including the associated mature trees, but it is not recommended the dwellings or surrounds be scheduled.
 - 31.5 and 31.12 are rejected on the basis this is a matter that the Local Board may wish to address. It is not a matter for the Precinct.
- 480. Possible amendments are set out in Section 10 of this report.

9.10 Submissions on Cultural Effects

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	, , ,
21.1	Ngāti Te Ata	Confirm ongoing iwi participation, consultation and engagement in the
	Waiohua	project
21.2	Ngāti Te Ata	Acknowledge within the project design the history of Mana Whenua in the
	Waiohua	PPC48 area
21.3	Ngāti Te Ata	Incorporate Te Aranga Principles in design concepts
	Waiohua	
21.4	Ngāti Te Ata	Confirm iwi monitoring of the project
	Waiohua	
22.31	Auckland	Include provisions that require mana whenua culture and traditions to be
	Council	explicitly incorporated into the new development taking into account the
		recommendations in the cultural values assessments. This could include
		but is not limited to actively working with mana whenua on relevant and
		appropriate design principles and options.
22.32	Auckland	Enable and provide for accessible and affordable social housing for Māori.
	Council	
31.11	HNZPT	Include appropriate conditions in the precinct provisions to address any
		Maori cultural values that may have been identified or as requested by iwi

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
33.3	Kāinga Ora	Retain Objective (3) subject to clarification and amendment around the phrase 'respects Mana Whenua values', and whether a Cultural Values Assessment would be required for all applications within the precinct.
35.1	Ngāti Tamaoho	Confirm ongoing iwi participation, consultation and engagement in the project
35.2	Ngāti Tamaoho	Acknowledge within the project design the history of Mana Whenua in the PPC48 area
35.3	Ngāti Tamaoho	Incorporate Te Aranga Principles in design concepts
35.4	Ngāti Tamaoho	Confirm iwi monitoring of the project

Discussion

- 481. Reflection and incorporation of cultural values into the development will likely involve a number of steps. At a Precinct Plan level, the recognition and enhancement of streams and their margins is important. In the detailed design of public places (streets, open spaces and plazas), there are opportunities to incorporate cultural references. Accidental discovery protocols apply to earthworks. Many of the other matters raised will be dependent upon the developer building and maintaining relationships with Mana Whenua. The extent of involvement in individual consent applications will continue to be determined by normal AUP/Council consent processing practices.
- 482. As noted by Kāinga Ora, I agree that Objective 3 (sense of place) needs to be implemented by way of an appropriate policy. This could cover:

In the development of Drury Centre Mana Whenua values are acknowledged and incorporated by:

- Retaining and enhancing streams, wetlands and their margins
- The physical design of streets, open spaces and plazas incorporating Te Aranga Design principles
- Encouraging applicants to seek input of Mana Whenua into the design of key buildings.
- 483. The submission by Auckland Council [22.32] for the inclusion of social housing for Maori is a matter that falls outside the scope of the AUP. This is a matter that would require direct investment by Council and/or Iwi authorities.

Recommendations on Submissions

- 484. Based on the analysis outlined above I recommend that submissions:
 - 21.1; 21.2; 21.3; 21.4; 22.31; 31.11; 33.3; 35.1; 35.2; 35.3 and 35.4 be accepted in part to the extent that provisions are recommended that encourage ongoing iwi engagement and incorporation of feedback on key matters.
 - 22.32 be rejected on the basis that the matter raised is outside the scope of the operative AUP.
- 485. Possible amendments are set out in Chapter 10 to this report.

9.11 **Submissions on Urban Form and Design Effects**

		on Urban Form and Design Effects
Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
15.6	Kiwi Property	Amend building height limits on Precinct Plan 1 within sub-precincts as follows: Sub-precinct E - 40.5m (was 32.5m) Sub-precinct C - 32.5m (was 25m) Sub-precinct F - 26m (was 18m)
20.1	The Ministry of Housing and Urban Development	Revise the plan change to be consistent with the requirements of the NPS-UD including the intensification policies and removal of minimum car parking rates, and the investigation of a six storey height in the THAB zone within the walkable catchment of Drury East rail station
22.22	Auckland Council	Add a policy and standards to provide for increased density near RTN stations including: a. A policy to the effect of: Ensure a built form and walkable environment that will provide for a high density of people living, working or visiting within an extended walkable radius of a rapid transit network station. b. Building height standards enabling at least the Metropolitan Centre equivalent 22-23 storey building height in all zones within a short walkable radius of the RTN train station, and 7-8 storey building height within an extended walkable radius of the proposed RTN station; c. In areas of more than 7-8 storeys, providing tower dimension and spacing, wind, and building set back at upper floors standards if they do not exist in the underlying zone; d. Any alterations to other building standards to respond to increased building height; e. An information standard for subdivision, building and road resource consents requiring information to demonstrate how the development will contribute to implementing the above density policy and provide for a safe and attractive walkable environment.
22.29	Auckland Council Auckland	Retain standards IX.6.7 Daylight and IX.6.8 Outdoor Living Space for the Business – Mixed Use Zone. Include amendments to standard H13.6.9(4) (Business – Mixed Use Zone
22.00	Council	Outlook Space) to the effect that the depth is measured from the external wall of the building where the window to which it applies is inset from the wall within an inset balcony.
23.3	NZTA	Ensure the plan change reflects the final location of the train station and achieves Objective 1 by providing a transit-orientated development that supports high density residential, employment-generating and retail activities close to rapid transit and prioritises public and active modes of transport to and within the centre.
23.8	NZTA	Amend IX.2 Objective 1 as follows: (1) Drury Centre is a transit-orientated development that supports high density residential, employment-generating and retail activities elose to within walking distance of rapid transit and prioritises public and active modes of transport to and within the centre.
23.10	NZTA	Amend IX.3 Policy 2 as follows: (2) Recognise that sub-precinct B will be the primary only location for large format retail activities.
23.11	NZTA	Retain IX.3 Policy 1 as notified
23.12	NZTA	Retain IX.3 Policy 3 as notified
23.13	NZTA	Retain IX.3 Policy 9 as notified

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Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
23.14	NZTA	Amend IX.3 Policy 4 as follows:
		(4) Provide for attractively designed, safe and direct access to the Drury
		Central train station, with a particular focus on pedestrians and cyclists at
		the same time as land use development.
23.15	NZTA	Retain IX.3 Policy 5 as notified
23.16	NZTA	Retain IX.3 Policy 6 as notified
23.17	NZTA	Retain IX.3 Policy 7 as notified
23.22	NZTA	Amend the activity tables in IX.4.1 to make large format retail a non-
		complying activity in all sub-precincts except sub-precinct B.
27.61	Auckland	Add key retail frontage provisions to the AUPOP map notations within the
	Transport	precinct area, and allow them to float with the indicative roads which may
		be located differently upon development.
27.62	Auckland	Amend Rule IX.4.1 (A10) as follows:
	Transport	Sub-Precinct C and E – Mixed Use
		(A10) <u>Large Format Retail</u> Department Stores – NC
33.4	Kāinga Ora	Amend Objective (4) as follows:
		"Drury Centre is an street-based environment that provides a high-quality
		pedestrian experience throughout the street network, with a particular
		emphasis on the Key Retail Street."
33.6	Kāinga Ora	Amend Policy (3) as follows:
		"(3) Provide for high density residential and supporting intensive
		employment activities compatible with residential amenity values in Sub-
		Precinct C, E and F without undermining the role that recognise the
		primacy of Sub-Precinct A as the core centre. Provide for a greater range
		of intensive employment activities and greater heights in Sub-Precinct E
		responding to its close proximity to rapid transport, while recognising the
		primacy of Sub-Precinct A as the core centre."
		(4) Provide for a greater range of intensive employment activities and
		greater heights in Sub-Precinct E responding to its close proximity to
		rapid transport, while recognising the primacy of Sub-Precinct A as the
		core centre.

Discussion

- 486. These submissions cover a range of matters relating to the height and density of development.
- 487. Kiwi Property **[15.6]** has proposed amended building heights to better align with the requirements of the NPS-UD. The Ministry of Housing and Urban Development **[20.1]** and Auckland Council **[22.22]** support amendments to improve alignment.
- 488. Sub-precinct E is adjacent to the proposed train station and as covered below, would, in my view, be more appropriately zoned BMC. A building height of greater than that proposed (40.5m) is appropriate. I see no reason not to increase the height to 72m, the same as the proposed BMC zoning. The sub-precinct is opposite land that is proposed to be zoned for terrace housing and apartment buildings with a height of at least 21m. Standard H9.6.2 of the BMC zone height in relation to boundary would apply to this interface.

- 489. Sub precincts C and F also have a transitional role with land to the south (on the opposite side of Fitzgerald Road which is within PPC49 plan change area and the walkable catchment of the BMC zone). I support the requestor's submission seeking a 32.5m height limit for sub-precinct C. Sub-precinct F's relationship with the land on the southern side of Fitzgerald Road is not settled. In response to the NPS-UD, a more intensive zoning of this land may be required. In that case, a greater height could be tolerated, such as the 32.5m proposed for sub-precinct C.
- 490. Auckland Council **[22.29]** notes that the proposed Daylight and Outdoor Living Space standards are an appropriate addition to the BMU zone standards because they fill a known gap in the zone provisions relating to residential activity. They will provide for a better-quality environment for future residents. Auckland Council also notes that monitoring of the BMU zone provisions has found that there is a significant unintended defect with the outlook standard that arises when apartment buildings have inset balconies, which is increasingly common. The dimension is measured from the window inside the balcony, not the outer face of the building. When this happens, the outlook space is not achieved as intended even though technical compliance is attained. This can cause significant adverse effects for residents on the quality of the built environment. The equivalent BMC zone rule H9.6.10 is a potential model replacement rule where the dimension is measured from the exterior face of the building.
- 491. I agree that H9.6.10 provides a more effective means of maintaining outlook and amenity and recommend that this standard be included in the precinct (applying to sub-precincts C, E and F). Furthermore, H13.6.9(4) (Business Mixed Use Zone Outlook Space) should be amended so that the current clause 4:
 - (4) The depth of the outlook space is measured at right angles to and horizontal from the window to which it applies

is replaced with the following:

- (4) The outlook space must extend from the exterior wall of the principal living room or bedroom and not the windows.
- 492. Waka Kotahi's support for policies 5, 6 and 7 (concerning collector and local roads) is noted. Its submission expressing support for policies 1, 3 and 9 needs to be read in conjunction with other submissions that suggest a modified central area (that is extension of the BMC zone to the north).
- 493. I agree with Waka Kotahi [23.8] that objective IX.2(1) where it refers to high density development being 'close to' rapid transit should be expanded to all land within walking distance to ensure consistency with the NPS-UD.
- 494. Waka Kotahi's proposal **[23.10]** to clarify that sub-precinct B is the only location for large format retail needs to be treated carefully. While I agree in principle that large format retail (big box) should generally be confined to sub-precinct B, large format retail is defined in the AUP as being any retail unit over 450m² in floor area. Technically a supermarket or department store could be classed as a large format retail unit. The BMC zone provides for all forms of retail as a permitted activity but controls the design of the buildings that accommodate these activities. Moreover, the AUP definition of large format excludes activities like garden centres and building supply stores. Yet, these types of activities could usefully be located in sub-precinct B.
- 495. In line with Waka Kotahi's proposed amendments to the description and policies, Waka Kotahi proposes that large format retail needs to be confined to sub-precinct B and listed

- as a non-complying activity in all other parts of the Precinct. I do not agree with this reclassification due to the definitional issues outlined above.
- 496. Waka Kotahi's submission on policy 4 [23.14] addresses a theme which is covered in section 9.21 of this report. The policy is generally supported as it will encourage active and public transport outcomes, but I agree it needs to be amended to ensure that connections are provided in tandem with development. Auckland Transport's submission seeks greater certainty over linkages to the station; this is a matter that I canvas in section 9.21 below. In that regard, I support the submission.
- 497. Kāinga Ora raises two points of detail. They suggest that the words 'street-based' in policy 4 may be misinterpreted as encouraging an agglomeration of streets throughout the precinct. They suggest instead a focus on a pedestrian orientated environment. My understanding is that the words 'street-based environment' seeks to emphasise a built environment where shops, activities and buildings orientate to and reinforce streets (that is, rather than an internally focused mall or buildings set amongst large areas of surface car parking). For that reason, I disagree with Kāinga Ora.
- 498. Kāinga Ora **[33.6]** generally supports policy 3. However, they suggest that the policy can be clarified as it appears to be two separate issues combined. A new policy 4 is proposed, which is the second component of policy 3. I agree that the policy should be split in two. A policy for sub-precinct E is appropriate, with a focus on employment, but I suggest that the reference to the primacy of sub-precinct A be removed. The role of sub-precinct E is discussed further in the next section (in particular whether sub-precinct E should be zoned BMC zone rather than BMU zone). However, the physical relationship between sub-precincts A and E should be acknowledged. For example:
 - "(3) Provide for high density residential and supporting intensive employment activities compatible with residential amenity values in Sub-Precinct C, —and F. without undermining the role that recognise the primacy of Sub-Precinct A as the core centre

Provide for a greater range of intensive employment activities and greater heights in Sub-Precinct E responding to its close proximity to rapid transport, while recognising the primacy of and physical relationship with Sub-Precinct A as the core centre.

- 499. Auckland Transport **[27.62]** notes that while department stores will require consent as non-complying activities, no other requirements are proposed on other types of large format retail, such as supermarkets. It is Auckland Transport's view that all large format retail activities have the potential to generate adverse effects on the transport network and therefore the same effects management approach should apply. I do not support making large format retail activities non-complying.
- 500. Auckland Transport [27.61] also notes that retail frontage and commercial frontage controls are usually mapped to an existing road. In this case if the proposed roads shown on the Precinct Plan ended up in a different location upon development, then a plan change would be required to update the precinct plan. Some form of 'floating' control that achieves the same outcome but moves with the actual location of the road could address this problem. I agree with the point being raised.

Recommendations on Submissions

501. Based on the analysis outlined above I recommend that submissions:

- 15.6; 20.1; 22.22 be accepted in part, to the extent that greater building height limits are supported (72.5m for sub-precinct E, and 50m for sub-precinct B)
- 22.29 and 22.30 be accepted (in relation to outlook space in the BMU zone)
- 23.10; 23.22; 27.62 be rejected on the basis that there are a range of large format stores and they should be able to locate across the centre
- 23.3; 23.8; 23.11; 23.12, 23.13, 23.14; 23.15; 23.16; 23.17; 33.4 and 33.6 be accepted in part, to the extent that I have recommend changes to these policies in section 10)
- 27.61 be accepted (with general frontage controls to be identified on the precinct plan).
- 502. Possible amendments are set out in Chapter 10 to this report.

9.12 Submissions on Open Space

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
20.2	The Ministry of Housing and Urban Development	Enable further open space through zoning (primarily refers to the PC49 area)
22.17	Auckland Council	Amend policy IX.3(14) to read as follows: (14) In addition to matters (a)-(c) of Policy E38.3.18, ensure that the location and design of publicly accessible open spaces contributes to a sense of place for the Drury Centre, including by: (a) incorporating distinctive site features; (b) reinforcing legibility within the centre; and (c) integrating with the stream network-; and (d) if Auckland Council ownership is proposed, the open spaces must be consistent with the council's open space and parks acquisition and provision policies.
22.18	Auckland Council	Reduce the open space zoning along Hingaia Stream to a 20m wide strip adjoining the stream.
22.19	Auckland Council	Include indicative open spaces in the precinct plan as shown in Attachment 1 to the submission.
29.7	Ministry of Education	Amend plan change to ensure there is provision of appropriate public open space to support the surrounding community.
30.1	Leith McFadden	Zone areas for parks and public space
31.9	HNZPT	Extend the open space zoning slightly to the east in the northern part of the precinct where the Mixed Use zoning is closest to the Hingaia Stream
33.1	Kāinga Ora	Approve the plan change, subject to: •Identifying local open space areas within the Precinct and strengthening precinct provisions to provide an integrated and connected open space network;

Discussion

- 503. The nature and extent of open space has been reviewed by Auckland Council's open space acquisition team, as set out in section 8.5 above.
- 504. The Ministry of Housing and Urban Development [20.2] notes that given the intensity of the collective zonings proposed across PPC48, 49 and 50, it is appropriate that a

suitable form of public open space is incorporated into the PPC49 area to support the urban and suburban environments sought to be established. This is a point strongly supported by the comments of the Papakura Local Board. Submitters L McFadden [30.1] and the Ministry of Education [29.7] also support appropriate open space provision.

- 505. As covered in section 8.5, Auckland Council has criteria for purchase or other forms of acquisition of land for public open space. These are set out in policy documents. The Council will not necessarily agree to purchase or receive proposed open space that does not meet these criteria. Council's funding via development contributions constrains the extent to which the Council can acquire land.
- 506. There are issues with planning for appropriate spaces in a mixed use environment that has significant potential development capacity. Land for open space will be determined at the subdivision stage, but actual development intensity and mix will occur subsequently, and it is possible that the amount of land identified will be inadequate to meet future needs. Open space is also a major urban form structuring element.
- 507. To provide a starting point for assessment it is recommended that indicative public open spaces are shown on the Precinct Plan. I do not support these areas being zoned as open space until after subdivision occurs and land is either vested or acquired, as the locations are indicative only and exact boundaries are yet to be determined.
- 508. In terms of PPC48 I consider the important open space elements that should be depicted on the Precinct Plans to be:
 - Hingaia stream corridor (but see discussion in the next paragraphs about the width of this corridor and appropriate zoning)
 - The green corridor to follow Fitzgerald Stream
 - The station plaza (although this is more likely to have a transit function rather than a recreational aspect)
 - A town centre plaza or similar
 - Homestead Park
 - Possible neighbourhood type parks in sub-precincts C and F, given that they are more likely to have a residential component than sub-precincts A, B or E (and particularly in the light of recommendations that sub-precinct E take on a Metropolitan Centre zoning).
- 509. With regards to the Hingaia Stream, Auckland Council does not support the proposed open space along the margins of the Hingaia Stream which exceeds the standard 20m esplanade reserve width. The Council notes that the land may be subject to flood hazards and / or affected by Transpower's transmission corridor. These features considerably reduce any open space benefits of the land. Neither the floodplain land nor the transmission corridor land beyond the standard 20m esplanade width meet the Council's open space acquisition criteria and the Council does not intend to purchase the land for reserve. The submission suggests that the open space zoning be reduced to the 20m esplanade reserve, with the balance area taking on the zoning of the adjoining land (such as BMC zone).
- 510. Transpower, as a further submitter, note that while the transmission line itself is located outside the BMC zone (as notified), the National Grid Corridor overlay provisions (which includes the National Grid Subdivision Corridor and National Grid Yard Uncompromised) extend into and would apply to the BMC zone. Transpower is neutral in relation to the zoning of land under the Corridor and Yard.

- 511. I agree that there appears to be limited public benefit of the open space zoned area identified, although I note that no detailed analysis of the space needed for a walkway/cycleway beside the stream has been undertaken and whether a pathway could be accommodated within a 20m wide reserve, given the topography present. However, there is the potential to top up (via acquisition) the width of the esplanade reserve at the time of subdivision, if required. Generally, I consider that the OSIR zone should only be applied to public land, however if there was a clear statement in the precinct provisions that land outside the 20m esplanade reserve that is to be zoned OSIR was to be publicly accessible, but privately managed, then this should help to avoid concerns that the open space zoning implies purchase by the Council.
- 512. Heritage New Zealand Pouhere Taonga [31.9] suggests a wider zoning along the stream corridor provides the opportunity for more contiguous and flowing open space area alongside the entirety of the stream. This suggestion appears to be made on the basis of future amenity, rather than in response to any particular heritage issues.

Recommendations on Submissions

- 513. Based on the analysis outlined above I recommend that submissions:
 - 20.2 and 30.1 be rejected on the basis at the precinct plan should not zone as open space the land indicatively identified as possible park land
 - 22.17 be rejected on the basis that the AUP should not state a preference over ownership
 - 22.18 is accepted (as it relates to the poor open space values of the land on the western side of the precinct that is outside a future esplanade reserve).
 31.9 should be rejected on the basis that there is no recreational benefit to the land
 - 22.19; 29.7; 33.1 are accepted, with recommendations that the precinct plan identify additional indicative open spaces.
- 514. Possible amendments are set out in Chapter 10 to this report.

9.13 Submissions on Traffic and Transport Effects

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
22.28	Auckland	Review the need for IX.6.5 if a notice of requirement has been lodged for the
	Council	upgrade of Waihoehoe Road.
23.2	NZTA	Amend the whole Plan Change (including Precinct Plans) to replace
		references to 'pedestrians and cyclists' with 'active transport' (as defined
		within the National Policy Statement on Urban Development 2020).
23.9	NZTA	Amend IX.2 Objective 3 as follows:
		(3) Development of the Drury Centre creates a distinctive sense of place
		through delivery of high density activities and a mix of uses, including by
		incorporating distinctive natural and built site features, responding to
		landform and respecting Mana Whenua values.
23.20	NZTA	Retain Activity IX.4.1 (A1) as notified.
23.24	NZTA	Retain IX.6 Standard (2)(b) as notified on the basis that transport, traffic or
		trip-generation provisions are retained in the precinct and that no permitted
		activities are enabled.

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter		
23.33	NZTA	Amend IX.8.1 Matters of discretion (1) as follows:		
		(1) Development of public and private roads:		
		(a) (d)		
		(e) the outcome of engagement with the relevant road controlling authority,		
23.34	NZTA	Amend IX.8.1 Matters of discretion (5) as follows:		
		(5) Development or subdivision that does not comply with Standard IX.6.2		
		Staging of Development with Transport Upgrades but complies with Standard IX6.3 Trip Generation Limit:		
		(a)		
		(d) the outcome of engagement with the relevant road controlling authority, (e) the utilisation of the development potential of the site (including its mix of		
		uses) and its correlation with the public transport accessibility of the site.		
23.35	NZTA	Amend IX.8.2(1) Assessment criteria as follows:		
		1) Development of public and private roads:		
		Location of roads		
		(a)		
		(e)(iii) Development in Sub-Precincts C and E provides for a direct and legible connection to the Drury Central train station via Drury Boulevard and		
		any connecting local or collector roads and/or open spaces.		
		Road Controlling Authority		
		(f) how the outcome of engagement with the relevant road controlling		
		authority has been responded to.		
23.36	NZTA	Amend assessment criteria IX.8.2(5) as follows:		
		(5) Development or subdivision that does not comply with IX.6.1 Staging of		
		Development with Transport Upgrades but complies with IX.6.2 Trip Generation Limit: (a) (d)		
		(e) how the outcome of engagement with the relevant road controlling		
		authority has been responded to.		
27.4	Auckland	Amend Objective IX.2(5) as follows:		
	Transport	(5)A transport network that facilitates the safe and efficient movement of		
		people, goods and services and manages effects on the safe and efficient		
07.40	Augldond	operation of the surrounding and wider transport network.		
27.10	Auckland Transport	Delete Standard IX.6 (2)(b) as follows: (2) The following zone standards do not apply to activities listed in Activity		
	rianoport	Table IX.4.1 above:		
		(a) H9.6.1 Building Height		
		(b) E27.6.1 Trip generation		
27.19	Auckland	Delete all reference to 'Access A' under Standards IX.6.2 and IX.6.3.		
	Transport	Remove 'Access A' from Precinct Plan 2 and Precinct Plan 3.		
27.20	Auckland	Amend the precinct provisions to better address the following related matters:		
	Transport	• Define the key transit-oriented development principles, characteristics and outcomes as they apply to the plan change area.		
		Ensure there is consistency through the suite of precinct provisions in		
		regard to giving effect to the transit- oriented development related outcomes.		
		Applying appropriate mechanisms in the precinct provisions to support		
		transit-oriented development related outcomes e.g. managing the provision		
		of parking as part of the wider suite of travel demand management measures		
27.21	Auckland	that are applied to transit- oriented development scenarios. Provide further assessment of the impacts of the proposal on accessibility to		
21.21	Transport	and from the Drury Central rail station for all modes including public transport		
	1	The state of the s		

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and from the station.	onnectivity to	
27.24 Auckland Amend the Presinct Description of follows:	and pedestrian access, focusing on safety, permeability and connectivity to and from the station.	
27.24 Auckland Amend the Precinct Description as follows:		
Transport There are five Sub-precincts in the Drury Centre Precinct:		
Sub-precinct A is zoned Business - Metropolitan Centre Zone	e and contains	
the primary retail area, Key Retail Main Street and civic and gr	een open	
spaces. The sub-precinct is the focal point for intensive retail, or	commercial	
· ·	and civic development, with safe and convenient active transport access to	
	and from the Drury Central rail station being enabled and prioritised and	
pedestrian activity;		
Sub-precinct B is zoned Business – Metropolitan Centre Zone		
intended to be the primary location for large format retail, while		
for other commercial and residential activities allowed in the zo		
Development in this sub-precinct should ensure that a quality s		
environment is achieved with the provision of safe and conven		
transport access to and from the Drury Central rail station bein prioritised;	ig enabled and	
prioritised,		
Sub-precinct E is zoned Business – Mixed Use Zone and pro	vides for high	
density residential and a range of commercial activities that wil	-	
the core centre and maximise the efficient use of land close to	•	
transport network. Eight to ten storey buildings are enabled, ar	nd flexible	
ground floor designs are encouraged in the sub-precinct with t	ground floor designs are encouraged in the sub-precinct with the provision of	
safe and convenient active transport access to and from the ra	il station being	
enable and prioritised, reflecting its close proximity to the Drury	y Central train	
	rail station;	
27.25 Auckland Amend Objective IX.2(1) as follows:		
Transport (1) Drury Centre is a transit-orientated development which con		
supports high density residential, employment-generating and		
close to rapid transit and prioritises public and active modes of and within the centre.	transport to	
27.26 Auckland Amend Objective IX.2(4) as follows:		
Transport (4) Drury Centre is <u>a walkable centre</u> , <u>with</u> a street-based envir	ronment that	
provides a high <u>standard of pedestrian amenity</u> , safety and cor		
quality pedestrian experience , with a particular emphasis on the		
Street.		
27.27 Auckland Add a new objective to IX.2 as follows:		
Transport (x) The Drury Centre precinct develops and functions in a way	which_	
promotes:		
• travel mode shifts to public and active modes of transport; an		
• a well-connected and legible network of pedestrian and cyclin		
throughout and connecting the precinct to the Drury Central ra	<u>il station.</u>	
27.28 Auckland Amend Policy IX.3(4) as follows:		
Transport (4) Provide for attractively designed, safe and direct access to		
Drury Central train rail station, with the provision of active trans		
being prioritised a particular focus on pedestrians and cyclists. 27.29 Auckland Amend Policy IX.3(7) as follows:		
Transport (7) Require streets to be attractively designed to appropriately	nrovide for all	
modes of transport by:	provide for all	
a) providing a high standard of <u>pedestrian</u> amenity, <u>safety and</u>	convenience	
for pedestrians in areas where high volumes of pedestrians are		
and	, ,	
b) providing for safe separated access for cyclists on arterial a	nd collector	

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter		
		roads that link key destinations; and c) providing a level of landscaping that is appropriate for the function of the street; and d) providing for the safe and efficient movement of public transport and private vehicles.		
27.31	Auckland Transport	Add a new rule to IX.4.1 Activity Table as follows: Long-term non-accessory parking facilities - NC		
27.32	Auckland Transport	Add a new policy as follows: (x) Recognise and provide for Drury Boulevard as the primary multi-modal access between the Precinct and the Drury Central train station.		
27.33	Auckland Transport	Add a new policy as follows: (x) Require the closure of the northern end of Flanagan Road to provide for the Waihoehoe Road rail bridge replacement, while ensuring safe and efficient access to the Precinct.		
27.34	Auckland Transport	Add the following transport upgrade requirement into Tables IX.6.2.1 and IX.6.3.1 as a prerequisite for any development and/or subdivision: • Construction of the northern end of Drury Boulevard as the primary multimodal station access		
27.35	Auckland Transport	Add the following transport upgrade requirement into Tables IX.6.2.1 and IX.6.3.1 to provide for the Waihoehoe Road rail bridge replacement: • Closure of the northern end of Flanagan Road.		
27.36	Auckland Transport	Amend Matter of discretion IX.8.1 (1)(c) and add a new clause as follows: (c) Location and design, and sequencing of connections to the Drury Central train rail station, in particular the provision of the northern end of Drury Boulevard; (x) Closure of the northern end of Flanagan Road.		
27.37	Auckland Transport	Add two new assessment criteria under IX.8.2(1) as follows: (x) Whether the northern end of Drury Boulevard is proposed as the primary multi-modal station access concurrently with the Drury Central rail station; and (x) Whether the closure of the northern end of Flanagan Road is provided for the Waihoehoe Road rail bridge replacement, while ensuring safe and efficient access to the Precinct.		
27.38	Auckland Transport	Amend IX.10.2 Precinct Plan 2 as follows: Include a notation for the northern end of Drury Boulevard as "primary multimodal station access road"; and Include a notation to close the northern end of Flanagan Road to provide for the Waihoehoe Road rail bridge replacement.		
27.39	Auckland Transport	Add new policy as follows: (x) Recognise and protect the route for Waihoehoe Road as a multi-modal arterial which provides for the east-west movements between Great South Road and Drury Hills Road intersection.		
27.40	Auckland Transport	Add new policy as follows: (x) Restrict direct vehicle access onto Waihoehoe Road to support the safe and efficient operation of the transport network for walking, cycling and public transport.		

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter		
27.41	Auckland Transport	Amend the building line restrictions in Standard IX.6.5 to reflect the final alignment and width required and ensure any yard requirements that apply are considered in addition to the building setbacks. The need for IX.6.5 should be reviewed if a notice of requirement is lodged for the upgrade of Waihoehoe Road.		
27.42	Auckland Transport	Retain the vehicle access restriction on Waihoehoe Road as per Rule E27.6.4.1 (3)(c) of the AUPOP.		
27.43	Auckland Transport	Amend IX.10.2 Precinct Plan 2 as follows: • Delete the notation of the future rail station; and • Delete the notation of Station Plaza.		
27.45	Auckland Transport	Amend Assessment Criteria IX.8.2 (2)(a) and delete IX.8.2 (2)(d) and (e) as follows: Whether Homestead Park and Station Plaza are is provided in a locations generally consistent with their indicative locations shown on IX.10.2 Drury Centre Precinct Plan 2 and hasve adequate street frontage to ensure the open spaces are visually prominent and safe; (d) Whether Station Plaza is designed as an open space which will act as a major entrance way to Drury Centre, integrating the train station with the Drury Centre; (e) Whether any buildings or kiosks which locate in the Station Plaza are designed to ensure they do not compromise or dominate the use of the		
27.46	Auckland	space for public recreational use. Delete Assessment Criteria IX.8.2 (3)(j) to (m).		
27.47	Transport Auckland Transport	Retain Policy IX.3(5)		
27.48	Auckland Transport	Amend Policy IX.3(6) as follows: (6) Ensure that development <u>and subdivision</u> provides a local road network that achieves a highly connected street layout and integrates with the collector road network within the precinct, and the surrounding transport network, and supports the safety and amenity of the open space and stream		
27.49	Auckland Transport	network. Amend Rule IX.4.1 (A1) as follows: "Development of new public or private road (this rule does not apply to Auckland Transport)" As a consequential amendment, the same changes are sought to the heading of IX.8.1 (1) matters of discretion and IX.8.2 (1) assessment criteria.		
27.50	Auckland Transport	Add a new standard to require the vesting of proposed public roads in all sub-precincts as follows: IX.6.X Road Vesting Proposed public roads (including separated pedestrian and bicycle routes) must be constructed and vested in Council upon subdivision or development of the relevant area at no cost to the Council. As a consequential amendment, add a new rule as follows: Development and/or subdivision that does not comply with IX.6.X Road Vesting – NC		
27.51	Auckland Transport	Amend matters of discretion IX.8.1 (1) as follows: (1) Development of <u>new</u> public and private roads: (a) Location and design of the collector <u>roads</u> streets, local <u>roads</u> streets and connections with neighbouring sites and to achieve an integrated street		

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter		
		network; (b) Provision of safe and efficient public transport, cycling and pedestrian networks; (c) Location and design, and sequencing of connections to the Drury Central train rail station, in particular the provision of the northern end of Drury		
		Boulevard; and (d) Matters of discretion IX8.1 (1)(a) - (c) apply in addition to the matters of discretion in E38.12.1;- (x) Location and design of intersections with existing roads; and (x) Closure of the northern end of Flanagan Road.		
27.52	Auckland Transport	Amend Assessment criteria IX.8.2 (1)(a) as follows: (a) The extent to which the collector road network and the Key Retail Street are provided generally in the locations shown on IX.10.X Drury Centre: Precinct Plan 2 to achieve a highly connected street layout that integrates with the surrounding transport network and responds to landform. An alternative alignment that provides an equal or better degree of connectivity and amenity within and beyond the precinct may be appropriate, having regard to the following functional matters: (i) The presence of natural features, natural hazards or contours and how this impacts the placement of roads; (ii) The need to achieve a permeable an efficient block structure and layout within the precinct suitable to the proposed activities.; and (iii) The constructability of roads and the ability for it to be delivered by a single landowner.		
27.53	Auckland Transport	Amend Assessment criteria IX.8.2 (1)(b) as follows: (b) Whether a high quality and integrated network of local roads is provided within the precinct that provides a good degree of accessibility and connectivity, and supports public and active modes of transport a walkable street network. Whether subdivision and development provide for collector roads and local roads to the site boundaries to coordinate with neighbouring sites and support the integrated completion of the network within the precinct over time;		
27.54	Auckland Transport	Amend Assessment criteria IX.8.2 (1)(c) as follows: (c) Whether the design of collector and local roads are generally in accordance with the minimum road reserve widths and key design elements road cross sections-provided in IX.11 Drury Centre: Appendix 1;		
27.55	Auckland Transport	Amend Assessment criteria IX.8.2 (1)(d) as follows: (d) Whether the layout of the street network provides a good degree of accessibility and connectivity, and supports the development of Drury Centre Precinct as a walkable centre and community-street network. As a general principle, the length of a block should be no greater than 180m, and the perimeter of the block should be no greater than 500m;		
27.56	Auckland Transport	Amend Assessment criteria IX.8.2 (1)(e) as follows: (e)Whether the street network provides safe and legible pedestrian and cycle connections to the operational Drury Central train rail station as development occurs over time. In particular, whether the following is provided, or an alternative is provided that achieves an equal or better degree of connectivity: (i) Development in Sub-Precincts B and F provides for a direct, legible and safe pedestrian and cycle connection to the Drury Central train rail station via Drury Boulevard or the Key Retail Street shown on Precinct Plan 42; (ii) Development in Sub-Precinct A provides for a direct, legible and safe		

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter		
		pedestrian and cycle connection to the Drury Central train rail station via the Key Retail Street and/or any connecting local or collector roads and/or open spaces;		
		(iii) Development in Sub-Precincts C and E provides for a direct and legible connection to the Drury Central train rail station via Drury Boulevard and any		
		connecting local or collector roads and/or open spaces.		
27.57	Auckland	Add new assessment criteria to IX8.2(1) as follows:		
	Transport	(x) Whether the layout of the street network supports the provision of a safe and efficient bus network; (x) Whether the design of collector and local roads includes safe and efficient		
		intersection treatments with existing roads;		
		(x) Whether the northern end of Drury Boulevard is proposed as the primary		
		multi-modal station access to and from the station;		
		(x) Whether the closure of the northern end of Flanagan Road is provided for		
		the Waihoehoe Road rail bridge replacement, while ensuring safe and		
		efficient access to the Precinct; and		
		(x) Where development is adjacent to a rural road, whether the road is to be		
		upgraded to an urban standard.		
27.58	Auckland	Delete IX.11 Appendix 1: Road Cross Section Details.		
	Transport	Introduce provisions relating to the minimum road reserve widths and key		
		design elements and functional requirements of new roads and roads which		
		need to be upgraded to urban standards including but not limited to:		
		• Carriageway		
		Footpaths		
		• Cycleways		
		Public Transport Ancillary Zono (parking street trees etc.)		
		Ancillary Zone (parking, street trees etc.)Berm		
		• Frontage		
		Building Setback		
		Design Speed		
		As part of new provisions, retain vehicle access restriction provisions, as		
		addressed above.		
27.59	Auckland	Add layers to the AUPOP maps for Arterial roads within the Precinct area,		
	Transport	including Waihoehoe Road		
27.60	Auckland	Show the purpose (role) of all roads on the precinct plans.		
	Transport			
29.9	Ministry of	Retain objectives and policies relating to the provision of safe and legible		
	Education	walking and cycling connections through communities.		
32.6	Drury	Amend IX.6(2)(b) so that any exemption is clear as to the activities that it		
	South	applies to, and that the effects of those activities have been assessed		
	Limited	through an ITA.		
33.7	Kāinga	Amend Policy (5) as follows:		
	Ora	"Require collector roads to be generally in the locations shown in IX.10.1		
		Drury Centre: Precinct Plan 2, while allowing for variation, where it would		
		achieve a highly connected street layout that integrates with the surrounding		
0.5.5	17-1	transport network and is generally aligned with transitions in zoning".		
33.9	Kāinga	Delete Standard IX.6(2)(b), removing the exclusion of E27.6.1 Trip		
00.10	Ora	generation standard from within the Drury Centre Precinct.		
33.12	Kāinga	Retain Criteria IX.8.2 (1)(a) subject to the following amendment:		
	Ora	i. The presence of natural features, natural hazards or contours and how this		
		impacts the placement of roads;		
		ii. The need to achieve an efficient block structure and layout within the		

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Sub.	Name of	Summary of the Relief Sought by the Submitter	
No.	Submitter		
		precinct suitable to the proposed activities; and	
		iii. The constructability of roads and the ability for it to be delivered by a	
		single landowner; and	
		iv. The need to ensure that any alternative Collector Road location is	
		generally aligned with transitions in zoning	

Discussion

- 515. This set of submissions deal with the more operational aspects of traffic and transport matters. Refer to section 9.21 on timing and sequencing for assessment of strategic level issues. Topics covered include:
 - Objectives for the 'internal transport' network
 - Road layout/ functions
 - · Local road design

Objectives and policies

- 516. Waka Kotahi states that the objectives are generally supported as they provide for transit orientated outcomes, active and public transport, appropriate infrastructure and the safe and efficient operation of the transport network. However, the proposed provisions should be expanded to include recognition of the need to implement the development envisioned in the plan change documents.
- 517. As a minor matter Waka Kotahi requests that references referring to pedestrians and cyclists is replaced with active transport to ensure consistency and clarity. For clarity, where the individual term pedestrian or cyclist is used, these should remain.
- 518. Auckland Transport notes that managing and optimising the use of the train station through spatial, physical and operational integration of the land use development (enabled by this plan change) is critical. The principles of a transit-oriented development approach should therefore underpin the spatial location of infrastructure, prioritisation of transport modes, patterns of land use development and associated development potential/ intensity within the plan change.
- 519. I agree with both Waka Kotahi and AT that the transit-orientated objective needs to be strengthened. In this regard, AT's suggestion [27.27] that a new objective be added has some merit, for example:
 - (x) The Drury Centre precinct develops and functions in a way which promotes:
 - travel mode shifts to public and active modes of transport; and
 - a well-connected and legible network of pedestrian and cycling linkages throughout and connecting the precinct to the Drury Central rail station.

Road layout

- 520. Submissions raise a number of issues with regard to whether the precinct provisions adequately recognise the particular functions of key roads. These include:
 - The importance of Waihoehoe Road as a future arterial road and its function as a multi-modal connection, and support for the vehicle access restriction proposed on Waihoehoe Road.

- Drury Boulevard as the primary multi-modal access between the precinct and the future Drury Central rail station.
- The need to close Flanagan Road and provide for the planned Waihoehoe Road rail bridge replacement. Instead, the precinct boundary specifically excludes Flanagan Road.
- The need for Access A is not adequately justified, and provision of Access A will be problematic.
- 521. In addition to the above, Kāinga Ora is opposed to wording of the policy and associated activities and development standards which allow for alternative road locations without consideration of the implications that may arise from a different location that fragments the pattern of zoning and built character that would establish within the precinct particularly the transition between the BMC and BMU zones. In contrast, Auckland Transport generally supports and seeks to retain the reference in Policy IX.3 (5) where variation to the location of collector roads is allowed to achieve land use and transport integration.
- 522. I agree that there would be benefit from the precinct provisions more explicitly stating the role and function of the various existing and proposed collector roads shown on the Precinct Plan. In this regard, I note that the Precinct Plan shows a potential connection to Drury West (over the motorway), without describing when and how this link may be achieved. Access A is referred to in relation to the trip generation standards, but not in terms of the spatial features, while there is no mention of the form and function of the associated northern, east-west link that would likely be an important route to the train station. The various new collector type roads should be named or numbered on the Precinct Plan to aid interpretation.
- 523. I would support amendments that address the above points. This may require an expanded policy 5, or a new set of policies.

Local road design

- 524. Turning to road design, AT **[27.49]** seek to amend Rule IX.4.1 (A1) road design so that it clearly excludes Auckland Transport. I agree that this exclusion should apply. The design of public roads to be vested will be considered by the future asset owner through the subdivision process. Private roads should be subject to an appropriate level of assessment to ensure that they are safe and do not displace traffic or other road users, for example.
- 525. Submissions from Waka Kotahi and AT seek a wider set of matters of discretion and related assessment matters when considering different alignments of collector roads and for the design of private roads. Further additional matters are proposed to ensure that:
 - the relevant road controlling authority outcomes are considered.
 - · public transport is provided for, where necessary and
 - the location and design of intersections with existing roads is taken into account
 - where development is adjacent to a rural road the road is to be upgraded to an urban standard.
- 526. I note that local and collector street design is subject to Policy 10 of Chapter E38 Urban subdivision. This refers to a road network that achieves all of the following:
 - (i) is easy and safe to use for pedestrians and cyclists;
 - (ii) is connected with a variety of routes within the immediate neighbourhood and between adjacent land areas; and

- (iii) is connected to public transport, shops, schools, employment, open spaces and other amenities.
- 527. Given this extent of discretion, it is unclear to me what further or additional matters are needed. I have separately addressed the matter of the upgrade of rural roads to an urban standard.
- 528. AT's submission [27.31] requesting that long-term non-accessory parking facilities be non-complying activities is not supported. Controlling trip patterns through the nature and extent of parking facilities is an indirect means of supporting public transport and active modes. I consider that more direct methods can be used in a greenfields situation. I also note that some form of parking building for 'park and ride' commuters may be desirable in the future.
- 529. AT [27.58] requests that IX.11 Appendix 1: Road Cross Section Details be deleted. I agree. My experience is that road design is an evolving matter (for example the current trend towards low traffic neighbourhoods and tactical urbanism responses to road safety). In my experience road cross sections can quickly become out of date. The details covered are more appropriately determined as part of future resource consent and engineering plan approval applications, noting that these will be subject to AT Standards and Guidelines.
- 530. AT **[27.50]** is concerned that the proposed rules and standards do not include any requirements in relation to road vesting. To provide clear direction, AT seeks to include a new standard and rule about the requirement of road vesting. I disagree that a 'vesting' rule is required in an RMA document. The vesting or not of an asset is a matter for the ultimate asset owner to determine.
- 531. Kāinga Ora [33.9] and AT [27.10] oppose the exclusion of the E27.6.1 Trip generation standard from within the Drury Centre Precinct while Waka Kotahi [23.24] supports the exclusion if trip generation provisions are retained in some form in the precinct. E27.6.1 requires assessment of trip generation for larger developments as part of consent processes. AT notes that the proposed exclusion in Standard IX.6 (2)(b) is not required, because it is explicitly stated under Rule E27.6.1(2)(b) that Standard E27.6.1(1) does not apply where development is being undertaken in accordance with a consent or provisions approved on the basis of an Integrated Transport Assessment where the land use and the associated trip generation and transport effects are the same or similar in character, intensity and scale to those identified in the previous assessment.
- 532. It is unclear what method the Drury Centre Precinct provisions employ to account for a situation where the land use and the associated trip generation and transport effects are not the same or similar in character, intensity and scale to those identified in the ITA assessment, and upon which the precinct provisions and various thresholds have been based. Retaining the application of E27.6.1 provides a 'back stop' to ensure that unforeseen (however unlikely) changes in the surrounding environment and transportation assumptions do not affect the planned outcomes of the Drury Centre Precinct or the safety and efficiency of the wider transportation network.
- 533. Based on the above, I recommend that the reference to trip generation rules not being applicable, be removed.

Recommendations on Submissions

534. Based on the analysis outlined above I recommend that submissions:

- 22.28, 23.2; 23.9; 27.4; 27.10; 27.19; 27.20; 27.21; 27.24; 27.25; 27.26; 27.28; 27.29; 27.32; 27.33; 27.34; 27.35; 27.36; 27.37; 27.38; 27.39; 27.40; 27.41; 27.42; 27.43; 27.45; 27.46; 27.47; 27.48; 27.49; 27.51; 27.52; 27.53; 27.54; 27.55; 27.56; 27.57; 27.58; 27.59; 27.60; 29.9; 32.6; 33.7; 33.9; 33.12 be accepted in part, to the extent of the modifications that I have recommended
- 23.20; 23.24; 23.33; 23.34; 23.35; 23.36; 27.31; 27.50 be rejected on the basis
 of the submissions covering matters that are either outside the AUP, or involve
 retaining provisions that I have recommended by deleted or substantially
 altered.
- 535. Possible amendments are set out in Chapter 10 to this report.

9.14 Submissions on Additional Infrastructure

Sub.	Name of	Summary of the Relief Sought by the Submitter		
No.	Submitter	Aller Brita to the Bresite to a City on City		
3.1	Fire and	Add new Policy to the Precinct provisions as follows:		
	Emergency New Zealand	•Policy xx: Ensure that development in Drury Centre is coordinated with		
	New Zealand	supporting stormwater, wastewater and water supply infrastructure.		
5.1	Wendy	Approve the plan change conditional on existing access rights to 228		
	Hannah	Flanagan Road being maintained and access being provided to services		
		and utilities to develop the property in future (note: property is outside		
10.1	_	PC48 area)		
10.1	Transpower	Retain the application of the National Grid Corridor Overlay and		
		associated Unitary Plan provisions to the plan change site.		
17.1	Spark	Consult Spark and the other telecommunication network providers		
		throughout the plan change process and any resource consents to		
		enable development including infrastructure to ensure that		
		telecommunications are recognised as essential infrastructure and		
47.0	On and	additional infrastructure under the NPSUD		
17.2	Spark	Consult Spark and the other telecommunication network providers to		
		ensure that there is adequate infrastructure to support the demand for telecommunication services generated by the development proposed		
17.3	17.3 Spark Consult Spark and the other telecommunication network prov			
		ensure staging of infrastructure is appropriate and underground ducting,		
		above ground mobile sites/facilities are provided for and designed into		
		the development		
17.4	Spark	Consult with Spark and the other telecommunication network providers		
		to ensure funding is available through the infrastructure funding		
		agreements		
17.5	Spark	Include telecommunications infrastructure within the triggers for the		
		staged release of development		
27.5	Auckland	Amend Objective IX.2(6) as follows:		
	Transport	(6) Development is supported by appropriate infrastructure. Subdivision		
		and development are supported by the timely and coordinated provision		
		of robust and sustainable transport, stormwater, water, wastewater,		
00.4	O a sundia a	energy and communications infrastructure networks.		
28.1	Counties Power	Retain Objective 5		
28.2	Counties	Retain Objective 6		
20.2	Power	INSTAIL ODJECTIVE O		
28.3	Counties	Amend Policy 7(c) so that electrical infrastructure is taken into		
20.5	Power	consideration when planning landscaping and planting of street trees;		
	. 51151	Todalogation whom planning landodaping and planning or direct frees,		

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter		
		require consultation with Counties Power regarding species in the vicinity of overhead lines; and apply a typical road cross section for arterial roads to ensure that the berm is an acceptable width for the installation of underground electrical reticulation		
28.5	Counties Power	Amend Policy 16 to include reference to electrical, telecommunications and other infrastructure.		
28.6	Counties Power	Retain Policy 17		
28.7	Counties Power	Add new policy IX.3.(5)(e) as follows: Require subdivision and development to: (e) Enable the reduction of CO2 emissions by promoting the use of renewable energy.		
28.8	Counties Power	Add new policy IX.3(5)(f) as follows: Require subdivision and development to: (f) Provide for the inclusion of vehicle recharging areas within parking areas and for the ability to upgrade additional spaces for increased demand when required.		
28.9	Counties Power	Amend matters of discretion in IX.8.1(1) to consider provision of suitable space for installation of electrical infrastructure to meet the needs of the area or building, as well as adequate separation between the different utilities, landscaping and other road users. Where electrical infrastructure is required, vehicular access of a suitable construction standard must be provided to allow access for maintenance of electrical infrastructure.		
28.10	Counties Power	Include matter of discretion IX.8.1(3) as drafted but clarify whether the intent of the word 'servicing' includes provision of electrical infrastructure.		
28.11	Counties Power	Include matter of discretion IX.8.1(4) as drafted but clarify whether the intent of the word 'servicing' includes provision of electrical infrastructure.		
28.12	Counties Power	Amend IX.8.2(1) assessment criteria to recognise the rights that the Electricity Act 1992, New Zealand Electrical Code of Practice for Electrical Safe Distances, NZECP 34:2001 and the Electricity (Hazards from Trees) Regulations 2003 offer in order to protect the lines from encroachment from vegetation/ trees to ensure their safe and reliable operation and ensure access for maintenance is not restricted; and provide a typical road cross-section for arterial roads to ensure that the berm is an acceptable width for installation of underground electrical reticulation.		
28.13	Counties Power	Amend IX.8.2(3) assessment criteria to recognise the rights that the Electricity Act 1992, New Zealand Electrical Code of Practice for Electrical Safe Distances, NZECP 34:2001 and the Electricity (Hazards from Trees) Regulations 2003 offer in order to protect the lines from encroachment from vegetation/ trees to ensure their safe and reliable operation and ensure access for maintenance is not restricted; and provide a typical road cross-section for planting in the vicinity of the train station to ensure that there will be no conflict with electrical infrastructure (potentially an assessment criterion).		
28.14	Counties Power	Amend IX.11 Appendix 1 Road Cross Section Details to provide a typical road cross-section for each roading type (including arterial roads) to identify the proposed location of the street trees and landscaping and to ensure that the berm is an acceptable width for installation of underground electrical reticulation.		

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Sub.	Name of	Summary of the Relief Sought by the Submitter		
No.	Submitter			
29.1	Ministry of	Amend Objective IX.2 (6) as follows:		
	Education	Development is supported by appropriate infrastructure (including		
		education infrastructure).		
29.2	Ministry of	Amend Policy IX.3 (16) as follows:		
	Education	Ensure that development in Drury Centre Precinct is coordinated with		
		supporting <u>education</u> , stormwater, wastewater and water supply infrastructure.		
00.0	Ministra			
29.3	Ministry of Education	Amend IX.8.1 Matter of discretion 1)(a) Development of public and		
	Education	private roads as follows: (a) Location and design of the collector streets, local streets and		
		connections with neighbouring sites (including schools) to achieve an		
		integrated street network.		
29.4	Ministry of	Amend IX.8.2 Assessment criteria 1)(a)(ii) as follows:		
20.1	Education	ii. The need to achieve an efficient block structure and layout within the		
		precinct suitable to the proposed activities (including provision of		
		schools); and		
29.5	Ministry of	Amend IX.8.2 Assessment criteria 1)(b) as follows:		
	b) Whether a high quality and integrated network of local roads is			
		provided within the precinct that provides a good degree of accessibility		
		and supports a walkable street network. Whether subdivision and		
		development provides for collector roads and local roads to the site		
		boundaries to coordinate with neighbouring sites (including potential		
		future school sites) and support the integrated completion of the network		
		within the precinct over time;		
29.6	Ministry of	Amend IX.8.2 Assessment criteria 1)(d) as follows:		
	Education	(d) Whether the layout of the street network provides a good degree of		
		accessibility and supports a walkable street network, including to		
		existing schools or sites designated for this purpose. As a general		
		principle, the length of a block should be no greater than 180m, and the		
34.1	Watercare	perimeter of the block should be no greater than 500m; Amend Policy 16 as follows:		
34.1	vvalercare	(16) Ensure that development in Drury Centre Precinct is coordinated		
		with, and does not precede, supporting stormwater, wastewater and		
		water supply infrastructure		
		water supply illinostructure		
34.2	Watercare	Add new Policy 16A as follows:		
		(16A) Manage subdivision and development to avoid, remedy or mitigate		
		<u>-</u>		
		autnorisea intrastructure.		
		adverse effects on infrastructure, including reverse sensitivity effects or those which may compromise the operation or capacity of existing or authorised infrastructure.		

Discussion

- 536. Some of these submissions are from utility operators and one landowner. If the plan change requests are approved and subdivision and development commences, then the above utility providers will need to be approached by the developers. There is no need to amend the proposed Precinct provisions to require this to happen.
- 537. Wendy Hannah **[5.1]** seeks access to services to develop 228 Flanagan Road in future. Watercare's further submission opposes this submission as no assessment of capacity and servicing requirements has been carried out for land outside the PPC area. I agree with Watercare that the servicing of sites outside the PPC area is not required.

- 538. Watercare's concern over reverse sensitivity is already captured by AUP objectives and policies under E26.2: Network utilities and electricity generation All zones and roads. For example:
 - E26.2.1. Objective (6) Infrastructure is appropriately protected from incompatible subdivision, use and development, and reverse sensitivity effects.
- 539. Spark has requested that telecommunications infrastructure be included within the triggers for the staged release of development. I see no specific reason to do so.
- 540. In relation to policies, Watercare's suggested new policy 16A ensure that development in Drury Centre Precinct is coordinated with supporting stormwater, wastewater and water supply infrastructure essentially replicates a policy in the AUP. For example E38.3 (19):

Require subdivision to provide servicing:

- (a) to be coordinated, integrated and compatible with the existing infrastructure network; (b) to enable the existing network to be expanded or extended to adjacent land where
- (b) to enable the existing network to be expanded or extended to adjacent land where that land is zoned for urban development; and
- (c) to enable electricity and telecommunications services to be reticulated underground to each site wherever practicable.
- 541. The proposed plan change contains the following objectives and policies relating to the provision of infrastructure.
 - Objective 1X.2(6): Development is supported by appropriate infrastructure.

Policies IX.3 Infrastructure and Staging

- (15) Ensure that the timing of development in Drury Centre Precinct is coordinated with the transport infrastructure upgrades necessary to mitigate the adverse effects of development on the effectiveness and safety of the immediately surrounding transport network.
- (16) Ensure that development in Drury Centre Precinct is coordinated with supporting stormwater, wastewater and water supply infrastructure.
- (17) Provide for the staging of pedestrian and cycling connections to the Drury Central train station to encourage the use of public and active modes of transport.
- 542. Fire and Emergency New Zealand [3.1] notes that the proposed precinct provisions do not currently require the integration of land use development with water supplies. In a similar vein, the Ministry of Education [29.1 and 29.2] wishes to ensure the Precinct provisions specifically acknowledge and provide for schools. An absence of supportive provisions can place obstacles in the way of establishment of education facilities in future years. Counties Power [28.3] wishes to see explicit recognition of electrical infrastructure.
- 543. The NPS-UD requires consideration of what it terms 'additional infrastructure'. This includes public open space, community infrastructure, social infrastructure such as schools and healthcare facilities, and networks operated for the purpose of telecommunications and for the purpose of transmitting or distributing electricity or gas. This grouping of activities is different from 'development infrastructure'. The NPS-UD defines development infrastructure as network infrastructure for water supply, wastewater, or stormwater and land transport (as defined in section 5 of the Land Transport Management Act 2003).

544. Under the NPS-UD local authorities must be satisfied that the additional infrastructure to service the development capacity is likely to be available. Given that the AUP has yet to be amended to give effect to the NPS-UD, there would be some benefit in modifying the proposed objectives and policies to refer to additional infrastructure as defined by the NPS-UD, and to link the provisions of these types of activities with spatial patterns, such as follows:

Objective: Development is supported by appropriate additional infrastructure (as defined by the NPS-UD).

<u>Policy: Ensure that development in Drury Central Precinct is coordinated with the provision of additional infrastructure, having particular regard to:</u>

- the likely location of educational facilities;
- the location and capacity of existing and planned gas, electricity and telecommunication networks;
- <u>future open space networks; and</u>
- a civic space in the middle of the centre.
- 545. Counties Power **[28.8]** states that with electric vehicles becoming more the norm it is important that enough charging stations are provided for while also allowing for further charging stations without the need for significant upgrade when the demand inevitably increases. Private developments are likely to offer charging stations as part of their onsite parking arrangements. As for charging stations on public roads, this is an operational issue.
- 546. Counties Power [28.12] also seeks to amend IX.8.2(1) assessment criteria to recognise the rights that the Electricity Act 1992, New Zealand Electrical Code of Practice for Electrical Safe Distances, NZECP 34:2001 and the Electricity (Hazards from Trees) Regulations 2003 offer in order to protect the lines from encroachment from vegetation/ trees.
- 547. I see no need to go to this level of detail in the assessment criteria. Council as asset owner of public roads is aware of the need to balance amenity and infrastructure operational needs in road design.

Recommendations on Submissions

- 548. Based on the analysis outlined above I recommend that submissions:
 - 3.1; 27.5; 28.1; 28.2; 28.3; 28.5; 28.6; 28.7; 28.9; 28.10; 28.11; 28.14; 29.1; 29.2; 29.3; 29.4; 29.5; 29.6 be accepted in part, to the extent of the modifications that I have suggested, including a new policy aimed at 'additional infrastructure'
 - 10.1 is accepted (national grid overlay is retained)
 - 28.8; 28.12; 28.13 be rejected as covering matters that are not controlled by the AUP or are otherwise managed by specific non-RMA plans or codes
 - 5.1 be rejected as being a matter outside the AUP
 - 17.1; 17.2; 17.3; 17.4; 17.5 be rejected on the basis that the matters raised are ones that the subdivider / developer will need to address, rather than being AUP matters
 - 34.1 and 34.2 be accepted in part, to the extent that the matters raised are addressed by existing AUP policies that continue to apply to development in the PPC48 area.

549. Possible amendments are set out in Chapter 10 to this report.

9.15 Submissions on Notification Provisions

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter		
22.20	Auckland Council	Amend the IX.5 Notification rules (1) to (3) which require non-notification to apply the normal tests for notification under the relevant sections of the RMA.		
23.23	NZTA	Either delete notification provision IX.5(3); or amend IX.5(3) to ensure that Activity E11.4.1(A1) (new public or private roads) and infringements to standards IX6.2 and 6.3 (transport upgrades and trip generation limits) are subject to normal notification tests.		
27.9	Auckland Transport	Amend the IX.5 Notification rules (1) to (3) which require non-notification to require the normal tests for notification under the relevant sections of the RMA.		
32.4	Drury South Limited	Delete notification provision IX.5(3) so that an application for resource consent for a restricted discretionary activity listed in Table E11.4.1, Table E11.4.2 and Table 12.4.1 will be subject to the normal tests for notification under the RMA.		
32.5	Drury South Limited	Delete notification provision IX.5(4) so that an application for resource consent for a restricted discretionary activity listed in Table E11.6.2 and Table E12.6.2 will be subject to the normal tests for notification under the RMA.		

Discussion

- 550. Auckland Council and Auckland Transport are concerned that the activities referenced in IX.5 Notification rules (1) to (3), which propose non-notification of certain activities, may have significant adverse effects and it is more appropriate to rely on the standard notification provisions in the RMA. Drury South is concerned that earthworks (such as to modify floodplains) may affect them (being upstream of Drury Central).
- 551. The table below lists the 'non-notification' rules of IX.5 and my assessment of them.

Proposed Precinct non- notification	Analysis	Recommendation
New buildings and alterations and additions to buildings not otherwise provided for listed in Activity Table IX.4.1	The underlying BMC and BMU zonings do not exclude notification. I see not specific reason to exclude public or limited notification. There may be building design and public interface issues that warrant notification of adjacent owners and occupiers, for example	Apply normal notification tests of the RMA.
To infringe IX.6.5 Daylight and IX.6.6 Outdoor Living Space	(Note numbering is incorrect). I agree that these are 'internal amenity' matters and therefore infringement of these standards is unlikely to affect adjacent activities, or the wider environment	Exclude from notification requirements
Restricted discretionary activity listed in Table E11.4.1, Table E11.4.2 and Table 12.4.1*	E11 and E12 set out various activity classifications based on quantities of earthworks. Earthworks that exceed these standards may raise	Do not amend. Apply current AUP notification tests.
*Note, it is unclear whether this is reference to Table E12.4.1.	issues for adjacent activities, such as dust and truck movements for district consents and discharge issues for regional consents	

Infringe E11.6.2 General	E11 and E12 set out standards for	Do not amend.
Standards and E12.6.2 General	earthworks. The standards cover a	Apply current AUP
Standards	range of basic parameters, the	notification tests.
	infringement of which may generate	
	adverse environment effects	

Recommendations on Submissions

- 552. Based on the analysis outlined above I recommend that submissions:
 - 22.20 and 27.9 be accepted in part, to the extent that the proposed nonnotification for infringement of the proposed outdoor living and daylight standards remain.
 - 23.23; 32.4, and 32.5 be accepted and the notification rules be amended by removing the proposed exclusions.
- 553. Possible amendments are set out in Chapter 10 to this report.

9.16 **Submissions on the Proposed Precinct Plan**

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
9.1	Brookfield Road Limited	Amend "Indicative Collector Road" on figure 1 to ensure the site at 61 Brookfield Road has a block depth of approximately 40m to the west of the indicative road.
22.26	Auckland Council	Delete the indicative railway station shown on the precinct plan and make any other consequential changes to the precinct provisions.
23.3	NZTA	Ensure the plan change reflects the final location of the train station and achieves Objective 1 by providing a transit-orientated development that supports high density residential, employment-generating and retail activities close to rapid transit and prioritises public and active modes of transport to and within the centre.
23.6	NZTA	Delete 'Access A' from Precinct Plan 3. On Precinct Plan 2, replace 'Access A' between the two yellow lines with a dashed orange line. Amend Precinct Plan 2 Legend as follows: Potential connection to Drury West and possible Access A to State Highway 1. Re-orientate the collector road which is currently shown to extend from Access A from an eastern alignment to a southerly one (i.e. so that it turns south to sub-precinct B).
23.7	NZTA	Amend IX Precinct description as follows: The purpose of the Drury Centre Precinct is to provide for the development of a new, comprehensively planned and transit-orientated high-density centre at Drury that supports a quality compact urban form. • Sub-precinct B is zoned Business – Metropolitan Centre Zone and is intended to be the primary only location for large format retail, while also providing for other commercial and residential activities allowed in the zone. Development in this sub-precinct should ensure that a quality street
24.4	KiwiRail Holdings Limited	environment is achieved; Amend IX.1 Precinct Description as follows: "precinct also provides for the highest employment generating activities and retail and residential densities around in the vicinity of the future Drury Central train station"

24.11	KiwiRail Holdings Limited	Remove the land within Sub-precinct D from the listed plans. In addition, remove the reference to Sub-precinct D from the legend in Precinct Plan 1.
24.12	KiwiRail Holdings Limited	Move the 'future train station' and 'Station Plaza' symbols to the preferred location further north. In addition, annotate Precinct Plan 2 to make it clear that the 'future train station' and 'Station Plaza' are shown as indicative only. For ease of readership it would be preferable to have two legends, one for indicative features and one for confirmed features on Precinct Plan 2. Remove the land within Sub-Precinct D from the plan change area.
32.8	Drury South Limited	Assess the effects of the connections identified in Precinct Plan 2 - Spatial Features in the ITA and / or though the PC48 provisions, and include appropriate upgrades to mitigate any effects arising.

Discussion

- 554. These submissions generally deal with the Precinct Plan and its depiction of key features like the proposed railway station and collector type roads. In relation to open space matters covered in section 9.12, I have recommended that indicative open space areas be identified.
- 555. Brookfield Road Limited [9.1] seeks that feasible development parcels are retained on either side of the proposed road on the submitter's site. While supporting the plan change, they wish to ensure the site at 61 Brookfield Road has a block depth of approximately 40m to the west of the indicative road. I note that the alignment of the road will be subject to detailed design, and where necessary negotiation between the landowner and developers. As a general principle I would agree that new roads should align with property boundaries where circumstances allow for this, however there is no need for this principle to be included in a policy or assessment matter.
- 556. The identification of an indicative train station location on the Precinct Plan is a significant issue, as a number of structural components flow from its location, including land uses, densities and access arrangements. As notified the Precinct Plan shows a train station adjacent to Watercare's facility, towards the western side of the precinct. KiwiRail is concerned that the precinct plan does not recognise that the preferred location of the station is planned to be further to the north than that shown on Precinct Plan 2. As a result, retail and residential development may need to be adjusted. KiwiRail states that the location and/or design of the train station should be determined by the designation process to be undertaken by KiwiRail. This is a point supported by Auckland Council and Waka Kotahi.
- 557. I agree with the submitters that the station location should be amended. SGA has published a preferred station location somewhat further to the north than that shown by the notified Precinct Plan (see Figure 12). Associated with the station is the proposal for a 'station plaza'. The notified plan change describes that a public plaza is provided for that will integrate the train station with the centre and will provide a high quality pedestrian experience. With the shift of the train station, the form of this plaza and who will deliver it will need to be determined.

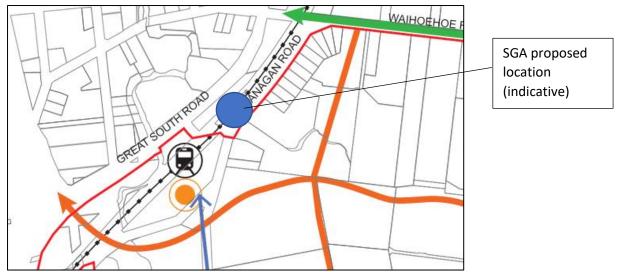


Figure 12: Future Train Station

- 558. Also related to the likely location of the rail station is the purpose of sub-precinct D. This sub-precinct is described in the notified plan change as being zoned BMC, providing for the establishment of the Drury Central Train Station and associated park-and-ride and transport interchange. The purpose of this sub-precinct is unclear, if the station moves north. I would recommend that the sub-precinct be deleted, but the land south of the rail line retain the proposed BMC zoning. As is discussed in section 9.4, the Precinct boundary should follow the rail corridor. There is no need for the precinct to extend over already zoned land on the north side of the rail corridor.
- 559. Waka Kotahi **[23.6]** notes that the optimal access for the town centre in terms of creating a high-quality TOD as proposed in the plan change is not clear in the submitted assessments. "Access A" and the associated east-west collector which would cut through the town centre is not supported in its current alignment. Modifications to (deletion of) references to Access A are also requested consequential to other parts of the submission.
- 560. I support Waka Kotahi's concern over the Precinct Plan showing a possible 'direct' connection to the southern Motorway. This is from an urban planning point of view. A direct connection, and the associated required infrastructure, traffic volumes and traffic speeds would be incompatible with a mainstreet type environment envisaged for the centre. I recommend deletion of the indicative connection.

Recommendations on Submissions

- 561. Based on the analysis outlined above I recommend that submissions:
 - 9.1 be accepted in part, to the extent that the precinct provisions identify that the road alignments shown on the plans are indicative.
 - 22.26; 23.2 and 24.12 be accepted in part to the extent that the indicative railway station location is not deleted but amended.
 - 23.6 be accepted and Access A be deleted.
 - 24.11 be accepted and sub-precinct D be removed.
- 562. Possible amendments are set out in Chapter 10 to this report.

9.17 Submissions on Reverse Sensitivity

		on Reverse Sensitivity
Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
24.1	KiwiRail	Amend IX.1 Precinct Description to add:
	Holdings	The North Island Main Trunk railway line is protected from reverse
	Limited	sensitivity effects by ensuring that new buildings and activities will be
		designed and located to manage any adverse effects
24.2	KiwiRail	Add new Objective IX.2(8) as follows:
	Holdings	(8) The NIMT is protected from adverse effects, including reverse
	Limited	sensitivity effects, of subdivision, use and development by,
		1. setbacks within which incompatible activities will be managed;
		2. standards designed to protect noise sensitive receiver's health and
		amenity.
24.3	KiwiRail	Add new policy IX.3 as follows:
	Holdings	(XX) Adverse effects on the operation of the regionally significant NIMT
	Limited	and on the health and safety of adjacent development and noise
		sensitive receivers are managed through setbacks and performance
		standards.
24.6	KiwiRail	Insert new activity (A8) to Activity table IX.4.1 as set out below and
	Holdings	renumber existing (A8) to (A20) accordingly.
	Limited	(A8) Development that does not comply with IX6.9 Setback from NIMT
		and IX6.10 Noise Sensitive Activities within 100m of a Rail Network
		Boundary - RD
24.7	KiwiRail	Add to IX.6 Standards a new standard IX.6.9 as follows:
	Holdings	IX.6.9 Setback from NIMT
	Limited	Buildings must be setback at least 5 metres from any boundary which
		adjoins the NIMT railway line.
24.8	KiwiRail	Add to IX.6 Standards a new standard IX.6.10 to manage potential
	Holdings	human health effects from rail noise and vibration where buildings
	Limited	containing noise sensitive activities are located adjacent to (within 100m
		of) the railway corridor. See submission for full proposed wording.
24.9	KiwiRail	Insert new matters of discretion in IX.8.1 as follows:
	Holdings	(12) Setback from NIMT and Noise Sensitive Activities within 100m of a
	Limited	Rail Network Boundary
		Effects from non-compliance with Standards IX.6.9 and IX.6.10
24.10	KiwiRail	Insert new assessment criteria in IX.8.2 as follows:
	Holdings	(11) Setback from NIMT
	Limited	(a) The size, nature and location of the buildings on the site.
		(b) The extent to which the safety and efficiency of railway operations
		will be adversely affected.
		(c) The outcome of any consultation with KiwiRail.
		(d) Any characteristics of the proposed use that will make compliance
		unnecessary.
		(40) N. C. W. A. W. W. W. A. C. D. W. L.
		(12) Noise Sensitive Activities within 100m of a Rail Network
		Boundary
		(a) Whether the activity sensitive to noise could be located further from
		the railway corridor
		(b) The extent to which the noise and vibration criteria are achieved and
		the effects of any non-compliance
		(c) The character of and degree of amenity provided by the existing
		environment and proposed activity.
		(d) The reverse sensitivity effects on the railway corridor and the extent
		to which mitigation measures can enable their ongoing operation,
	1	maintenance and upgrade.

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
27.64	Auckland Transport	(e) Special topographical, building features or ground conditions which will mitigate vibration impacts; (f) The outcome of any consultation with KiwiRail. Add a new policy as follows: Ensure that new activities sensitive to noise adjacent to arterial roads are located, designed and constructed to mitigate adverse effects of road noise on occupants.
27.65	Auckland Transport	Add a new standard to IX.6 to require that the assessed incident noise level to the façade of any building facing an arterial road that accommodates a noise-sensitive space is limited to a given level (Auckland Transport to confirm appropriate level). As a consequential amendment, add a new rule to Activity table IX4.1 as follows: (X) Development that does not comply with IX.6.X Noise Mitigation - RD
27.66	Auckland Transport	Add a new assessment criterion as follows: The extent to which noise sensitive activities in proximity to arterial roads are managed.

Discussion

- 563. KiwiRail's submission raises concerns over buildings being built close to the NIMT and potential impacts of noise and vibration from the rail line on nearby noise sensitive activities. Auckland Transport raises concerns over activities close to arterial roads.
- 564. KiwiRail's submission raises relevant issues over the management of the NIMT line. This line is designated in the AUP, but there are no specific corridor protection controls (such as for the National Grid). KiwiRail has sought a 5m set back of buildings and controls over noise sensitive activities within 100m of the rail corridor.
- 565. While the issue raised applies across the whole of the Auckland Region and would benefit from a region-wide approach, it is appropriate to introduce set back and noise insulation controls as rezoning occurs.
- 566. The submission notes that providing a physical setback for buildings adjoining the railway corridor boundary is a safety control which manages the interface between operations within the railway corridor and activities near the railway corridor i.e. it ensures that site occupants are able to carry out normal residential or business activities, including building maintenance with a reduced risk of coming into contact with the operational railway. In terms of building setbacks, in the case of PPC48, currently Flanagan Road separates some of the rail corridor from developable land, but it is likely that the alignment of Flanagan Road will be amended, and it is possible that development (other than rail related activities like station buildings) could be built close to the rail line on the land to the south-west.
- 567. I recommend that, as suggested, a new standard be introduced as follows, but amended to allow for rail related buildings:

IX.6.X Setback from NIMT: Buildings (other than those associated with rail operations) must be setback at least 5 metres from any boundary which adjoins the NIMT railway line.

- 568. As a standard is introduced, then matters of discretion for when the standard is exceeded need to be stated. I would recommend the following:
 - IX Infringement to standard IX.6.X NIMT railway line building set back: IX.8.1 Effects on the safe operation of the NIMT.
- 569. In relation to noise and vibration, KiwiRail proposes a series of standards that would apply to noise sensitive activities located within 100m of the rail line. These standards would apply to the following activities:
 - Activities sensitive to noise: Any dwelling, visitor accommodation, boarding house, marae, papakāinga, integrated residential development, retirement village, supported residential care, care centres, lecture theatres in tertiary education facilities, classrooms in education facilities and healthcare facilities with an overnight stay facility.
- 570. KiwiRail seeks that buildings accommodating these activities must be designed to achieve indoor noise levels not exceeding a range of set noise levels, depending upon the activity. In the alternative, if located more than 50m from the rail line, then they seek that line of sight to a point 3.8m above the railway tracks is blocked by a noise barrier.
- 571. KiwiRail's concerns over noise and vibration are understandable, but the environment within the proposed precinct will be an urban, built up environment, not a suburban residential, environment. There will be a variety of noise sources. The built form of taller buildings will also affect the extent to which noise is received in different areas. Whether all buildings within 100m of the rail corridor containing noise sensitive activities need to be insulated when large buildings up to 72m in height may be possible, is unclear.
- 572. The BMU and BMC zonings proposed do not contain any standards relating to the internal noise environment of noise sensitive activities; rather E25.6.10. manages noise levels for noise sensitive spaces in the BMC and BMU zones. The standards set out in E25.6.10 are very similar to those advanced by KiwiRail. As such, given the proposed zoning and current AUP rules, I see no need to add any specific noise standards to PPC48. However, assessment matters may need to be added to reflect rail-specific issues, should the standards be sought to be modified through consent processes.
- 573. In a similar vein, Auckland Transport seeks to ensure that noise-sensitive activities in proximity to arterial roads are controlled to address potential health and reverse sensitivity effects. The zoning of the land in the Precinct ensures that this will occur. In the case of PPC48 and the zoning proposed, I consider that E25.6.10 addresses the concerns over road noise.
- 574. KiwiRail also seeks a standard relating to vibration. In this case the standard would apply to noise sensitive activities within 60m of the boundary of the railway network. Two standards are set out, one a performance standard, the other a design standard for single level dwellings. My understanding is that Chapter E25 of the AUP controls vibration during construction, but not vibration from permanent infrastructure like rail lines. The following performance standard is proposed:

Any new buildings or alterations to existing buildings containing an activity sensitive to noise closer than 60m from the boundary of a railway network is designed, constructed and maintained to achieve rail vibration levels not exceeding 0.3mm/s.

- 575. As a method of compliance with the standard, KiwiRail suggests that a report by a suitable qualified expert would have to be provided to the Council demonstrating achievement of the standard prior to a building construction.
- 576. A range of assessment matters are set out for assessment of consents that seek to modify the setback, noise and vibration standards. As noted, the AUP already controls internal noise environments in the BMU and BMC zones. Matters of discretion for the standard AUP controls in E25 cover (a) reverse sensitivity effects; and (b) alternative temperature control solutions. The following assessment matter is stated:
 - (3) for reverse sensitivity effects:
 - (a) whether the activity or infringement proposed will unduly constrain the operation of existing activities (excluding construction or demolition activities).
- 577. I would recommend the following matters for discretion be added, in addition to the matters set out in E25:

Noise sensitive activities:

<u>Effects on the operation of the NIMT and arterial roads and the amenity of nearby noise sensitive activities.</u>

Setback from NIMT:

- (a) The size, nature and location of the buildings on the site.
- (b) The extent to which the safety and efficiency of railway operations will be adversely affected.
- 578. Assessment matters would then cover the following:
 - (12) Noise Sensitive Activities within 100m of a Rail Network Boundary and Buildings within 5m of the rail corridor:
 - (a) The character of and degree of amenity provided by the existing environment and proposed activity.
 - (b) The reverse sensitivity effects on the railway corridor and the extent to which mitigation measures will not constrain their ongoing operation, maintenance and upgrade.
 - (c) Topographical, building features or ground conditions which will mitigate vibration impacts.
- 579. In relation to road noise, Auckland Transport suggests the following additional assessment matter for noise sensitive activities:
 - The extent to which noise sensitive activities in proximity to arterial roads are managed.
- 580. To support the above, I agree with adding a new policy IX.3 as follows:

Potential adverse effects on the operation of the regionally significant NIMT rail line and regional road network and on the health and safety of nearby noise sensitive receivers are managed through setbacks and building performance standards.

Recommendations on Submissions

- 581. Based on the analysis outlined above I recommend that submissions:
 - 24.1; 24.2; 24.3; 24.6; 24.7; 24.8; 24.9; 24.10; 27.64; 27.65; and 27.66 be accepted in part, to the extent that the precinct introduce setbacks from the NIMT and vibration standards, while continuing to rely upon the rules relating to noise sensitive activities in Business zones (as contained in E25), with additional assessment matters to address potential impacts on the NIMT and arterials if noise insulation is not provided.
- 582. Possible amendments are set out in Section 10 of this report.

9.18 Submissions on Stormwater and Flooding Effects

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
15.4	Kiwi Property	Add new policy 21 to clarify stormwater management approach as follows: Stormwater Management
		Policy IX.3(21): Require subdivision and development to be consistent
		with any approved network discharge consent and supporting stormwater
		management plan including the application of water sensitive design to
		achieve water quality and hydrology mitigation.
15.5	Kiwi Property	Amend Standard IX6.6 as follows:
		IX6.6 Stormwater Quality
		(1) The activity rules and standards in E9 apply to development in the Drury Centre precinct
		as if the reference to 'high use roads', was a reference to 'all roads'.
		(2) For all other impervious surfaces inert building materials should be
		<u>used.</u>
21.7	Ngāti Te Ata	Apply a minimum of a two-treatment train approach for all stormwater prior
	Waiohua	to discharge to a waterway
21.8	Ngāti Te Ata	Require roof capture for reuse and groundwater recharge
	Waiohua	
22.3	Auckland	Amend the precinct to include additional policies and rules to manage the
	Council	effects of stormwater as described in an approved SMP.
		This includes:
		New policy: Require subdivision and development to be assessed for
		consistency with any approved network discharge consent and supporting
		stormwater management plan including the application of water sensitive
		design to achieve water quality and hydrology mitigation.
		Additional matters of discretion/assessmentAny other rules necessary
22.4	Auckland	Retain application of SMAF 1 to the plan change area.
	Council	
22.5	Auckland	Add a new policy to the following effect:
	Council	Ensure that all impervious services are treated through a treatment train
		approach to enhance water quality and protect the health of stream and
		marine environments.
22.6	Auckland	Add a new policy to the following effect:
	Council	Provide sufficient floodplain storage within the Drury Centre precinct to
		avoid increasing flood risk upstream and downstream and manage
		increased flood risk within the precinct unless downstream infrastructure
		capacity means this is not required. This is subject to the upgrade of the
		downstream culvert upgrade.
		And insert rules to give effect to this.

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
22.8	Auckland Council	Retain and amend standard IX6.6 (1) Stormwater Quality but amend it to read as follows: "The activity rules and standards in E9 apply to development in the Drury Centre precinct as if the reference to 'high use roads', was were a reference to 'all existing, new, upgraded or redeveloped roads accessways and carparks" or other amendments that would achieve the same environmental outcome. Insert new matters of control and discretion, in addition to those in E9, to the effect of: • How the location and design of stormwater treatment assets reduces their operating costs. • The consolidation and community scale of stormwater treatment assets. • The location of stormwater treatment assets where they will be most effective in reducing contaminants.
22.9	Auckland Council	Include a new standard to the effect that: Buildings cannot have exterior materials with exposed surfaces that are made from contaminants of concern to water quality including zinc, copper and lead.
22.15	Auckland Council	Retain policy IX.3(18)
32.1	Drury South Limited	Insert new policies to IX.3 Policies (Infrastructure and Staging) to: (a) Make adequate provision within the PC48 area to detain the 1% AEP event without adverse effects on the extent of flooding of upstream and downstream areas; and (b) Provide sufficient floodplain storage within the PC48 area to avoid increasing flood risk upstream and downstream, and manage increased flood risk within the precinct, to habitable rooms for all flood events.
32.3	Drury South Limited	Amend Table IX.4.1 by introducing two new discretionary activities: (a) Development that does not comply with Standard IX.6.6 (Stormwater Quality and Flooding); and (b) Subdivision that does not comply with Standard IX.6.6 (Stormwater Quality and Flooding).
32.9	Drury South Limited	Amend Standard IX6.6 by adding the words "and Flooding" to the heading and adding the following clause (2): (2) any stormwater management plan or earthworks proposed as part of subdivision or development must: (i) comply with any approved discharge consent; (ii) be effective in avoiding, remedying or mitigating the potential adverse effects of stormwater discharge on water quality and flood hazards. In the case of stormwater management facilities within private land this assessment will include how the operation and maintenance of such facilities is to be secured by way of appropriate covenants or consent notices; (iii) be effective in containing all the natural and diverted streams and their margins, wetlands, and other off-site stormwater management devices; (iv) provide for overland flowpaths; (v) ensure that subdivision and development does not result in increased flood risk to land for all flood events from the 50% and up to 1% AEP flood event downstream and upstream of the precinct.
35.7	Ngāti Tamaoho	Apply a minimum of a two-treatment train approach for all stormwater prior to discharge to a waterway

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
35.8	Ngāti Tamaoho	Require roof capture for reuse and groundwater recharge

Discussion

- 583. Ngāti Te Ata Waiohua **[21.7]** and Ngāti Tamaoho **[35.8]** are concerned that the PPC48 request does not give effect to Te Mana o Te Wai and risks damaging mauri of wai. Te Mana o Te Wai is given recognition in the NPS-FM. In particular Ngāti Te Ata Waiohua and Ngāti Tamaoho seek:
 - A minimum of a two-treatment train approach for all stormwater prior to discharge to a waterway
 - Roof capture is required for reuse and groundwater recharge.
- 584. Treatment train approaches and reuse of roof water are also two matters that are addressed in Auckland Council's submission. The submission notes that the plan change should protect the receiving environment of the Te-Manukanuka-O-Hoturoa (Manukau Harbour). Stormwater Management Plans (SMPs) which sit outside the AUP are a key tool to achieve this outcome. SMPs identify effects of stormwater and how effects should be managed both to achieve the RPS, NPS-FM and regional plan and to be in accordance with the region-wide Network Discharge Consent (NDC) granted by the Environment Court on 30 October 2019. Without an SMP approved by the Network Utility Operator (in this case the Council) there is uncertainty if the SMP adequately manages effects and if there are sufficient provisions to enact the direction that the SMP would provide.
- 585. Implementation of an SMP raises a number of co-ordination issues with the AUP:
 - Proposed policy IX.3(18) recognises that urban development fundamentally alters stream health including significant changes to hydrology and interventions other than hydrology mitigation may be needed to manage effects and protect the functioning of the stream.
 - The proposed SMAF1 identification should be retained. This overlay has both a
 retention and detention volume and the combination of these is intended to reduce
 erosive flows in streams, maintain stream baseflow and support the recharge of
 aquifers. It is the default minimum required under the region wide NDC, and based on
 current knowledge is the most practicable option.
 - It is important to focus on improving biodiversity as distinct from just planting. It is also important to provide for ecological corridors. A new policy and amendments to proposed policy IX.3(20) are proposed to address these matters (see submissions on ecology in section 9.5).
 - Policy and matters of discretion/assessment criteria are required to ensure that consenting of subdivision and land uses is consistent with the SMP in its final adopted form which may be included in the council's NDC.
 - Proposed standard IX6.6 (1) Stormwater Quality is supported in principle but cross references to the activity rules and standards in E9, including the parent rule E9.6.1.4 involves additional, and in some cases, confusing exemptions. These undermine its effectiveness because many roads, private roads and carparks may not be required to

have stormwater treatment. Consequently, they are not sufficient to protect the upper Te-Manukanuka-O-Hoturoa (Manukau Harbour) from contaminant accumulation from the combined contaminant discharges from all the new, existing or upgraded roads, access ways and parking areas.

- 586. Kiwi Property's **[15.4 and 15.5]** submission seeks to clarify the approach to stormwater management within the plan change area, in accordance with the SMP prepared to be adopted under the NDC, including recognising that a higher standard of stormwater treatment for roads applies and an additional requirement for inert building materials also applies.
- 587. I generally agree that the stormwater management provisions could be strengthened, given the values of the receiving environment, and that amendments should be more explicit, as proposed by new policy 21 submitted by Kiwi Properties, but further amended to address key issues raised. I recommend the following:

Require subdivision and development to be assessed for consistency with any approved network discharge consent and supporting stormwater management plan adopted by Council under that discharge consent including:

- application of water sensitive design to achieve water quality and hydrology mitigation.
- <u>ensuring that all impervious services are treated through a treatment train approach</u> to enhance water quality and protect the health of stream and marine environments.
- seeking integrated improvements to water quality, habitat and biodiversity, including by providing planting on the riparian margins of permanent and intermittent streams
- <u>ensuring that development is co-ordinated with upgrades of off-site stormwater infrastructure.</u>
- 588. In terms of standards, I agree that the following amendments should be made to proposed IX6.6 Stormwater Quality:

The activity rules and standards in E9 apply to development in the Drury Centre precinct as if the reference to 'high use roads', were a reference to 'all existing, new, upgraded or redeveloped roads accessways and carparks'. In addition:

- <u>Buildings cannot have exterior materials with exposed surfaces made from zinc, copper and lead.</u>
- Development of surface car parking areas that are not defined as high contaminant generating car parking areas is a permitted activity provided water quality treatment of run off from impervious surfaces is installed, in accordance with an approved Stormwater Management Plan.
- 589. I also agree with adding associated new matters of control and discretion, such as:
 - How the location and design of stormwater treatment assets reduces their operating costs.
 - The consolidation and community scale of stormwater treatment assets.
 - <u>The location of stormwater treatment assets where they will be most effective in reducing contaminants.</u>
- 590. Auckland Council wishes to ensure that flood attenuation is provided until such time that stormwater infrastructure is upgraded to provide sufficient flood conveyance capacity and there are no adverse downstream effects. Drury South Limited raises concerns about a lack of any policies addressing the issue of avoiding earthworks and development that will exacerbate the known risk of upstream and downstream flooding outside the PPC48 area. This is contrasted with the Policies I410.3 (15) and (16) in the

adjacent Drury South Industrial Precinct which address the need to detain the 1% AEP event without adverse effects on the extent of flooding of upstream and downstream areas and provide sufficient floodplain storage to avoid increasing flood risk upstream and downstream.

- 591. In my opinion, the precinct provisions managing flood risks could be strengthened. While Chapter E36 deals with flooding and natural hazards (in conjunction with specific policies and standards in subdivision and zone-based chapters), there are sufficiently high local risks for specific measures to be identified.
- 592. To this end, I agree with adding a new policy as suggested by Drury South Limited and Auckland Council, but modified, as follows:

Provide sufficient floodplain storage, including attenuation storage, within the Drury Centre to avoid increasing flood risk upstream (including the Drury South area) and downstream (including the Drury industrial area) from a 1% AEP event, and minimise increased flood risk within the precinct, including through upgrades to downstream infrastructure capacity.

593. I do not agree with submissions from Drury South Ltd [32.7,32.8, 32.9] that seek to add to Standard IX6.6 by adding the words 'flooding', and adding a range of associated matters. In my assessment, the matters listed are covered in the relevant chapters of the AUP, and as strengthened by the proposed policy set out in the above paragraph.

Recommendations on Submissions

- 594. Based on the analysis outlined above I recommend that submissions:
 - 15.4; 15.5; 22.3; 22.5 and 22.6 be accepted in part to the extent that amended wording is recommended relating to flood hazards. The amendments will better manage upstream and downstream flood risks.
 - 21.7; 21.8; 22.8; 22.9; 35.7 and 35.8 be accepted in part, to the extent that
 these measures are likely to be required through the approved SMP adopted
 into the NDC, and reflected in amended policy relating to water quality. This
 will help implement the NPS-FM.
 - 22.4 (SMAF1 overlay is retained) and 22.15 be accepted
 - 32.1; 32.3 and 32.9 be accepted in part to the extent that the matters raised are addressed by a new policy and associated consent processing, rather than being able to be clearly stated as measurable standards.
- 595. Possible amendments are set out in Section 10 of this report.

9.19 Submissions on Zoning

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
22.24	Auckland	Extend the Business – Metropolitan Centre Zoning west along Flanagan
	Council	Road as far as Waihoehoe Road.
23.4	NZTA	Amend the Precinct plans and zoning by extending the Metropolitan Centre zoning and sub-precinct A to incorporate sub-precinct E; make consequential amendments to Precinct Plan 2 in line with the NPSUD; and delete provisions relating to sub-precinct E.

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
23.5	NZTA	Amend the Precinct plans by reducing the spatial extent of sub-precinct B by 50%. The Sub-precinct B boundary should be moved in a southerly direction.
27.22	Auckland Transport	Extend the Business – Metropolitan Centre Zoning west along Flanagan Road.
33.1	Kāinga Ora	Approve the plan change, subject to the inclusion of spatial zoning (i.e. Special Purpose Zone) and corresponding precinct provisions to enable the provision of identified future tertiary and hospital activities within the precinct provisions that are necessary to support the intensity of urbanisation sought

Discussion

- 596. These submissions relate to the likely future position of the Drury Central train station, and ensuring that the land around the station is enabled for substantial development.
- 597. Auckland Council's **[22.24]** submission notes that extending the BMC zone north to Waihoehoe Road provides for the centre to be co-located with the full extent of the train station, thus giving effect to the RPS, the NPS-UD and the Drury-Opāheke Structure Plan. Waka Kotahi as a further submitter supports this, noting that this will allow increased development intensity close to the proposed metropolitan centre zone and rail station. Auckland Transport express concerns as to whether there are any implications to transport assessments from additional development that may be enabled.
- 598. By way of background, it is likely that the Drury Central train station will be positioned to the north of the location identified in the proposed precinct plan as notified. This means that the station will sit opposite land to be zoned 'mixed use', and a height control variation of 40.5 metres (as proposed in submissions, the notified height limit was 32.5 metres). While a mixed use zoning is not incompatible with a transit-orientated form of development, it is nevertheless a potentially inefficient use of land close to station. The BMU zone does not set out an appropriate management for taller buildings, for example. It also limits retail uses.
- 599. An expanded BMC zoning may imply a greater risk that the new centre will harm the social and economic wellbeing of Papakura and Pukekohe. A larger centre may also imply a potential dissipation of 'retail' energy across a large area. Equally, metropolitan centres enable and provide for a wide range of retail, employment, social and community activities.
- 600. Council's expert reviewer (Tim Heath of Property Economics) supports expansion of the Metropolitan Centre so as to provide long term capacity, but raises the question of whether retail development needs to be staged so as to not create adverse (non-trade) effects on other centres that is effects on social and economic wellbeing outcomes associated with these centres (such as Pukekohe).
- 601. I agree that the metropolitan centre zoning should be extended to the north-east along Flanagan Road. A staging mechanism should be introduced to manage the overall size of the centre in the first years of its establishment. The staging standard should be included, even if the BMC zoning as notified remains without change.
- 602. I do not have concerns over a possible dissipation of retail 'energy' across a larger centre. Over time, as the centre builds up, then a number of retail sub nodes may

- establish. The proposed mainstreet will be an important node, but the NPS-UD would support a more flexible approach to retail capacity.
- 603. Auckland Transport's concern over the implications of additional development should sub-precinct B be rezoned as BMC can be addressed through the standards that I have recommended, with their focus on easy and convenient access to the train station being in place before development can be occupied, and clear requirements to upgrade surrounding roads.
- 604. Submissions also question the purpose and size of sub-precinct B (which is described as providing for large format retail), and the role/benefit of such a sub zone within a Metropolitan Centre and given its proximity to the Drury Station and compatibility with a transit-orientated form of development. In my view, sub-precinct B is not well justified. The type of development proposed (low scale, large format boxes) is not compatible with the outcomes sought by the BMC zoning. This point is highlighted to an extent by the requestor's proposed Policy 12, that refers to recognition of the functional requirements of large format retail.
- 605. In my opinion either the land in sub-precinct B should be subject to the full provisions of the BMC zone, or a zoning more conducive to the anticipated built form (and density) outcome should be applied, such as the BMU zone. I would support a BMU zoning, and to this end, I would support amendment to the BMU zone provisions to enable large format retail (i.e. retail over 450m² in floor area) as a permitted activity.
- 606. I do not agree with Kāinga Ora's submission seeking the inclusion of a Special Purpose Zone and corresponding precinct provisions to enable the provision of possible future tertiary and hospital activities within the precinct. While the AUP has a range of Special Purpose zones, these zones are applied to existing activities, enabling their on-going operation and expansion in areas where surrounding zonings may otherwise constrain them. As there are no firm proposals for tertiary and medical facilities, then it is not possible to zone specific areas for these activities. I support inclusion of educational and medical activities in the centre, and these activities will be able to establish in the BMU and BMC zones proposed.

Recommendations on Submissions

- 607. Based on the analysis outlined above I recommend that submissions:
 - 22.24 and 27.22 be accepted as they refer to extending the BMC zone along Flanagan Road. This zone change better implements NPS-UD requirements relating to appropriate density around train stations.
 - 23.4 be accepted in part, to the extent that sub-precinct E is zoned BMC but kept as a separate sub-precinct. Sub precinct E should have a lower height limit than sub-precinct A.
 - 23.5 be accepted in part to the extent that sub-precinct B is rezoned BMU, a zone more compatible with the proposed environment (large format retail).
 - 33.1 be rejected on the basis that there is no analysis or justification to support application of a Special Purpose zone.

608. Possible amendments are set out in Section 10 of this report.

9.20 Submissions on Other / General Matters

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
21.12	Ngāti Te Ata Waiohua	Reflect sustainable development in the design and outcomes
22.21	Auckland Council	Ensure that the consent categories in IX4.1 Activity table, matters of discretion in IX.8.1, and assessment criteria in IX.8.2 are the most appropriate to give effect to: matters raised in this submission, the objectives and policies of the precinct, the RPS and any national policy statement.
23.7	NZTA	Amend IX Precinct description as follows: The purpose of the Drury Centre Precinct is to provide for the development of a new, comprehensively planned and transit-orientated high-density centre at Drury that supports a quality compact urban form. • Sub-precinct B is zoned Business – Metropolitan Centre Zone and is intended to be the only location for large format retail, while also providing for other commercial and residential activities allowed in the zone. Development in this sub-precinct should ensure that a quality street environment is achieved;
24.4	KiwiRail	Amend IX.1 Precinct Description as follows: "precinct also provides for the highest employment generating activities and retail and residential densities in the vicinity of the future Drury Central train station"
26.2	Karaka and Drury Limited	Do not amend PPC48 in any way that would impact on, impede or preclude: (i) The quality of planning outcomes that the submitter seeks to achieve for Drury West; or (ii) The timing in which those outcomes are delivered.
27.63	Auckland Transport	Make any necessary amendments to PPC48 as required to achieve a consistency in approach, including in relation to objectives, policies, rules, methods and maps, across the private plan changes within the Drury growth area
33.2	Kāinga Ora	Retain the Drury Centre Precinct description (with any consequential amendments to reflect Kāinga Ora's submission).
35.11	Ngāti Tamaoho	Reflect sustainable development in the design and outcomes

- 609. As covered in the review of stormwater, open space and urban design effects and the discussion of associated submissions, aspects of sustainable development (as sought by Ngāti Te Ata Waiohua [21.12] and Ngāti Tamaoho [35.11]) are incorporated into the proposed Precinct.
- 610. I agree with Auckland Transport [27.63] that the Precinct provisions should be amended and based on the discussion of urban form and transport effects, and as outlined in previous sections, I would support stronger provisions around transit-orientated development. In my view, this would bring the Precinct more in line with the NPS-UD. As a result, I would suggest the following replacement to the sixth paragraph of the proposed Precinct:

The precinct includes provisions to ensure that the development of land for business and housing is coordinated with the provision of public transport, including access to

the Drury Central rain station by way of walking and cycling, and provision of a safe surrounding environment for station users.

611. As for the submission by Karaka and Drury Limited, PPC48 and the proposed precinct provisions cannot control the timing of the development of Drury West.

Recommendations on Submissions

- 612. Based on the analysis outlined above I recommend that submissions:
 - 21.12; 22.21 and 35.11 be accepted in part, to the extent that the plan change request and the AUP enable some aspects of sustainable development
 - 23.7; 24.4; 27.63 and 33.2 be accepted in part, to the extent of minor modifications to the proposed precinct description
 - 26.2 be rejected on the basis that the proposed precinct provisions cannot control the timing of the development of Drury West.
- 613. Possible amendments are set out in Section 10 of this report.

9.21 Submissions on Timing and Funding Issues

Sub.	Name of	Summary of the Relief Sought by the Submitter
No.	Submitter	
2.1	Doug Signal	Reject the plan change on the basis that all roads and intersections in the area need to be upgraded before zoning is granted, otherwise public and local residents would be impacted with years of traffic problems.
19.1	Lomai Properties Limited	Decline PPC48, unless the matters relating to alternative staging of development, provision of all required infrastructure and traffic are adequately resolved.
22.1	Auckland Council	Ensure that the council's concerns about infrastructure: funding deficit, timing and location uncertainty are resolved by the following or other means: a. Evidence is presented at the hearing that a mechanism has been identified with the agreement of the council that unfunded infrastructure (as of October 2020) will be funded. b. Evidence is presented at the hearing that parts of the plan change area are not constrained by infrastructure funding, timing or location uncertainty and can proceed without significant adverse effects. c. Infrastructure development threshold or staging rules can be devised that are enforceable and effective, and supported by robust objective and policy provisions. This could for example include: • Threshold rules are not used for infrastructure works to be supplied by third party, e.g. Auckland Transport or NZTA, if these agencies do not have funds allocated for the works. • Threshold rules are not used for infrastructure works which are scheduled beyond the lifetime of the plan (2026). • Threshold rules are not used for works to be funded privately but there is no funding agreement in place. • Threshold rules do not use gross floor area as a metric (the council may not be able to track this with current data systems). • Threshold rules are not used in circumstances where the extent and location of works have not been determined yet. • Use of prohibited activity status for infringement could be considered. d. Notices of requirement have been lodged for the relevant infrastructure by the time of the hearing.

Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
		Threshold rules are not used for works which would require a funding contribution from multiple landowners or developers and there is no agreement to apportion costs and benefits in place.
22.34	Auckland Council	Decline PC 48 in its entirety until there is a fully funded and appropriately staged solution for the integration of land use, infrastructure and development for the Precinct and Sub Region
23.1	NZTA	Provide information and suitable provisions through out the whole of the plan change to resolve the transport infrastructure issue
23.18	NZTA	Retain IX.3 Policy 15 as notified.
23.19	NZTA	Amend IX.3 Policy 17 as follows: (17) Provide for the staging of pedestrian and cycling connections to the Drury Central train station to encourage the use of public and active modes of transport at the same time as land use development
23.21	NZTA	Amend and/or delete Activities IX.4.1 (A5), (A6), (A8) and (A9) in a manner which responds to Waka Kotahi's submission in its entirety.
23.25	NZTA	Retain Standard IX.6.2(2) Staging of Development with Transport Upgrades as notified.
23.26	NZTA	Delete the italicised note following IX.6.2 (3) Staging of Development with Transport Upgrades
23.27	NZTA	Delete Standard IX.6.2(3) Staging of Development with Transport Upgrades and consequentially delete Table IX6.2.2.
23.28	NZTA	Amend Table IX.6.2.1 Threshold for Development with 'Access A' not constructed to provide more specificity as to the details of works required in the right hand column by including upgrade details listed in Table 8.1 of the Integrated Transport Assessment supporting the proposal, column headed Revised (2020) Modelling – Infrastructure Upgrades Required.
23.29	NZTA	Amend Table IX.6.2.2 Threshold for Development with 'Access A' constructed to provide more specificity as to the details of works required by including upgrade details listed in Table 8.1 of the Integrated Transport Assessment supporting the proposal, column headed Revised (2020) Modelling – Infrastructure Upgrades Required.
23.30	NZTA	Delete IX.6.3 Trip Generation Limit including Tables IX.6.3.1 and IX.6.3.2, and replace with provisions which provide for operational requirements and more specific transport network responses. Potential wording is set out below, and could include a new permitted activity standard with non-compliance being a restricted discretionary activity (consequential changes to Activity Table IX.4 would be required). Restricted discretionary activity assessment criteria/matters of discretion could include transport network improvements. An alternative compliance pathway would be for an applicant to propose and undertake transport network improvements to maintain LOS E i.e. comply (noting that all development requires consent so compliance could be considered as part of this process). IX.6.3 Transport Infrastructure Development and subdivision to comply with the following: (a) Great South Road/ Waihoehoe Road Intersection Operation: (i) Where the baseline intersection operation is at Level of Service E (LOS E) or better at the time of application, no subdivision or development shall generate traffic movements which result in: 1) a Level of Service of less than LOS E; or 2) have a degree of saturation higher than 95%. (ii) Where the baseline intersection operation is at Level of Service F (LOS F) at the time of application, no subdivision or development shall generate

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
		traffic movements which results in: 1) degrees of saturation of more than the base line scenario, or 2) delays of more than 10% greater than the baseline scenario. Other relief would include additional provisions which outline transport upgrades to be considered (as listed in Table 8.1 of the Integrated Transport Assessment supporting the proposal).
23.31	NZTA	Amend Tables IX.6.3.1 and IX.6.3.2, if submission point 23.30 is not accepted, to provide more specificity as to the details of works required in the right hand columns of both Tables by including upgrade details listed in Table 8.1 of the Integrated Transport Assessment supporting the proposal, column headed Revised (2020) Modelling – Infrastructure Upgrades Required.
23.32	NZTA Auckland Transport	Delete italicised Note following provision IX.6.3 (2). Decline plan change unless submitter's concerns are addressed including about the funding, financing and delivery of required transport infrastructure and network improvements and services to support the 'out of sequence' development proposed
27.2	Auckland Transport	Decline plan change unless submitter's concerns are addressed, including about reliance on development triggers to stage transport infrastructure provision. In the alternative, amend the plan change to include alternative mechanisms/provisions, and/or include the amendments to provisions set out in AT's submission.
27.3	Auckland Transport	Amend IX.1 Precinct Description as follows: The transport network in the wider Drury East area as defined on Precinct Plan 3 will be progressively upgraded over time to support development in the wider area. The precinct includes provisions to ensure that any subdivision and development of land for business and housing is coordinated with the funding and construction of the transport network upgrades in order to avoid, remedy and mitigate adverse effects on the local and wider transport network.
27.6	Auckland Transport	Amend Policy IX.3 (15) as follows: (15) Ensure that the timing of <u>subdivision and</u> development in <u>the wider</u> Drury <u>area as defined on Precinct Plan 3</u> is coordinated with the <u>funding and delivery of transport infrastructure upgrades necessary to <u>avoid, remedy and mitigate the adverse effects of urbanisation</u> on the <u>safe and efficient operation</u> of the surrounding <u>and wider transport network.</u></u>
27.7	Auckland Transport	Add new Infrastructure and Staging policy as follows: (x) Avoid any subdivision and development in the wider Drury area as defined on Precinct Plan 3 until the required transport infrastructure is in place.
27.8	Auckland Transport	Amend Rules IX.4.1 (A5), (A6), (A8) and (A9) to introduce more onerous activity status for any development and/or subdivision not complying with Standards IX6.2 Staging of Development and IX6.3 Trip Generation Limit (such as non-complying activity status). In the alternative, amend Rules IX.4.1 (A5) and (A6) as follows: (A5) Development and/or subdivision that does not comply with Standard IX6.2 Staging of Development with Transport Upgrades but complies with Standard IX6.3 Trip Generation Limit as confirmed in the Transport Assessment submitted with application for consent - RD (A6) Development and/or subdivision that does not comply with Standard IX6.2 Staging of Development with Transport Upgrades and er Standard IX6.3 Trip Generation Limit as confirmed in the Transport Assessment

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
		submitted with application for consent - NC-D As a consequential amendment, delete Rules IX.4.1 (A8) and (A9).
27.11	Auckland Transport	Amend Standards IX.6.2 (1) and (2) and delete Standard IX.6.2 (3) and the note as follows: IX.6.2 Staging of Development with Transport Upgrades (1) Development and subdivision within the area shown on IX.10.3 Precinct Plan 3 must not exceed the thresholds in Table IX.6.2.1 until such time that the identified infrastructure upgrades are constructed and are operational. (2) For the purpose of this rule 'dwelling' and 'retail/commercial floorspace' means buildings for those activities that have are subject to a valid land use and/or building consent or subdivision that is subject to a subdivision consent.
27.12	Auckland Transport	Amend Table IX.6.2.1 as set out in full in the submission, including to specify additional transport infrastructure upgrades and network improvements required to be completed
27.13	Auckland Transport	Delete Table IX.6.2.2.
27.14	Auckland Transport	Amend Standards IX.6.3 (1), delete Standard IX.6.3 (2) and the note, and add a new clause as follows: IX.6.3 Trip Generation Limit (1) Development and subdivision within the Drury area shown on IX.10.3 Precinct Plan 3 must not exceed the thresholds in Table IX.6.3.1 until such time that the identified infrastructure upgrades are constructed and are operational. (x) A Transport Assessment corresponding to the scale and significance of the proposed activity prepared by a suitably qualified expert must be provided in order to confirm compliance with this standard.
27.15	Auckland Transport	Amend Table IX.6.3.1 as set out in full in the submission, including to specify additional transport infrastructure upgrades and network improvements required to be completed
27.16	Auckland Transport	Delete Table IX.6.3.2.
27.17	Auckland Transport	Amend IX.8.1 (5) as follows: (5) Development and/or subdivision that does not comply with Standard IX.6.2 Staging of Development with Transport Upgrades but complies with Standard IX.6.3 Trip Generation Limit: (a) Effects on the transport network consistent with the trips generated by development specified in Table IX.6.3.1 (b) The rate of public transport uptake and travel management measures; and (c) The coordination of retail, commercial and residential development in within the wider Drury area shown on IX.10.3 Precinct Plan 3; (x) The degree of certainty around the provision of required infrastructure upgrades including confirmation of infrastructure funding or other such measures agreed; and (x) Any mitigation measures or review conditions required to address the effects from development occurring ahead of the required infrastructure upgrades.
27.18	Auckland Transport	Amend IX.8.2 (5) as follows: (5) Development and/or subdivision that does not comply with IX.6.2 Staging of Development with Transport Upgrades but complies with IX.6.3 Trip

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
NO.	Submitter	Generation Limit:
		 (a) Whether the effects of the proposal on the transport network are consistent with the trips generated by development specified in Table IX.6.3.1; (b) Whether increased use of public transport provides additional capacity within the <u>local</u> transport network <u>included within the Drury area shown on IX.10.3 Precinct Plan 3</u>;
		(c) Whether residential development is coordinated with retail and commercial development within the wider Drury area shown on IX.10.3 Precinct Plan 3 to minimise trips outside of the precinct providing additional capacity within the transport network;
		(d) The effect of the timing and development of any transport upgrades; (x) Where new, upgrades and/or extensions to transport infrastructure are required, whether infrastructure funding agreements or other agreements exist to ensure that the new, upgraded or extended infrastructure required to service the subdivision and/or development can be funded and delivered; and (x) Whether the effects of development proceeding ahead of the required transport upgrades are mitigated by any conditions of consent including those relating to the scale, staging or operation of an activity, review conditions or interim network improvements proposed by the applicant.
27.23	Auckland Transport	Include provisions in the plan change to ensure that funding for public transport services (i.e. bus services) is available to support and provide public transport connections between the developments and the Drury Central rail station upon its completion.
27.30	Auckland Transport	Amend Policy IX.3(17) as follows: (17) Provide for <u>bus</u> , <u>pedestrian</u> and <u>cycling</u> the staging of <u>pedestrian</u> and <u>cycling</u> connections to the Drury Central train <u>rail</u> station <u>upon its completion</u> to encourage the <u>immediate</u> use of public and active modes of transport <u>as soon as practically possible</u> .
28.4	Counties Power	Retain Policy 15
29.8	Ministry of Education	Retain Standard IX.6.2 Staging of Development with Transport Upgrades.
30.2	Leith McFadden	Ensure infrastructure upgrades are tied to staging through precinct provisions
32.2	Drury South Limited	Consider amending trip generation rule framework (Activity table IX.4.1(A5), (A6), (A8) and (A9) and standard IX.6.3) to replace with a simplified approach using GFA triggers alone, given the potential challenges in monitoring trip generation levels for a development of this scale.
32.7	Drury South Limited	Amend Standard IX.6.2 to ensure that: (a) adequate upgrading of the surrounding road network (for example Waihoehoe Road, Great South Road, Fitzgerald Road and the proposed connections between the PC48 area and Quarry Road and Pitt Road / Great South Road shown on Precinct Plan 2) is undertaken; and (b) any non-compliance with this standard is a discretionary activity.
33.8	Kāinga	Retain Policy (15) subject to clarification and / or amendment of policies and
	Ora	associated provisions to account for public infrastructure upgrades.
33.10	Kāinga Ora	Retain Standard IX.6.2 subject to clarification and / or amendment of policies and associated provisions and thresholds to account for public infrastructure upgrades.

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Sub. No.	Name of Submitter	Summary of the Relief Sought by the Submitter
33.11	Kāinga	Retain Standard IX.6.3 subject to clarification and / or amendment of policies
	Ora	and associated provisions and thresholds to account for public infrastructure
		upgrades.

Discussion

- 614. These submissions cover important strategic growth and development matters, many of which have been traversed in the review of strategic growth and infrastructure issues.
- 615. The submissions seek that funding be agreed prior to rezoning and development. The submissions identify substantial concerns over the use of some form of trigger/threshold provisions as a means to address uncertainty over funding of local infrastructure improvements, while allowing some development to progress.
- 616. For example, Auckland Transport [27.3, 27.7] states that the proposed precinct description, objectives and policies do not recognise the need for both subdivision and development to be coordinated with the provision (including funding and delivery) of the transport infrastructure and services that are required to support the precinct and connecting it to the wider network. In this respect, AT's view is that the provisions do not give effect to higher order NPS-UD and RPS provisions. In a similar vein, Auckland Council [22.34] seeks that PPC48 be declined in its entirety until there is a fully funded and appropriately staged solution for the integration of land use, infrastructure and development for the Precinct and sub-region. Drury South Limited as a further submitter is concerned to ensure that there is appropriate infrastructure in place to manage the impacts of PPC48 in a way that does not adversely affect the wider transport network and developments in the area, such as the Drury South development.
- 617. The submissions raise significant issues over the method proposed by the requestor to address uncertainty over the funding and delivery of local road improvements (Staging of development with transport upgrades rules).
- 618. The requestor, as part of their submission, has provided additional assessments of transport effects, based on modelling to understand what upgrades to the local roading network (such as the various projects identified by DTIP) are necessary to support development in the plan change area, and manage the effects of development on the transport network in accordance with proposed Objective 5. This assessment shows that the development enabled by the Drury East plan changes do not rely on the 'DTIP' transport upgrades until 2048. Through the conferencing sessions the requestor has indicated a willingness to consider some form of interim upgrade of Waihoehoe Road (to provide for walking and cycling), as well as the improvements to Great South Road and Waihoehoe Road intersection set out in the proposed Precinct provisions.

Analysis

619. I agree that there needs to be reasonable certainty over funding before rezoning should occur, such as commitments in Council's financial plans. However, I cannot find any support in the AUP (or NPS-UD) for the principle that all funding must be agreed before rezoning occurs. In my assessment there is now reasonable certainty over funding of network infrastructure for rezoning to proceed, given NZUP, ATAP, and the draft RLTP and Council's draft LTP.

- 620. I understand there is a risk that not all road projects will be funded and delivered ahead of or at the same time as development, and that some projects may lag behind development.
- 621. In broad terms my recommendation to address the uncertainty over funding of road improvements is that objectives relating to land use and transport integration be strengthened, but with a shift in emphasis to ensuring transit-orientated development occurs. I recommend this on the basis that a transit-orientated form of development seeks to reduce reliance on private trips and associated roading investment. Transit-oriented development also supports the intensity and mix of land uses proposed. In my view, so long as the train station and electrified network is in place, as well as priority measures for buses on Waihoehoe Road, people (residents, workers visitors) can have access to reliable public transport services, importantly the train station 'from day one' then development should be able to proceed.
- 622. The extent to which other road-based infrastructure needs to be improved is a matter that can be, to an extent, addressed as development occurs. The NoRs issued by AT and Waka Kotahi are an important step in securing space for the necessary upgrades. A delay in the actual upgrading of road capacity due to funding issues may disadvantage some people and businesses, but so long as there is an alternative that is convenient and easy to use (for example the train and bus network), then residents and workers have options.
- 623. To help address the issue of uncertainty over the nature and extent of upgrades to existing roads as development progresses (and the potential for development to occur in a number of disjointed locations), I would recommend that the precinct contain clear standards that require that pedestrian and cycle links be provided to the train station before development can be occupied. Furthermore, the standards should state that the existing rural roads in the area should be upgraded as development proceeds, with the requirement being that the upgrade should not be just to the frontage of the subject application site. Corridor upgrades from the site of the new access or road to the Waihoehoe Road overpass should be in place.
- 624. In this context, I disagree that a fully funded and appropriately staged solution for the integration of land use, infrastructure and development for the Precinct and sub region is required before the rezoning can occur.
- 625. In terms of policies, I do agree that the Precinct provisions should be strengthened as they relate to public transport access and safety. Auckland Transport [27.6] seeks to amend Policy IX.3 (15) as follows:
 - (15) Ensure that the timing of <u>subdivision and</u> development in <u>the wider</u> Drury <u>area as</u> <u>defined on Precinct Plan 3</u> is coordinated with the <u>funding and delivery of</u> transport infrastructure upgrades necessary to <u>avoid, remedy and</u> mitigate the adverse effects of <u>urbanisation</u> on the <u>safe and efficient operation</u> of the surrounding <u>and wider</u> transport network.
- 626. I note that this would be a very hard policy to implement in practice, given the wider demands on the regional transport network. For example, my understanding from the SGA work is that even with Mill Road extension in place, additional lanes to the motorway and other upgrades, the south will continue to face significant transport pressures (as will north and west Auckland).
- 627. In my view, a more effective response is to focus on the key public transport aspects of the development, these being the rail station, rail electrification and associated safe

pedestrian, cycle and bus priority. To this end I support proposals along the following lines such as suggested by Waka Kotahi:

- (17) Provide for the staging of pedestrian and cycling connections to the Drury Central train station to encourage the use of public and active modes of transport <u>at the same time as land use development.</u>
- 628. Auckland Transport's proposal [27.30] is better:
 - (17) Provide for <u>bus</u>, <u>pedestrian</u> and <u>cycling</u> the <u>staging</u> of <u>pedestrian</u> and <u>cycling</u> connections to the Drury Central <u>train</u> <u>rail</u> station <u>upon its completion</u> to encourage the <u>immediate</u> use of public and active modes of transport <u>as soon as practically possible</u>.
- 629. I would also support, in response to the submissions, a strongly worded policy that is directed at avoiding development occurring ahead of infrastructure necessary to support public transport use, such as:
 - Avoid subdivision and development in the Drury Central area that precedes the delivery of public transport infrastructure necessary to enable travel patterns consistent with a transit-orientated form of development.
- 630. In this respect I support the type of 'requirements' set out by Mr Church in his transport review and as set out in section 8.7. That is, buildings are occupied only once the train station is operational (timed for 2025-26), pedestrian and cycle connections to the train station are in place, bus priority is provided for westbound on Waihoehoe Road, and rural roads are brought up to an urban standard early in the development process.
- 631. I agree with submitters that the requestor's methods of dealing with uncertainty over funding and delivery of local road improvements are unworkable in their current state. Auckland Council's submission notes that threshold rules should not be used for works which would require a funding contribution from multiple landowners or developers and there is no agreement to apportion costs and benefits in place. I agree with this position and note that it essentially covers all of the PPC48 land.
- 632. Auckland Transport considers that failure to comply with trigger standards (i.e. allowing subdivision and development to advance before the required transport upgrades are implemented) will have the potential to result in significant adverse effects on the transport network. AT therefore seeks a non-complying activity status for development and subdivision which fail to comply with both Standards IX.6.2 and IX.6.3. This will make sure that such consents can only be granted if the adverse effects will be minor or if the activity will not be contrary to the relevant objectives and policies. AT also seeks the combination of Rules IX.4.1 (A8) with (A5), and (A9) with (A6) to avoid duplication. In my view a discretionary status is appropriate for consents that seek to advance development without complying with the standards.
- 633. As discussed in the expert transport review, Mr Church has proposed a similar method to that identified by Waka Kotahi in regards to the nature and extent of upgrades to Great South Road / Waihoehoe Road intersection. I agree that some form of performance-based rule could work. My understanding is that Mill Road extension has a significant effect on travel patterns. Prior to Mill Road extension being fully made operational, assessment is needed of impacts on Waihoehoe Road and Great South Road intersection. Mr Church for Council has set out a possible performance-based approach in his Transport Assessment (as covered in section 8.7). Waka Kotahi has proposed a similar approach, as follows:

- IX.6.3 Transport Infrastructure Development and subdivision to comply with the following:
- (a) Great South Road/Waihoehoe Road Intersection Operation:
- (i) Where the baseline intersection operation is at Level of Service E (LOS E) or better at the time of application, no subdivision or development shall generate traffic movements which result in:
 - 1) a Level of Service of less than LOS E; or
 - 2) have a degree of saturation higher than 95%.
- (ii) Where the baseline intersection operation is at Level of Service F (LOS F) at the time of application, no subdivision or development shall generate traffic movements which results in:
- 1) degrees of saturation of more than the base line scenario, or
- 2) delays of more than 10% greater than the baseline scenario.
- 634. I would support such a performance-based approach prior to Mill Road extension becoming operational. My assessment would be that such a requirement would be a more effective method than the fixed threshold approach proposed by the requestors. The performance-based approach would recognise the wider factors influencing the performance of the key intersection.
- 635. As noted in many submissions, if Standard IX6.2 as notified was to be retained by the Panel (this would not be my recommendation), then there would be considerable work required. In my assessment this would need to cover:
 - Only one standard, rather than two. I would delete the trip generation limits as being unable to be implemented. In my view the trip generation rules would be impossible to show compliance with for smaller developments.
 - Reference made to both subdivision and development.
 - More specificity as to what upgrades are actually required.
 - Clarification as to how the dwelling and floorspace thresholds are to be measured (given that Council will not necessarily record retail floorspace nor control conversions between retail and office floorspace in the business zones).
 - Expanded assessment matters.
 - At least discretionary activity status for activities that seek to not meet the standards.

Recommendations on Submissions

- 636. Based on the analysis outlined above I recommend that submissions:
 - 2.1; 19.1; 22.1; 22.34; 23.1; 23.19; 23.21; 23.26; 23.27; 23.30; 23.31; 23.32; 27.1; 27.2; 27.3; 27.6; 27.7; 27.8; 27.11; 27.12; 27.13; 27.14; 27.15; 27.16; 27.17; 27.18; 27.23; 27.30; 30.2; 32.2; and 32.7 be accepted in part, to the extent that I have recommended substantial modifications to the relevant standards and policies so as to bring alignment with the NPS-UD and AUP RPS provisions that support early and convenient access to public transport
 - 23.18; 23.25; 23.28; 23.29; 28.4; 29.8; 33.8, 33.10 and 33.11 be rejected, on the basis that the policies and standards that are sought to be retained, I have recommended be substantially amended or deleted.
- 637. Possible amendments are set out in Chapter 10 to this report.

10 OVERALL ASSESSMENT

- 638. In this section of the report, I provide my assessment of the plan change request against the statutory tests set out in section 7 and taking into account the analysis in sections 8 and 9.
- 639. This assessment is in the context of the role of Precincts in the AUP. As noted by A1.6.5, Precincts enable local differences to be recognised by providing detailed place-based provisions which can vary the outcomes sought by the zone or Auckland-wide provisions and can be more restrictive or more enabling.
- 640. I consider in order:
 - Description
 - Objectives
 - Policies
 - Activities
 - Standards
 - Assessment matters
 - Zoning / Precinct Plan
 - Special information requirements.

Description

641. The precinct description is generally appropriate. I would recommend an amendment to para 6 as follows:

An overarching objective of the precinct is to support a reduction in dependence on vehicles in favour of public transport, walking, cycling and other active modes. The precinct includes provisions to ensure that the development of land for business and housing is coordinated with the early provision of public transport, including access to the Drury Central train station by way of walking and cycling, and provision of a safe surrounding environment for station users.

Objectives

- 642. The main statutory test for objectives is whether the objectives are the most appropriate way to achieve the Act (including Part 2 and higher order RMA documents)?
- 643. One aspect of this is that objectives for Precincts should not replicate objectives already contained in the AUP. The objectives should be specific to the Precinct and deal with outcomes that are relevant to the Precinct. Objectives that replicate other AUP objectives are not the most appropriate way to implement the Act.
- 644. To this end, the following wording should be inserted at the start of the Objectives.
 - The zone, Auckland-wide and overlay objectives apply in this precinct in addition to those specified above.
- 645. It should also be made clear whether the objectives are at the Regional Plan / District Plan level. The absence of an 'RP' tag suggests that all of the objectives are at a district plan level, yet stormwater and related discharge matters are addressed.
- 646. Of the seven objectives listed in PPC48, Objectives 6 and 7 essentially replicate other AUP Objectives. For example, Objective 6 development is supported by appropriate

infrastructure – is similar to the matters in E26, E27 and E38. Objective 4 of E38 is much more directive as to the timing of infrastructure:

(4) Infrastructure supporting subdivision and development is planned and provided for in an integrated and comprehensive manner and provided for to be in place at the time of the subdivision or development.

Objective 6 should be more specific as to outcomes.

- 647. Similarly, Chapter E1 of the AUP contains objectives relating to the improvement of water quality. The need for Objective 7 is not clear (and furthermore is not tagged as being a regional plan matter).
- 648. Objective 1 relates to regional land use and transit planning matters and should be retained. I note that while the term 'transit-orientated development' is not a defined term, it is nevertheless a concept that is well understood. If there was concern that the term may create confusion, words such as 'high-density, public transport focused, mixedused node' could be used instead. However, my preference would be to retain the words transit-orientated development as the concept involves a succinct summary of a range of matters relating to the density and mix of activities; proximity to and preference for public transport, and a public realm focused on active modes. Either way, it would be more appropriate for the objective to refer to the centre as providing for high density activities within walking distance of the train station, rather than the centre 'supporting' these outcomes.
- 649. Objective 2 is not in accordance with the purpose of the RMA. The AUP RPS does not seek to make some centres 'pre-eminent centres'. In my view, given the strategic context outlined, it is important that the objective for the precinct clearly set out the role of the centre as a large employment hub. In the light of the NPS-UD's focus on capacity, the objective should refer to the centre developing in a way that sustainably meets the retail, service and employment needs of the wider community and which accommodates a diverse mix of business and supportive residential activities. I consider that this is a more appropriate objective.
- 650. Objective 3 is very general in nature and not dissimilar to other objectives in the AUP. The objective could be shortened and supported by more specific policies as to placebased outcomes, such as development of green corridors, mana whenua values being reflected in the design of public places, development that supports active, lively, and safe street environments and high standards of urban design, for example.
- 651. Objective 4's reference to a street-based environment is supported from an urban design point of view, but the ambit could be expanded to cover both the key retail street, and the other collector-type roads identified on the Precinct Plan.
- 652. Objective 5's focus on 'access' to the precinct does not recognise the wider transport issues associated with movement, to, from and through the Drury area. Auckland Transport has proposed wording that refers to a transport network that facilities safe and efficient movement of people, goods and services. However, this replacement objective repeats other objectives of the AUP in its general intent. The objective should be more place-specific, for example referring to development occurring in a way that provides direct access to the train station and mitigates impacts on Drury (Great South Road), the existing and future arterial road network including Waihoehoe Road and State Highway 1.
- 653. In this regard, I would recommend a modified set of objectives along the following lines:

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- Drury Centre is a transit-orientated development that contains high density
 residential, employment-generating and retail activities within walking distance of
 rapid transit and prioritises public and active modes of transport to and within the
 centre.
- 2. <u>Drury Centre develops in a way that sustainably meets the retail, service and employment needs of the wider Drury-Opāheke community.</u>
- 3. Drury Centre develops and functions in a way which:
 - a) provides, as development proceeds, a well-connected, direct and legible network of pedestrian and cycling linkages connecting the precinct to the Drury Central rail station, and
 - b) mitigates impacts on the safe and efficient functioning of the roading network, including roads within the Drury township (Great South Road), the existing and future arterial road network including Waihoehoe Road and State Highway 1,
 - 5. <u>Development of the Drury Centre creates a distinctive sense of place.</u>
 - 6. <u>Drury Centre is a street-based environment that provides a high quality pedestrian experience, with a particular emphasis on the Key Retail Street and main roads.</u>
 - 7. Freshwater quality and biodiversity are improved.

Policies

654. In accordance with section 32, policies need to be tested as to their efficiency and effectiveness in implementing the objectives. This needs to include consideration of options and the likely costs and benefits of these options. The following table lists the proposed policies (as to be amended by way of Kiwi Property's submission) and my comments on the effectiveness and efficiency of the policies.

Policies	Comments
Land use	
(1) Provide for the greatest density of retail and commercial activities with supporting community and residential activities within Sub-	While this policy helps to explain the adopted zoning strategy, I consider that the objectives and policies applying to the BMC and BMU zone are sufficient to describe the mix and intensity of
Precinct A.	activities to be enabled. There is a precinct-specific building height
	strategy associated with the sub-precincts, and this should be described so as to help assess subsequent resource consent applications that seek to exceed height limits. This point is addressed below.

Policies	Comments
(2) Recognise that Sub-Precinct B will be the primary location for large format retail activities.	It is unclear if there is a method associated with this policy, apart from reliance on BMU zone provisions that make retail stores over 200m² and supermarkets over 2,000m² in floor area a discretionary activity (thereby suggesting that sub-precinct B is an appropriate location for such stores). The policy does link with policy 12 which more appropriately manages urban design issues, rather than land use allocation. If sub-precinct B is rezoned to BMU zone (as I have recommended), then the policy could be re worded to refer to the sub zone enabling larger format stores to be located in the sub-precinct, rather than being the 'primary' location.
(3) Provide for high density residential and supporting intensive employment activities compatible with residential amenity values in Sub-Precinct C, E and F that recognise the primacy of Sub-Precinct A as the core centre. Provide for a greater range of intensive employment activities and greater heights in Sub-Precinct E responding to its close proximity to rapid transport, while recognising the primacy of Sub-Precinct A as the core centre.	My assessment is that there would be improved alignment with objectives (and greater benefits) if this policy stated that sub-precinct E provides for intensive employment activities with some supportive residential development. That is, the emphasis be on employment activities. The reference in Policy 3 to employment activities compatible with residential amenity could raise substantial concerns over reverse sensitivity effects for businesses. I note that the BMU zone policies focus on a range of activities that will not compromise the function, role and amenity of Metropolitan Centres. I consider that the shift in emphasis towards residential and compatible employment activities is not an efficient or effective method of achieving the zone's outcomes.
	As far as I can tell, there are no specific methods associated with the statement that there should be a greater range of employment activities in Sub-Precinct E, apart from increased height. For example, there is no limit on residential activities. Sub precincts C and F could provide for more of a mix of residential and business, given their transitional role.
(4) Provide for attractively designed, safe and direct access to the Drury Central train station, with a particular focus on pedestrians and cyclists.	This policy should refer to <u>requiring</u> safe and direct access as development occurs, given Objective 1's focus on transit-orientated development. Bus access should also be identified. These points are addressed further below.

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Policies Comments Street Network and Built Form (5) Require collector roads to be This policy references the Precinct Plan and is generally in the locations shown in therefore appropriate. The policy could be made IX.10.1 Drury Centre: Precinct Plan more effective by referring to alternative 2, while allowing for variation, alignments when these are demonstrated to where it would achieve a highly achieve better urban form outcomes than the alignments indicated on the Precinct Plan. This connected street layout that integrates with the surrounding links better to the objectives. transport network. (6) Ensure that development This policy is similar to policies in the subdivision provides a local road network that section of the AUP (such as Policy E38.3.10). achieves a highly connected street layout and integrates with the The policy could be simplified by referring directly collector road network within the to the safety and amenity of the open space and precinct, and the surrounding stream network as matters that are in addition to transport network, and supports the the matters set out in E38.3.10. For example. safety and amenity of the open space and stream network. In addition to the matters in Policy E38.3.10, ensure that the local roading supports the safety and amenity of the open space and stream network The matters listed in (a) and (d) are similar to (7) Require streets to be attractively designed to those in E38.3.10 (road design) while items (b) appropriately provide for all modes and (c) are additional to the matters set out in of transport by: E38.3.10. I note that the extent of on-street parking is a particular design matter that varies between retail, commercial and residential areas. (a) providing a high standard of amenity for pedestrians in With the shift under the NPS-UD to removal of areas where high volumes on-site parking requirements, street parking will of pedestrians are come under greater demands. Furthermore, landscaping should reflect the urban context of expected; and the street, not just its transport function. (b) providing for safe separated access for cyclists on I would suggest that the policy be amended so arterial and collector roads that matters in addition to E38.3.10 are listed, for that link key destinations; example: and In addition to the matters set out in E38.3.10, (c) providing a level of street design should: landscaping that is appropriate for the function provide for safe separated access for cyclists on of the street: arterial and collector roads that link key <u>destinations;</u> (d) providing for the safe and efficient movement of provide a level of landscaping that is appropriate vehicles. for the function and urban context of the street; and provide on-street parking commensurate with anticipated surrounding land use mix and

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densities.

Policies	Comments
(8) Manage building height and form where adjacent to large publicly accessible open spaces to minimise shading effects.	This policy is a repeat of policies found in the AUP and could be deleted.
(9) Ensure that Sub-Precinct A is the compact, pedestrian orientated retail core of the precinct with a comprehensively planned mix of large and small-scale retail activities integrated with other commercial and office activities, leisure, tourist, cultural, residential, community and civic services with streets that are open to the sky.	This policy overlaps with policy 1 and could be deleted.
(10) Ensure that development in Sub-Precinct A positively addresses and engage with the street by: (a) Maximising street activation, building continuity along the frontage, pedestrian	The BMC zone notes that some street frontages within the zone are subject to Key Retail Frontage Control or General Commercial Frontage Control provisions as shown on the planning maps. Key retail streets are a focus of pedestrian activity within the centre. General commercial streets play a supporting role, with development fronting these streets expected to reinforce this function.
amenity and safety and visual quality on the Key Retail Street. (b) Achieving a reasonable level of street activation, building continuity along the frontage, pedestrian amenity and safety and visual quality on other local roads in Sub-Precinct A.	Proposed policy 10 doubles up with the relevant policy in the BMC zone that describes these two street environments. However, given the greenfields nature of the PPC48 development, there is a need for the policy (and precinct plan) to specify which outcome will apply where. I support the policy. As noted below, I consider that there is benefit from the sub-precincts covering the BMU zone to also define streets where the 'general
(11) Recognise that residential at ground floor may be appropriate on some local roads in Sub-Precinct A away from the Key Retail Street, including where residential adjoins public open space.	commercial street' typology should apply. The nature and extent of ground floor residential activities in a busy, high rise commercial environment is one that needs specific design assessment. I consider that this policy does not recognise the employment role of the centre, while potentially leading to adverse design outcomes at street level. I do not think that the policy helps to implement the objectives.

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Comments **Policies** (12) Require large format retail The justification of this policy is not well activities in Sub-Precinct B to articulated, especially within a TOD context. provide for the visual quality and While I accept that large format retail is an interest of streets and other public activity that needs to be accommodated, my places, having regard to the assessment is that the BMU zone is better able functional requirements of that to accommodate the design issues and trade-offs activity. present than the BMC zoning. I accept that for sub-precinct B, the BMU zone would need to be amended to provide for retail and supermarkets over 200m² in area as a permitted activity. This policy should also apply to residential that (13) Enable residential activities at high densities in Sub-Precinct C may occupy sub-precincts B, C and F (that is all and E that provide quality on-site areas zoned mixed use). amenity for residents, including privacy and outlook, outdoor living Note, my recommendation is that sub-precinct E space and access to daylight. be zoned Metropolitan Centre. (14) In addition to matters (a)-(c) of I agree that these additions better help to Policy E38.3.18, ensure that the implement the objectives than sole reliance on location and design of publicly the policies in E38. accessible open spaces contributes to a sense of place for As noted, reference should be made to the the Drury Centre, including by: Homestead and garden, given its visual and amenity values. (a) incorporating distinctive site features: (d) retaining the Flanagan Homestead and surrounding mature trees. (b) reinforcing legibility within the centre; and (c) integrating with the stream network. Infrastructure and Staging (15) Ensure that the timing of Options as how to ensure integration between development in Drury Centre transport and land use have not been well Precinct is coordinated with the analysed, in my assessment. transport infrastructure upgrades necessary to mitigate the adverse I consider that the issues of integration need to effects of development on the be divided between those associated with public effectiveness and safety of the transport (particularly rail access), and those immediately surrounding transport related to the surrounding roading network.

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As discussed in the body of this report, to achieve strategic outcomes relating to the

co-ordinated with public transport, and the provision of a safe transport environment for active transport modes. The capacity and

regional transport network, development must be

efficiency of the road network is a more variable

network.

Policies	Comments
	matter, dependent upon assumptions relating to Mill Road and other roading improvements.
	I consider that more effective and efficient policies would address four issues:
	Development being timed with the opening of the rail station and more frequent services on the rail network (electrification)
	Safe access to the rail station from 'day one' for active modes
	Safety upgrades of the rural roads in the area early in the development process
	Development-by-development assessment of effects on key roads, such as Great south Road/Waihoehoe Road intersection and motorway approaches.
(16) Ensure that development in Drury Centre Precinct is coordinated with supporting stormwater, wastewater and water supply infrastructure.	I do not see the need for this policy. It replicates existing AUP matters. However, I do note that the Ministry of Education has suggested the inclusion of educational activities in the policy. The NPS-UD does require consideration of what it terms "additional infrastructure'. This includes public open space, community infrastructure, social infrastructure such as schools and healthcare facilities, and networks operated for the purpose of telecommunications for the purpose of transmitting or distributing electricity or gas. The policy could be amended to cover 'additional infrastructure'. This is discussed further below.
(17) Provide for the staging of pedestrian and cycling connections to the Drury Central train station to encourage the use of public and active modes of transport.	To be effective and efficient in implementing the TOD objective this policy should be much more directive, such as requiring pedestrian and cycle connections to be in place at the same time as development is occupied. This is addressed further below.
Ecology	
(18) In addition to the matters in Policy E1.3(8), manage erosion and associated effects on stream health and values arising from development in the precinct, including parts of the Fitzgerald and Hingaia streams, and enable in-stream works to mitigate any effects.	I agree that the policy will assist with interpretation of the policies in the AUP (Chapter E1 and E3) by referring directly to the likely need for some in-stream works to manage erosion. In my view, there is justification to add this policy.

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Policies Comments (19) In addition to the matters in This policy replicates the intent of new Policy 18 in Chapter E3. This policy was inserted by the Policy E.3.3(13) (a) provide for stream works. NPS-FM (which occurred after notification of the including culverting, PPC). diversion and/or reclamation, required to I see no need to replicate the policy that is now in construct the Drury the AUP. Boulevard, where it can be demonstrated that there is I do not agree with (b). The nature and extent of no practicable alternative, riparian planting to off-set any stream infilling will and where there is a need to be determined at the resource consent functional need to construct stage. The riparian planting that is required manages a range of ecological, water quality and it in the location generally shown on Precinct Plan 1 amenity effects. Additional effects resulting from (b) enable the planted riparian the infilling of a stream and loss of habitat should be off-set 'over and above' these effects. margins of identified streams to contribute to offsetting the effects of any In relation to the extent of off-setting, I consider that there is merit in the precinct establishing a stream works assessed under Policy (19)(a). principle of 'no-net loss of stream function arising from any reclamation'. This would better accord with the NPS-FM. For example: In addition to the matters E3.3.13 Ensure that if stream reclamation occurs, then there is no net loss in ecological function and preferably a net gain. (20) Support improvements to The policy supports the standards relating to water quality and habitat, including riparian planting. Reference should be added to by providing planting on the biodiversity benefits of riparian planting, as well riparian margins of permanent and outcomes related to green corridors and riparian intermittent streams. vards: Ensure improvements to water quality, and habitat and biodiversity, including by planting of the riparian margins of all permanent and intermittent streams, and creation of a green corridor following the Hingaia and Fitzgerald streams setting back buildings from stream banks to provide space for riparian planting, flood water conveyance, management of potential stream bank erosion and provision of infrastructure including walkways cycleways and local streets, where relevant. Stormwater Management (21) Require subdivision and This policy is appropriate, as it establishes a link development to be consistent with between land use development and stormwater

any approved network discharge consent and supporting stormwater management plan including the application of water sensitive design to achieve water quality and hydrology mitigation.

Comments

network requirements. As discussed above, the policy could be expanded. For example:

Require subdivision and development to be assessed for consistency with any approved network discharge consent and supporting stormwater management plan adopted by Council under that discharge consent including:

- <u>application of water sensitive design to achieve water quality and hydrology mitigation.</u>
- ensuring that all impervious services are treated through a treatment train approach to enhance water quality and protect the health of stream and marine environments.
- seeking integrated improvements to water quality, habitat and biodiversity, including by providing planting on the riparian margins of permanent and intermittent streams
- <u>ensuring that development is co-ordinated with upgrades of off-site stormwater infrastructure.</u>
- 655. I note that my assessment of the proposed plan change provisions and associated submissions has highlighted a number of gaps that I consider need to be addressed.
- 656. The first gap relates to a clear explanation of the height strategy adopted for the centre. To assist with administration of the of the precinct provisions, I would suggest inclusion of a policy that describes the height strategy as being:

Retaining the visual dominance of the central core of the centre, being sub-precinct A. Stepping down height where land is opposite residentially zoned land (sub-precincts C and F) to create a compatible transition.

Providing for a mid range height for the shoulders of the centre, being sub-precincts B and E.

Recognising the potential for additional height along the new collector roads (such as Drury Boulevard) and at key corners to assist with legibility and identity.

- 657. I consider that such a policy would assist with implementation of the AUP's approach to building heights in business zones. The AUP provides scope for buildings that are taller than the standard to be tested through the restricted discretionary application process. Policy guidance is needed to assist with the assessment of such applications. While the AUP contains general guidance, more specific guidance would be a more efficient means of implementing the relevant objectives and policies.
- 658. The next area where I consider there is a gap is in methods to implement the objective of development supporting significant use of public transport. In my view, based on the assessments and submissions, I consider that the following two policies (or words to that effect) should be inserted:

Avoid subdivision and development in the Drury Central area that precedes the delivery of public transport infrastructure necessary to enable travel patterns consistent with a transit-orientated form of development.

Ensure bus, pedestrian and cycling connections to the Drury Central rail station are progressively provided as development occurs so as to encourage the immediate use of public and active modes of transport.

- 659. I consider that these policies would be a more effective and efficient method of implementing the objective than that proposed by the plan change.
- 660. As for impacts on the local roading network, I would suggest that policy 15 as notified is capable of being modified to support the revised approach to assessment of local road impacts. I would recommend:

Ensure that development in Drury Centre Precinct is co-ordinated with the transport infrastructure upgrades necessary to mitigate the adverse effects of development on the effectiveness and safety of the surrounding road network, through managing the timing and scale of development, undertaking on-site and off-site works, as well as financial contributions towards necessary off-site upgrades.

661. The new Metropolitan Centre will be a significant feature of the southern fringe of urban Auckland. While a large employment node will benefit the wider area (and this outcome supports zoning of large areas for commercial and mixed-use activities), the retail component of the centre needs to be managed in the initial establishment phase so as to not undermine other centres (such as Pukekohe), while the resident catchment builds up. To this end the following policy is proposed in response to submissions:

The amount of retail floorspace is controlled in the Precinct in the period up to 2033 so as to ensure that there are no significant (non-trade) adverse effects on the social and economic function, role and amenity of Papakura and Pukekohe centres.

662. Developing a unique sense of place to the new centre will also be important. As noted, I would support the following policy being added:

In the development of Drury Centre, Mana Whenua values are acknowledged and incorporated by:

- Retaining and enhancing streams, wetlands and their margins
- <u>The physical design of streets, open spaces and plazas incorporating Te Aranga Design principles</u>
- Encouraging applicants to seek input of Mana Whenua into the design of key buildings.
- 663. The role and function of sub-precincts C, E and F need to be clarified. As noted, I consider there is merit in zoning sub-precinct E as BMC zone. I would suggest the following policy for sub-precinct E:

<u>Provide for a range of intensive employment activities in Sub-Precincts B and E responding to their proximity to rapid transport and physical relationship with Sub-Precinct A as the core centre.</u>

664. In terms of sub-precincts C and F, I would support a policy along the lines of:

<u>Provide for high density residential and supporting intensive employment activities compatible with amenity values in a Mixed Use environment in Sub-Precinct C and F.</u>

665. In terms of infrastructure, a policy addressing flood hazards is warranted, given the upstream and downstream risks of increased hazards, as are policies directed at the operation of the rail line, and in relation to 'additional infrastructure':

Provide sufficient floodplain storage, including attenuation storage, within the Drury Centre to avoid increasing flood risk upstream (including the Drury South area) and downstream (including the Drury industrial area) from a 1% AEP event, and minimise increased flood risk within the precinct, including through upgrades to downstream infrastructure capacity.

<u>Potential adverse effects on the operation of the regionally significant NIMT rail line and regional road network and on the health and safety of nearby noise sensitive receivers are managed through setbacks and building performance standards.</u>

Ensure that development in Drury Centre Precinct is coordinated with the provision of additional infrastructure, having particular regard to:

- the likely location of educational facilities in the wider area;
- the location and capacity of existing and planned gas, electricity telecommunication networks:
- future open space networks; and
- a civic plaza in the heart of the centre.

Activities

- 666. I generally support the amendments to activity classifications set out in Tables IX.4.1 of the notified PPC48. I would recommend the following changes:
 - Activity A1 should exclude new public roads
 - Deletion of Activities A5 to A7, and replacement with a single discretionary activity classification for any subdivision or development that does not meet the revised transport standard that is set out below.
 - I do not support A16, A17, A18, A19 and A20 being made Discretionary or non-complying in sub-precinct E. Sub precinct E should have an employment focus.
 - In sub-precinct B, retail over 450m² in area should be a permitted activity, with retail less than 450m² being discretionary (assuming the zoning of the sub-precinct is changed to BMU zone).
 - Department stores should not be NC in sub-precincts C and E.

Standards

667. The following table lists proposed precinct-specific standards and my comments on them.

Methods / standards	Comments
IX.6.1 Building Height	I would support the additional height sought through the submissions, but extended in sub-precincts B and E as follows:
	Sub precinct A = 72.5m Sub precinct B = 40.5m (but could go to 50m) Sub precinct C = 32.5m
	Sub precinct E = 72.5m (consistent with proposed BMC zoning) Sub precinct F = 32.5m (on the basis that the THAB zone on the southern side of Fitzgerald Road is extended)
IX.6.2 Staging of Development with Transport Upgrades	I do not consider this standard to be an effective and efficient method of addressing concerns over impacts on the local roading network. I consider that an alternative approach needs to be used, as set out in section 8.7.
IX.6.3 Trip Generation Limit	This standard is not able to be implemented and should be replaced with a more performance-based approach as set out in the Council's transport review.
IX.6.4 Riparian Margins	The riparian margins rule needs to be amended as follows:
	Riparian margins of permanent and intermittent streams must be planted either side to a minimum width of 10m measured from the top of the bank of the stream, provided that: a. this rule shall not apply to road crossings b.replanting is carried out in accordance with a planting plan prepared with reference to Appendix 16 Guideline for native revegetation plantings c.prior to planting an archaeological survey has been completed and any areas of archaeological value are not planted d. where not vested in Council, the planting is maintained in perpetuity by an appropriate legal mechanism.
	Walkways, cycleways and other forms of linear infrastructure shall not be located within the riparian margin.
IX.6.5 Building Setback along Waihoehoe Road	The necessity of this rule needs to be re-assessed given a Notice of Requirement has now been notified.
IX.6.6 Stormwater Quality	I support this method being broadened out to cover the matters addressed in the Stormwater Management Plan, including inert building materials and appropriate treatment of run off from non high contaminant generating surfaces. This addressed below.
IX.6.7 Daylight	I agree that this is an appropriate method to

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Methods / standards	Comments
	introduce. It will assist with amenity outcomes.
IX.6.8 Outdoor Living Space (a)	I agree that this is an appropriate method to introduce. It will assist with amenity outcomes.
IX.6.9 Stream works for the Drury Boulevard	This method is unnecessary. Stream reclamation is appropriately governed by the AUP.

668. In terms of a replacement to Standard IX.6.2 and 6.3, I refer to the discussion in section 8.7. In summary, I recommended the following amended standards:

All sub-precincts

All subdivision and development shall comply with the following standards.

Infringement of the standards will be assessed by way of a Discretionary Activity consent application

<u>Purpose</u>

To ensure that development and activities can efficiently access train services, roads are upgraded to an urban standard and adverse effects on the performance of key intersections are managed as development occurs.

IX.6.2 Threshold for development: Transit Orientated Infrastructure

<u>Threshold</u>	Transport and Land use Required to
	Exceed the Thresholds
Prior to any new buildings being	Drury Central train station is operational
occupied	
	Waihoehoe Road is upgraded to an urban
	standard between the Waihoehoe rail
	overpass and Fitzgerald Road, with
	westbound bus priority measures being
	provided
	<u> </u>
Prior to any buildings being occupied	Direct, safe and separated pedestrian and
in Precinct A; Drury Central	cycle connections are provided from the
	Key Retail Street (Main Street) to the Drury
	Central station concourse
Prior to any buildings being occupied	Direct, safe and separated pedestrian and
in sub Precincts B and F; Drury	cycle connections are provided to the Drury
Central	Central station concourse via the Key Retail
	Street or Drury Boulevard
Prior to any buildings being occupied	Direct, safe and separated pedestrian and
in sub Precincts C and E; Drury	cycle connections are provided to the Drury
Central	Central station concourse via the Drury
	Boulevard
No more than 2 years after the Drury	A publicly accessible station plaza of at
Central train station is made	least 2000sqm in area is provided adjacent
<u>operational</u>	to the station concourse along with a
	minimum of 500sqm of fronting commercial

floorspace (in temporary or permanent
buildings).

Table IX.6.3 Rural Road Upgrades

<u>Threshold</u>	Transport and Land use Required to
	Exceed the Thresholds
Prior to any subdivision or	Urbanisation of Fitzgerald Road between
development fronting Fitzgerald	the new access and Waihoehoe Road.
Road, or any new road connection to	
Fitzgerald Road	
Prior to any development fronting	Urbanisation of Brookfield Road from the
Brookfield Road, or any new road	new access to Fitzgerald Road and
connection to Brookfield Road	Fitzgerald Road to Waihoehoe Road.

Note: The term 'urbanisation' would need to be defined but would likely involve works within the current road reserve to incorporate walking and cycling facilities, kerb and channel, lighting, services, stormwater management and pavement approvements.

IX.6.4 Transport network performance

<u>Prior to Mill Road connecting to Waihoehoe Road and 4 Laning of Waihoehoe</u> <u>Road between Fitzgerald Road and Great South Road:</u>

- (2) <u>Any development of more than 50 dwellings or 1000 sqm of non-residential floorspace must meet the following standard:</u>
 - a. Waihoehoe Road / Great South Road intersection traffic performance:
 - i. <u>95th percentile queues (not average queues) for each movement at</u> intersections do not
 - <u>a. extend to and through upstream intersections</u> b.queues shall not extend beyond dedicated storage lanes
 - ii. no individual traffic movement shall have a level of service (LOS) worse than LOS E, or have a degree of saturation higher than 95%
 - iii. movements where buses operate shall have a LOS no worse than LOS D
 - iv. The overall intersection LOS shall be no worse than LOS D.
 - b. a safety review of the Great South Road / State Highway 22 Intersection, Great South Road/Pitt Road Intersection, and Great South Road/Quarry Road Intersection at that time and assessment of the predicted safety risk resulting from the development traffic
 - c. <u>identification of any necessary upgrade to the Great South Road / State</u>
 <u>Highway 22 Intersection, Great South Road/Pitt Road Intersection, and Great South Road/Quarry Road Intersection to accommodate development traffic, and timing of its implementation, to address any adverse effects on the safety and efficiency of the intersection.</u>

A traffic assessment shall be prepared by a suitably qualified and experienced traffic engineer or transportation planner demonstrating compliance with the above must be submitted with any resource consent application for subdivision or development and must utilise traffic data no older than 6 months at the time that a resource consent application is lodged for the development proposal.

Note: Degree(s) of saturation is defined to be the proportion of actual traffic movements using the intersection to the theoretical maximum capacity of the intersection.

<u>Level of Service (LOS) is defined by Auckland Transport guidance or, in its absence, by Austroads guidance.</u>

<u>Traffic generation from parallel, lodged, or consented stages that are not yet operational are to be included in the traffic assessment</u>

Note: Standard iX6.2(1)(c) is not required once Drury South "link road" as shown on 1410.10.2 Drury South Industrial Precinct plan 2, and Sh1 Drury South Interchange is constructed.

IX.6.5 Waihoehoe Road

By 2028 the Waihoehoe rail overbridge and Waihoehoe Road to Fitzgerald Road shall be upgraded to a four lane format with separated walking and cycling facilities. If this upgrade is not in place by this date, no further subdivision or development shall occur until the upgrade is operational.

669. I would recommend that IX6.6 (water quality standard) be modified as follows:

The activity rules and standards in E9 apply to development in Drury Centre precinct with the following amendments:

- a) Reference to high use roads is replaced with reference to all existing, new and upgraded or redeveloped roads
- b) Development of surface car parking areas that are not defined as high contaminant generating car parking areas is a permitted activity provided water quality treatment of run off from impervious surfaces is installed, in accordance with an approved Stormwater Management Plan.
- c) <u>Buildings cannot have exterior materials with exposed surfaces made from</u> zinc, copper and lead.
- 670. The outlook control in the BMU zone (H13.6.9) should be modified so that it is measured from the exterior face of the building. That is, clause (4) should be replaced with the following:

The outlook space must extend from the exterior wall of the principal living room or bedroom and not the windows.

- 671. Retail activities involving stores larger than 450m² should be permitted in sub-precinct B (assuming that the sub-precinct is rezoned as BMU).
- 672. A new standard is required for building setbacks from the North Island Main Trunk Line and in relation to potential vibration effects. The following is proposed (see section 9.17):

IX.6. Operation of NIMT

Purpose: To maintain the operational capacity of the North Island Main Trunk Rail line.

<u>Buildings must be setback at least 5 metres from any boundary which adjoins the NIMT railway line.</u>

Any new buildings or alterations to existing buildings containing an activity sensitive to noise closer than 60m from the boundary of a railway network is designed, constructed and maintained to achieve rail vibration levels not exceeding 0.3mm/s.

673. A standard should address the relationship of sites to public open spaces in terms of fence heights, as follows:

IX.6.X Sites adjoining public open space

Purpose: To enable opportunities for passive surveillance of the open space.

- (1) Where a site adjoins public open space, the following must apply:
- (a) fences or walls or a combination of these structures within the yard adjoining the open space must not exceed either:
- (i) 1.2m in height, measured from the ground level at the boundary; or
- (ii) 1.8m in height provided that any fencing above 1.2m in height is at least 50% visually open.
- 674. To secure the employment potential of the proposed BMU zone I consider it appropriate to replicate the 'no residential activities at ground floor' rule of the Metropolitan Centre zoning in sub-precincts B, C and F:
 - IX.6.X: Residential activities in sub-precincts B, C and F (Business Mixed Use zone)

<u>Purpose: to protect the ground floor of buildings within centres for commercial use; and avoid locating activities that require privacy on the ground floor of buildings.</u>

- (1) Dwellings including units within an integrated residential development must not locate on the ground floor of a building where the dwelling or unit has frontage to public open spaces including streets.
- 675. Infringement of the standard would trigger a restricted discretionary activity application.
- 676. To manage the potential effects of the retail component of the new centre on the amenity, social and economic wellbeing of other centres in the southern sector, the following retail staging rule is proposed:

1X.6.X Retail floorspace staging

<u>Purpose: to manage potential adverse effects on the amenity and social and economic well being of other centres from the fast growth of Drury Centre.</u>

Prior to 2033 retail floorspace (GFA) shall not exceed 20,000 sqm.

677. The riparian yard standards of the BMU and BMC zones need to be amended so the required set back is 20m from the bank of the main stem of the Fitzgerald Stream (as to be identified on the Precinct Plan).

Assessment Matters

- 678. Additional and modified assessment matters are needed where new standards are introduced. I have recommended the following.
- 679. In relation to the expanded water quality standard IX.6.6:

- The contaminant loads likely to be generated by the impervious surface.
- How the location and design of stormwater treatment assets reduces their operating costs.
- The consolidation and community scale of stormwater treatment assets.
- <u>The location of stormwater treatment assets where they will be most effective in reducing contaminants.</u>
- 680. In relation to the NIMT, arterial roads and noise sensitive activities:
 - (a) The size, nature and location of the buildings on the site and surrounding sites.
 (b) The extent to which the safety and efficiency of railway and/or regional road operations will be adversely affected.
- 681. Assessment matters would then cover the following (being in addition to those in E25.8.3):

Noise Sensitive Activities within 100m of a Rail Network Boundary and Buildings within 5m of the rail corridor:

- (a) The character of and degree of amenity provided by the existing environment and proposed activity.
- (b) The reverse sensitivity effects on the railway corridor and the extent to which mitigation measures will not constrain their ongoing operation, maintenance and upgrade.
- (c) Topographical, building features or ground conditions which will mitigate vibration impacts.

Noise sensitive activities and arterial roads

<u>Effects on the operation of the NIMT and the amenity of nearby noise sensitive activities.</u>

- 682. In addition to the matters specified in the BMC and BMU zones, infringement of the riparian yard standard should include:
 - Effects on floodplain management taking into account maximum probable development, climate change and the roughness coefficient of existing and planned planting.
 - Effects on stream bank stability taking into account the cohesiveness of the soil and steepness of the bank angle.
 - Effects on bio diversity from the inability to provide for any proposed paths, cycleways, infrastructure and facilities outside the 10m wide strip of riparian planting.
- 683. For dwellings on the ground floor in the BMC or BMU zones:
 - Whether an active ground floor use is needed to activate street environment
 - Whether the residential activity is located on a minor street
 - Whether the ground floor space is designed as a flexible space that could accommodate a separate non-residential activity.

684. For all development in the Precinct in relation to relationships with open space (that is, in all sub precincts):

Whether the height of retaining walls to streets and public open spaces are minimised where practicable. Where retaining walls are required, they should be stepped and landscaped.

Whether the height and form of buildings provides for four hours of sunlight access to over 75% of the net site area of publicly accessible open spaces greater than 3,000m², between the hours of 10am-4pm during the Equinox (22 September). This may require the height of buildings to be reduced below that allowed by Rule IX.6.1 Building Height.

Zoning / Precinct Plans

- 685. Based on the technical reviews, submissions and my analysis, I consider the zoning strategy and proposed Precinct Plan need to be modified to better give effect to the objectives and policies. The range of matters that need to be addressed cover:
 - Amended train station location the train station symbol should be shifted north to reflect SGA / KiwiRail's position
 - Remove sub-precinct D from the plan change
 - The BMC zoning should cover sub-precincts A and E, but not that part of Area A south-east of Drury Boulevard. This creates a centre based on the train station and bounded by the Boulevard.
 - Sub precinct B is more appropriately zoned BMU zone (reflecting the large format approach for this area and distance from the train station). This will require an amendment to the activity classification for retail in this sub-precinct to make large format stores a permitted activity
 - Sub precinct F should have a height limit of 32.5m to be consistent with subprecinct C – not 26m
 - Sub precinct B could have a taller height limit, given is its interface with the
 motorway on the west, the Metropolitan Centre zoning to the north and the
 intermediary role of sub-precinct F to the south and east. In my opinion, a 50m
 height limit would be appropriate. This would still maintain the visual primacy of
 Sub-precinct A
 - Streams (permanent and intermittent) should be shown indicatively on the Precinct Plan – with final alignment and classification determined at consent stage.
 - The green corridor concept should be notated along the Hingaia Stream and the main stem of the Fitzgerald Steam (involving riparian planting, walk/cycle, open space etc)
 - Additional neighbourhood open space areas should be shown to the north and south, along with a civic plaza (indicative only)
 - The width of open space land along Hingaia Stream should be reduced to 20m, unless it is clear that the land outside the 20m esplanade will be privately owned, but accessible to the public.
 - A possible new station plaza should be identified noting that this will need to be delivered early in the development process.
 - Extend the key retail street so it links to the revised train station location (and plaza).
 - Delete Access A from SH1. The associated east-west route should be aligned with the train station.

 A Commercial Frontage Control should be identified for Drury Boulevard and the two new, east-west Collector Roads, with the note that the frontage control will 'shift' with the road corridor.

Special Information Requirements

- 686. I consider additions need to be made to the special information requirements of IX.9 to fill identified information gaps and ensure the RPS is given effect to. These should cover:
 - An assessment of historic heritage prior to any land disturbance, riparian planting or demolition of pre-1900s buildings.
 - An assessment of whether any trees met the criteria for Notable Trees under B4.5.2(1).
 - In relation to the risk assessment required by Policy E36.3.32, a high-level (scoping) assessment of liquefaction and consolidation risks prior to subdivision that identifies the nature and magnitude for these constraints and implications for development.
 - Wetland and streams to be accurately surveyed and classified.

11 CONCLUSIONS

- 687. The plan change request (based on the technical reviews and analysis of submissions) raises a number of potential conflicts with national and regional policies relating to land use and infrastructure integration, as set out in relevant planning documents.
- 688. In terms of capacity for growth, the plan change does align with the National Policy Statement on Urban Development in relation to providing for expected demands for business and to a lesser extent, housing. The AUP RPS also supports the provision of additional capacity. However, that support needs to be seen within the context of the substantial residential capacity already available through operative AUP zonings, as well as a range of rezoning proposals that are underway. The location of the capacity to be provided (as part of a new large centre with rail station access) is supported.
- 689. In my view there is a lack of alignment in the Precinct provisions with RPS objectives and policies that seek a close relationship between urban development and transport investment, particularly public transport. For example:
 - RPS Objective B2.2.1(1) 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;
 - RPS Objective B2.2.1 (5) the development of land within the Rural Urban Boundary is integrated with the provision of appropriate infrastructure.
 - RPS Policy B2.2.2. (7) Enable rezoning of land within the Rural Urban Boundary 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;

- RPS Policy B3.2.3 (2) Encourage subdivision, use and development to be designed to promote the health, safety and well-being of people and communities by all of the following: (a) providing access for people of all ages and abilities; (b) enabling walking, cycling and public transport and minimising vehicle movements; and (c) minimising the adverse effects of discharges of contaminants from land use activities (including transport effects) and subdivision.
- NPS-UD Objective 6 states that local authority decisions on urban development that affect urban environments are: integrated with infrastructure planning and funding decisions; and strategic over the medium term and long term; and responsive, particularly in relation to proposals that would supply significant development capacity.
- NPS-UD Policy 1 refers to well functioning urban environments. These are urban environments that, as a minimum, have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport.
- 690. It is my assessment that at a strategy level, the plan change will assist with meeting business and housing demands in the wider south Auckland area in a sustainable way through the proposed new Drury Centre and train station. In particular is the employment and service activities to be provided which will assist with localising trips. However successful achievement of regional and national policy seeking integration of development with infrastructure is dependent upon the development being co-ordinated with access to public transport services (including easy and direct access to the train station and future bus services that can connect into the regional network along Great South Road). The means to ensure such integration has elicited a wide range of submissions from local and central government agencies. Auckland Council and Auckland Transport have expressed significant concern over the funding and delivery of a number of roading projects that will be important to transport outcomes.
- 691. These concerns are understandable, but since the plan change request was lodged, recent Council planning documents like the draft Long Term Plan and draft Regional Land Transport Strategy identify the wider Drury area as being an important focus area for investment. In my opinion, the uncertainties over the delivery of roading projects (including Mill Road) can be mitigated to a degree by a strong focus on development supporting the use of public transport (given that the NZUP and ATAP Update both commit substantial sums to expanding rail services between Papakura and Pukekohe).
- 692. In conjunction with improved access to public transport, the quality of the public realm will be important in delivering on objectives relating to a quality, compact urban environment. The new Metropolitan Centre and rail station mean that the density of development needs to be increased to meet the expectations of the National Policy Statement on Urban Development. Hand-in-hand with an increase in density needs to come a step up in the extent and quality of the public realm. This can be achieved through retention of stream corridors, more detail on future open spaces and attention to road design that reflects the varied urban contexts that will be present, as well as high quality building design that reinforces the street environment, particularly along important streets.

12 RECOMMENDATIONS

- 693. That, the Hearing Commissioners accept or reject submissions (and associated further submissions) as outlined in this report.
- 694. That, as a result of the assessment of the plan change request and recommendations on the submissions, the Auckland Unitary Plan be amended by inclusion of PPC48, but as modified to address the matters set out in Section 10 of this report.
- 695. If the matters set out in this report cannot be appropriately resolved, then I would recommend that the plan change request be declined.

13 SIGNATORIES

	Name and title of signatories
Authors	David Mead, Consultant Planner
Reviewer / Approver	Craig Cairncross Team Leader Central South Plans and Places/Chief Planning Office

APPENDIX 1

PLAN CHANGE 48 (DRURY CENTRE), AS NOTIFIED

This appendix has not been re-produced in this agenda, but can be found at:

https://www.aucklandcouncil.govt.nz/UnitaryPlanDocuments/appendix-1-drury-centre-plan-change.pdf

APPENDIX 2

SECTION 32 REPORT AND TECHNICAL REPORTS

This appendix has not been re-produced in this agenda, but can be found at:

https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/ourplans-strategies/unitary-plan/auckland-unitary-planmodifications/Pages/details.aspx?UnitaryPlanID=77

APPENDIX 3

REQUESTS FOR FURTHER INFORMATION AND RESPONSES

This appendix has not been re-produced in this agenda, but can be found at:

https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/ourplans-strategies/unitary-plan/auckland-unitary-planmodifications/Pages/details.aspx?UnitaryPlanID=77

APPENDIX 4 TECHNICAL PEER REVIEW REPORTS

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

03/03/2021

To: David Mead, Processing Planner

From: Jason Smith, Consultant Ecologist to Auckland Council

Subject: Private Plan Change – PC48 Drury Centre, Drury – Ecology Assessment

1.0 Introduction

1.1 I have undertaken a review of the Private Plan Change 48 (PPC48), on behalf of Auckland Council in relation to ecological effects, both freshwater and terrestrial.

- 1.2 I hold the qualifications of a BSc and BSc (Hons.) from the University of Auckland.
- 1.3 I have over nine years of professional experience in the fields of ecological surveys, environmental impact assessments, environmental monitoring, water quality, as well as, in providing technical peer-reviews under the Resource Management Act (RMA) including resource consents, notice of requirements, outline plan of works and plan changes.
- 1.4 I am accredited under The Ministry for the Environments Making Good Decisions Programme.
- 1.5 I am a member of the New Zealand Freshwater Science Society and the Engineering NZ Rivers Group.
- 1.6 I have previously provided several reviews of the application material, including:
 - A completeness and adequacy review of the application material as it was initially lodged.
 - A review of the Applicants response's to Council's Further Information Request.
 - A review of the Applicants response's to Council's second Further Information Request.
- 1.7 In forming this technical assessment, the following documents have been reviewed and assessed:

Application Material (As Notified):

- Kiwi Property No. 2 Limited Private Plan Change Request S32 Assessment Report, report prepared by Barker & Associates, August 2020 Revision. Including:
 - Appendix 1: Drury Centre Precinct.
 - Appendix 2: Plan Change Zoning Map.
 - Appendix 6: Auckland Unitary Plan (operative in Part) Objectives and Policies Assessment, prepared by Barkers & Associates, undated.
 - Appendix 7: Drury Centre Private Plan Change Request Urban Design Statement, report prepared by Barkers & Associates dated 12 December 2019.
 - Appendix 11: Drury Metropolitan Centre Assessment of Ecological Effects, report prepared by Tonkin & Taylor, dated September 2019.
 - Appendix 12: Drury East Stormwater Management Plan Drury Centre and Drury East Plan Change Areas, report prepared by Tonkin & Taylor, dated June 2020, Revision A.
 - Appendix 13: Infrastructure Report for Drury Metropolitan Centre, report prepared by Bluebarn Consulting Engineers, dated September 2019, Revision 4.
 - Appendix 25: National Policy Statement for Freshwater Management and Auckland Unitary Plan Comparative Analysis.

Clause 23 Response:

- Drury Centre Plan Change: Second RFI Response, memorandum prepared by Barker & Associates, dated 28 April 2020.
- Drury East Plan Changes Ecology Response, memorandum prepared by Justine Quinn, dated 24 March 2020.
- Drury Centre Plan Change: Planning RFI Response, memorandum prepared by Barker & Associates, dated 25 March 2020.

- 1.8 I have also reviewed the submissions and the further submissions have been received.
- 1.9 This technical assessment considers PPC48 from an ecological perspective (both terrestrial and freshwater) as it was notified, along with the Applicant's clause 23 response information and the submissions received to date.
- 1.10 Stormwater management, including stormwater quality and quantity related effects, have are assessed by others under separate cover.

2.0 Key Ecology Issues

This section provides an overview of the key ecological concerns that arise from the review of the application material, along with the relief sought and supporting cross-references back to the Regional Policy Statement (RPS) in the Auckland Unitary Plan (AUP), and the National Policy Statement for Freshwater Management (NPS:FM). Note that the analysis in section 2 is made based on the application material as it was notified and does not address the issues and relief sought through the Applicant's own submission (which is assessed in section 3).

Current ecological features of note include wetlands, as well as, permanent and intermittent streams.

2.1 Precinct Map

- 2.1.1 Council's clause 23 request questioned whether the Waihoehoe Precinct should be updated with a precinct map that shows all freshwater watercourses (wetlands, permanent and intermittent streams).
- 2.1.2 The Applicant's response was unambiguous, it is not proposed to add any watercourses to the precinct plans.
- 2.1.3 The reasoning provided was that this lacks spatial accuracy and there is no resource management reasons for taking a place-specific approach to this matter.
- 2.1.4 Mapping of freshwater watercourse(s) and the inclusion of those watercourses within Precinct maps is now considered standard practice. The mapping of freshwater watercourses provides guidance for future developments of both opportunities (such as the enhancement of freshwater systems as sought by RPS Objective B7.3.1(1)) and constraints for developments, to respond to.
- 2.1.5 The NPS:FM 2020 Clauses 3.22 Natural Inland Wetlands, 3.23 Mapping and Monitoring Natural Inland Wetlands and 3.24 Rivers arguably increases the need for structure and precinct plans to identify and accurately map all freshwater watercourses.
- 2.1.6 NPS:FM Clauses 3.22 3.24 contain provisions for Regional Council's that relate to the mapping and monitoring of freshwater watercourses. The starting point for this work would be the accurate identification and mapping of such watercourses.
- 2.1.7 The plan change process provides an opportunity for this work to be undertaken and incorporated into the regional plan, in advance of the change of land use and the pressures that may impact on the ecological values (such as water quality and habitat provision), as well as, the spatial extent of these watercourses.
- 2.1.8 It is noted that in mapping the freshwater watercourses presented in the EcIA, the Applicant's ecologist has not had access to all of the land within the area covered by PPC48.
- 2.1.9 Concern is therefore expressed as to the spatial accuracy of any watercourse classifications and delineations which could translate to any mapping, particularly the length of intermittent streams and delineation of wetlands (as assessed further below).
- 2.1.10 This technical assessment adopts the position that the precinct map should include all freshwater watercourse (permanent and intermittent streams, as well as, wetlands) based on the best available information with a footnote that clarifies the level of assessment undertaken and the need for site-specific watercourse classification and

delineation assessments to be undertaken and accompany any future resource consent application.

2.2 Consistency with the AUP

- 2.2.1 The proposed Drury Centre Policy 19 seeks to recognise that there may be no practicable alternative to streamworks, including reclamation, where they are required to construct critical infrastructure.
- 2.2.2 Policies E3.3 (13) and E3.3 (18) of the AUP already provides for reclamation, as a non-complying activity, when there is a functional need for infrastructure to be in that location:
 - (13) Avoid the reclamation and drainage of the bed of lakes, rivers, streams and wetlands, including any extension to existing reclamations or drained areas unless all of the following apply:
 - (a) there is <u>no practicable alternative</u> method for undertaking the activity outside the lake, river, stream or wetland;
 - (b) for lakes, permanent rivers and streams, and wetlands the activity is required for any of the following:
 - (i) as part of an activity designed to restore or enhance the natural values of any lake, river, stream or wetland, any adjacent area of indigenous vegetation or habitats of indigenous fauna:
 - (ii) for the operation, use, maintenance, repair, development or upgrade of infrastructure; or
 - (iii) to undertake mineral extraction activities; and
 - (c) the activity avoids significant adverse effects and avoids, remedies or mitigates other adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai.

Rivers

(18) The loss of river extent and values is avoided, unless the council is satisfied: (a) that there is a <u>functional need</u> for the activity in that location; and (b) the effects of the activity are managed by applying the effects management hierarchy.

[emphasis added]

- 2.2.3 Given Policy E3.3(13), it is not clear what resource management purpose would be served by the addition of Policy 19 or why a place-specific approach to this issue is necessary.
- 2.2.4 It is noted that that Policy 19 is consistent with, and not contrary to, the existing policy direction; although may add to confusion and inconsistent interpretations at the resource consenting stage.
- 2.2.5 The provisions of the Drury Centre Precinct (policy's and standards) relate only to intermittent and permanent streams and, as written, do not apply to wetlands.
- 2.2.6 Wetlands are subject statutory provisions of the NPS:FM, AUP and the non-statutory provisions of the Drury-Opāheke Structure Plan that seek the maintenance and enhancement of the ecological values of freshwater watercourses.
- 2.2.7 The Applicant's response, that wetlands are dynamic and complex environments and therefore, unlike streams, technical analysis, including soil sampling, is required to determine the edge of a wetland, is technically correct.
- 2.2.8 However, I disagree with the Applicant's conclusion that, there is not enough certainty to apply the riparian planting rule to wetlands as a permitted activity standard, as this confidence can be achieved following standard methodologies to delineate the edge of a wetland.
- 2.2.9 The buffering of the wetland with riparian vegetation would enhance ecological functions, similar to that of permanent and intermittent streams; which is proposed and would be consistent with the RPS Objective B7.2.1(2); and Policies B7.3.1(1), B7.3.2(2, 3, 5 and 6).

2.3 Drury-Opāheke Structure Plan

- 2.3.1 The Drury-Opāheke Structure Plan envisions the restoration of 20 m riparian margins along streams, although it also notes that the actual width provided would be subject to more detailed investigation.
- 2.3.2 The Drury Centre Precinct includes a permitted activity standard for a minimum of 10 m of riparian restoration along streams, without any corresponding detailed investigation or assessment of the effect of the reduced riparian planting width.
- 2.3.3 The Drury-Opāheke Structure Plan notes that protection of the riparian planting is envisioned through esplanade reserves or other methods. No mention of protection measures is contained within the application material.
- 2.3.4 The restoration of 20 m riparian margins, provision of the Blue-Green Network and protection in perpetuity align with RPS Objectives B7.2.1(2), and Policies B7.3.1(1 and 3).
- 2.3.5 The Applicant's c23 response provides the reasoning for 10 m planted riparian margins still being their preferred option.
- 2.3.6 The Applicant's response is factually accurate, but limited in scope.
- 2.3.7 The ecological functions provided by riparian vegetation including: the filtration of contaminants, habitat provision, organic matter input and supports connectivity and buffering functions, as well as influencing water quality correspondingly increase with the width of the riparian vegetation.
- 2.3.8 Furthermore, 20 m riparian buffers are thought to be self-sustaining for indigenous vegetation, with buffers of lesser extent being subject to a greater degree of 'edge effects' leading to an increase prevalence of weed species and associated increase in maintenance activities required to establish and maintain a self-supporting system.
- 2.3.9 The provision of a 20 m riparian margin would also support the implementation of Policy 9, as notified, in the Drury Centre Precinct.
- 2.3.10 In summary the full 20 m planted riparian margin, protection measures for riparian planting, or updates to reflect the Drury-Opāheke Structure Plan Blue-Green Network are not proposed.
- 2.3.11 The change in land use is likely to be permanent and it is considered that the measures proposed to address the effects from the change in land use, including the riparian planting, should therefore also be permanent (i.e. secured in perpetuity).
- 2.3.12 Protection in perpetuity through a suitable legal mechanism would have the additional benefit of also securing the gains in the ecological function derived from the riparian vegetation.
- 2.3.13 It not clear what weight Council places on the Drury-Opāheke Structure Plan and if Council would settle for a lesser standard than that of the Drury-Opāheke Structure Plan.
- 2.3.14 For the avoidance of doubt, from an ecological perspective, consistency with the Drury-Opāheke Structure Plan is the preferred outcome.
- 2.3.15 Support for this position can be found in the Regional Policy Statement, Chapter B7 Natural Resources: Objectives: B7.2.1(2), B7.3.1; Polices B7.3.2(1 6). The provisions of B7 do not specify 20 m over 10 m riparian margin; but do support the greater degree of enhancement of greater riparian planting margin.
- 2.3.16 By way of relief this assessment seeks that the width of riparian planting around freshwater watercourses be widened to 20 m around wetlands and 20 m either side of permanent and intermittent watercourses, all riparian planting be protected by a suitable legal mechanism, as well as, that these amendments be embedded into the Precinct Plan.
- 2.3.17 For the avoidance of doubt, there is limited scope for low impact activities such as boardwalks and cycle-paths within the 20 m riparian margin; however this will need to consider site specific-ecological values at a level of detail that has not yet been provided.

3 Submissions

- 3.1 PPC48 was publicly notified and thirty-five submissions were received.
- 3.2 Six submissions are relevant to the matters considered within this technical assessment.
- 3.3 A broad theme throughout the submissions as that: the adverse effects of urban development on the natural environment, including the Manukau Harbour, Hingaia Stream and its tributaries can be effectively managed, and key natural features within the Plan Change area will be maintained and enhanced.
- 3.4 The more substantive issues, not otherwise considered within this technical assessment, that require further assessment are summarised and assessed in the table below.

Submission Number	Submitter's Name	Issues Raised	Relief Sought (From Submitter)	Technical Assessment
15	Kiwi	5: Stream reclamation	Insert:	The applicant seeks to add streamworks
	Property	to facilitate the		provisions to the Drury Centre Precinct to
		development of Drury	IX.3 Policies	provide a greater degree of certainty in
		Boulevard	:	relation to the construction of Drury
			(19) In addition to the matters in Policy E.3.3(13):	Boulevard.
			(a) provide for stream works including culverting diversion	From an ecological perspective I am not
			and/or reclamation, required to construct the Drury	opposed to including provisions within the
			Boulevard, where it can be demonstrated that there is no	PPC to enable specific activities that accord
			practicable alternative, and where there is a functional	with the framework of the NPS:FM and
			need to construct it in the location generally shown on	AUP; specifically, when the quantum is
			Precinct Plan 1.	scoped as is the case here.
			(b) enable the planted riparian margins of identified streams	
			to contribute to offsetting the effects of any stream works	However, concern is expressed if the level
			assessed under Policy (19)(a).	of certainty sought by the Applicant is
				appropriate given the high-level nature of
			Table IX.4.1 Activity table	the plan change and the lack of design
			:	details.
			A21) Stream works including reclamation and diversion	
			within Stream A required to construct the Drury	Once the design is finalised it could be that
			Boulevard as shown on Precinct Plan X which comply	the quantum of the impact (such as the
			with IX6.9, and which are not provided for as a permitted	length of reclamation/diversion) could
			activity under Chapter E3. With a correspondence	change. If so, the corresponding effects
			activity Status of Discretionary	management package would need to be
				yet this would app
			IX6.9 Stream works for the Drury Boulevard	prevented due to the prescription
			Purpose:	embedded within the precinct.
			 To provide for a limited extent of stream works to construct 	
			the Drury Boulevard to be assessed as a discretionary	It is considered that the AUP contains
			activity.	sufficient provision to address these issues
			 Where offsetting is determined to be appropriate in 	through normal resource consenting.
			accordance with the effects management hierarchy and	
			Policy E3.3(4), enable the planted riparian margins of	It is also noted that the activity status of
			identified streams to contribute towards it.	ary would apply
				permitted of restricted discretionary

			 (1) The extent of stream works to achieve the construction of Drury Boulevard shall be limited to diversion of Stream A or 60m of reclamation along Stream A as identified on IX10.4 Precinct Plan 4. (2) For the purpose of calculating the offset required for stream works provided for under IX7.1(1) the SEV and ECR methods will be used. (3) The area of riparian planting identified on IX10.4 Precinct Plan 4 will count towards the offset required under IX7.1(2). 	activities, including E3.4.1 (A2 – Conservation Planting; and A34 – Erosion Control Structures less than 30m).
21 and 35	Ngati Te Ata Waiohua and Ngati Tamaoho	Wai (Water): PPC48 does not give effect to Te Mana o te Wai and risks damaging the mauri of wai within the project area. This includes through PPC48's proposed treatment of waterways and its proposed stormwater and wastewater solutions. Native Trees and Plants: The Submitter supports whakapapa sourced trees and plants: within the PPC48 site	Natural and cultural landscaping accounted for in the project design. A minimum of 20 metre riparian margin for all waterways especially those to contain walkways / cycleways. Park edge design adjacent to all waterways. Native trees and plants only within the precinct. Ridgelines hilltops and wetlands protected.	From an ecological perspective, with one exception, the issues raised, and the relief sought is supported. The exclusive use of native trees and plants within the precinct, whilst generally preferred, may not always be the most practicable option. Exotic vegetation may be preferred, in specific circumstances such as in addressing the effects on natural heritage values; or to provide relatively more rapid canopy cover, bank stabilisation or erosion control. I do not therefore think the exclusive use of native vegetation should be specified, and the use of 'should' in IX.9(1) is appropriate, being directive but not absolute.
22	Auckland Council ¹	The precinct is not fully consistent with the objectives and policies of the National Policy	Include more policies and rules to give full effect to the direction in the NPS-FM, including but not limited to Te mana o te wai.	This technical assessment is supportive of provisions within the PPC to give effect to Te Mana o Te Wai. No further assessment can be made in this regard to this submission point as it lacks specifity on the

¹ Submitter 34 also raised a number of points regarding stormwater management that relate to water quality that are not specifically covered by this technical assessment. From an ecological perspective the inclusion of further provisions to ensure the effects of stormwater is generally supported.

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Statement for Freshwater Management 2020 (NPS-FM).		additions sought. Solely increasing the number of objectives and policies within the Precinct alone is not considered not give effect to Te Mana o Te Wai. The mandatory objectives and polices are already included within the NPS:FM and AUP.
Policy IX.3 (19) is unnecessary.	It is better to rely on the existing AUP E3 framework and the Resource Management (National Environmental Standards for Freshwater) Regulations 2020. Policy E3.3(13) provides an adequate policy framework for where reclamation may be sought for development of infrastructure	From an ecological perspective the amendment is supported and aligns with the comments in s2.
Cross-referencing in standard IX.6.4(1) to Appendix 15 of the AUP will assist in ensuring good outcomes.	Retain and amend IX.6.4(1) by including a cross reference to the matters in Appendix 15.6(3)(b-f) and (4) of the Auckland Unitary Plan.	It is noted the riparian planting standards, references and requirements varies across other precincts in the AUP. From an ecological perspective the submission point is supported; however, it is considered that this could be simplified by:
		 making the reference to Appendix 16 of the AUP, which contains similar provisions. requiring that the planting plan be prepared and implemented by a suitably qualified and experienced person.
Extended 20 m riparian building setbacks are appropriate on permanent streams	Replace standard IX.6.3(2) with a new standard and consequential amendments to effect that the riparian yards set for buildings	From an ecological perspective the amendment is supported and aligns with the comments in s2 regarding riparian margins.
Additional matters of discretion are requested for assessing infringements of	Add the following matters of discretion to IX.8.1(3):(b) Effects on floodplain management taking into account maximum probable development, climate change and the roughness coefficient of existing and planned planting.	From an ecological perspective the amendments are supported.

standard IX.6.3 referred to above.	(c) Effects on stream bank stability taking into account the cohesiveness of the soil and steepness of the bank angle. (d) Effects on the ability to provide for any proposed paths, cycleways, infrastructure and facilities outside the 10m wide strip of riparian planting. Add related assessment criteria at IX.8.2(3).	
The council has found that maintenance and enhancement of permanent and intermittent streams is more likely to be achieved on development if indicative permanent and intermittent streams are shown on precinct plans.	Include indicative permanent and intermittent streams and wetlands on the precinct plan.	From an ecological perspective the amendments are supported, as assessed in \$2.
Including the blue- green linkages from urban concept planning can help reinforce the importance of	Include the indicative blue-green corridor within the precinct plan based on the urban concept in the Urban Design Assessment.	From an ecological perspective the submission point is supported, as assessed in s2.
It is important to focus on improving biodiversity as distinct from just planting. It is also important to provide for ecological corridors. A new policy and amendments to proposed policy IX.3(9) are proposed	Support improvements to water quality, and habitat and biodiversity, including by providing planting on the riparian margins of permanent and intermittent streams. All relevant overlay, Auckland-wide and zone policies apply in this precinct in addition to those specified above. Enable a network of open space, riparian corridors and park edge roads that provides for: • potential ecological corridors along streams between Te-Manukanuka-O-Hoturoa (Manukau Harbour) and the Hunua; • improvement of freshwater and coastal water systems; and	From an ecological perspective the submission point is supported.

	to address thes matters.	to address these • a safe and attractive walking and cycling network. All relevant overlay, Auckland-wide and zone policies apply in this precinct in addition to those specified above.	
		Retain and amend IX.6.3 (1) by including a cross reference to the matters in Appendix 15.6(3)(b-f) and (4) of the Auckland Unitary Plan.	
	The proposed open space along the margins of the Hingaia Stream exceeds the standard 20m esplanade reserve width.	The proposed open Reduce the open space zoning along Hingaia Stream to a space along the 20m wide strip adjoining the stream. An argins of the Alream Stream to a space zoning along Hingaia Stream to a space along the stream to a space strip adjoining the stream. Stream to a space strip adjoining the stream.	This technical assessment is <u>neutral</u> on this submission point. There is no provision that would require that the entire open space / esplanade reserve be planted; however the preclusion of the opportunity to restore riparian margins (specifically if this width was reduced to less than 20 m) would not be supported.

4 Further Submissions

- 4.1 Ten further submissions were received, five of which are relevant to the matters considered within this technical assessment.
- 4.2 The broad themes of the further submissions are similar to those in the original submissions.
- 4.3 From an ecological perspective, no new concerns are raised that have not otherwise been addressed in section 2 and 3 of this technical assessment. For the avoidance of doubt, this technical assessment:
 - 4.3.1 Notes concerns regarding the provision of streamworks-specific policies and activities as currently proposed.
 - 4.3.2 Supports the provision of an increased riparian yard width for all permanent streams, and considers that this should be applied to intermittent streams, as this would facilitate a greater width of riparian planting.

5 Conclusions and Recommendations

- 5.1 This technical assessment has reviewed and assessed PPC48 from an ecological perspective. Generally, the application material has adequately assessed the effects on the environment related to ecological effects and provided measures to address those effects that are appropriate. Notwithstanding the assessment above, concern is expressed over:
 - freshwater watercourses to be shown on the precinct map.
 - restoration of 20 m riparian margins.
 - alignment with the provisions of the AUP.
 - the provision of the Drury-Opāheke Structure Plan Blue-Green Network.
 - protection of future riparian planting by a suitable legal mechanism.
 - the specification of native plantings.
 - the detail to be included within the riparian planting standard.
- 5.2 Where necessary, relief sought to strengthen the provisions of PPC48 and resolve the issues noted above, have been provided within this technical assessment. With the inclusion of the relief sought, PPC48 could be supported from an ecological perspective.

PROPERTY ECONOMICS



DRURY EAST PC48

ECONOMIC REVIEW

Client: Auckland Council

Project No: 51847

Date: May 2021



SCHEDULE

Code	Date	Information / Comments	Project Leader
51847.6	May 2021	Report	Tim Heath / Phil Osborne

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1. INTRODUCTION

Property Economics has been engaged by Auckland Council to undertake a review of the economic assessments submitted as part of the Kiwi Property Holdings No.2 Limited Private Plan Change 48 (PC48) to the Auckland Unitary Plan (Operative in Part) which proposes to establish a new Drury Centre precinct enabling the development of a large new commercial centre at Drury.

This includes a review of the original economic assessment by Market Economics (**ME**) dated March 2020, a Pukekohe Centre Impact Assessment by ME dated March 2020, and a RFI response by ME to economic matters raised in the original economic report dated April 2020. Additionally, the review will address economic effects matters raised in submissions on PC48.

This review is not intended to provide an exhaustive outline of every economic matter raised in the ME reports, but traverse matters where residual economic issues remain and form an economic position on PC48 to assist the reporting planner in framing a formal position on PC48 in their s42A report.

As an overarching general comment, Property Economics has a level of comfort around the general thrust of PC48 and its desire to enable the development of a large (Metropolitan Centre) in Drury based on its own economic and future commercial land requirement assessments completed in 2018. This analysis represented an important base document in the development of Council's Drury-Opaheke and Pukekohe-Paerata Structure Plans.

As such any identified economic matters in this review are more about fine tuning rather than being a fundamental issue that threatens PC48 as a proposition in the round.



At a high-level Property Economics does have some issues with the methodological approach taken by ME and some of the activities that are included in the demand profile for the new Drury Centre, however these represent an alternative economic approach, and are not considered fatal to the economic analysis nor would alter the conclusions Property Economics reach.

There were five more substantive economic issues where additional information and clarification was sought to better understand the potential economic effects of PC48 based on Property Economics' initial evaluation in early 2020. These were:

- 1. The potential impacts on the Pukekohe Town Centre;
- 2. The status of the Papakura Metropolitan Centre with the proposed Drury Centre in the market:
- 3. The assumptions around infrastructure timing (Mill Road, train station location and timing, park'n ride facility, motorway interchange upgrade, etc.) and potential effects on the timing of demand for the development of the Drury Centre;
- 4. Proposed employment densities in consideration of Transit Oriented Development (TOD) expectations of Council; and
- 5. Whether any staging of the proposed Drury Centre is required to ensure any potential retail impacts (on Papakura and Pukekohe in particular) are appropriately managed.

Pukekohe Town Centre

ME prepared an additional separate report on potential impacts on the Pukekohe Town Centre. This report estimated that if the Drury Centre opened in 2023 it would have an estimated impact of -7.5% on the core retail and hospitality sectors in Pukekohe. Moving forward from 2023 percentage impacts would diminish largely as a result of modelled growth in the market.

The ME impact assessment was undertaken prior to the (unforeseen) COVID-19 pandemic emerging and its subsequent effects on retail centres. The 'state' or health of the Pukekohe Town Centre, like many retail centres across NZ, is more 'fragile' now than when ME undertook its analysis.

In Property Economics opinion, the ME impact assessment of -7.5% impact if the Drury Centre was fully developed by 2023 as proposed was conservative pre-COVID given the size of the proposed Drury Centre, its comprehensive breadth of offer, more modern retail environment and superior shopping experience, and its close proximity to the Pukekohe market. It is also highly questionable whether the Farmers department store (anchor retail store for Pukekohe) would remain open. In fact, the same market the Pukekohe Town Centre relies on is in the core economic catchment of the proposed Drury Centre. The updated post-COVID settings would indicate the potential impacts are likely to be more material than that assessed in the ME report.



There are a couple of important considerations offsetting the likely extent of adverse impacts on the Pukekohe Town Centre. These include over the medium-long term a robust level of residential growth anticipated for the Pukekohe market (as identified in the Pukekohe-Paerata Structure Plan) and local growth projections, and the fact the Pukekohe market loses a significant level of annual retail spend to other larger centres in Auckland currently. This would suggest some 'higher order' comparison shopping retail spend would be diverted from other centres in Auckland rather than solely from Pukekohe.

The anticipated growth offsetting impacts is something that will take time given rezoning processes, development lead times and the level of servicing infrastructure required before meaningful growth can occur in and around Pukekohe. However, the full development of the proposed Drury Centre by 2023 is implausible, and nothing consequential is likely to be developed until 2033 at the earliest in Property Economics opinion.

By way of example, Property Economics worked with Todd Property on the new Ormiston Town Centre when originally initiated about a decade ago (2011/12), and the main component of the Ormiston Town Centre has only just recently opened (2021). The reality around development lead times and retailer commitment to leases suggests the residential market around Drury will have to build-up significantly first before national banner brands will commit to leasing tenancies, suggesting a more realistic timeframe for the Drury Centre starting is 2033 in Property Economics view.

A 2033 timeframe means Pukekohe Town Centre will have time to recover from the more immediate COVID impacts and its market experience population growth in its core catchment, particularly in Paerata Rise. However, the reality is no-one can predict that 'state', health or offer of the Pukekohe Town Centre in 2033 (or beyond), therefore the impacts on this receiving environment is unknown until the Drury Centre (whatever form or composition that may be in the future) is materially advanced. To establish consequential impacts on the Pukekohe Town Centre as a result of the Drury Centre is simply not possible at this point in time.

As such, Property Economics suggest a staging regime is considered to ensure the Drury Centre is not advanced to a scale that could potentially adversely impact Pukekohe Town Centre from successfully playing its envisaged role and function in the Unitary Plan. This approach would better align centre growth with growth in market demand. The 'unknowns' at this point are considered too great to enable full development of the Drury Centre at any point in the future and given the close proximity of Pukekohe and Papakura centres.

Papakura Metropolitan Centre

The ME RFI response suggests that the Papakura Town Centre, while having a breadth of employment and retail activities, does not currently perform its Metropolitan Centre role and function like other Metropolitan Centres in Auckland. ME's analysis indicates the centre's more isolated location, limited expansion potential, and smaller population base (relative to other Metropolitan Centres in the city) means it is highly unlikely to play its envisaged Unitary Plan role and function in the future. ME view the Papakura Centre playing more of a town centre role



and function at present. However, this does mean by default the Papakura Town Centre will become a town centre with the Drury Centre in the market, which is a lower status than it currently holds in the Unitary Plan.

Property Economics agrees with this synopsis. The reality is the Papakura Centre was the main commercial centre in the previous Papakura District Council territorial authority, but since the Super City amalgamation the actuality is the centre does not perform a Metropolitan Centre role and function. There is no doubt the proposed Drury Centre will remove any ability for the Papakura Town Centre to expand and improve its offer, experience and environment to a material degree elevating it to a level of playing a broader role and function like other Metropolitan Centres across the city. This does cause a policy tension with the Unitary Plan, however in Property Economics view its current envisaged role and function is unlikely to be realised with or without the proposed Drury Centre.

This does mean the proposed Drury Centre would result in the Papakura Centre status changing from Metropolitan Centre to Town Centre. However, in Property Economics opinion this would not change Papakura's current role and function, nor its ability to grow and improve to play the town centre role and function more successfully for the community its services in the future.

Infrastructure Timing

Subsequent to the ME economic assessments, the Government has made announcements confirming the funding and commitment to develop the Mill Road extension and the new public train stations in Drury (East and West). This has in effect bought forward some of the key infrastructure investment required to unlock some of the key growth areas in Drury East.

These infrastructure developments by themselves do not provide all infrastructure requirements but represent major infrastructure investment to advance growth in the area potentially ahead of earlier projections. Property Economics view this as a positive for PC48 and the potential for growth in demand to be realised ahead of schedule.

However, while Government announcements are positive, the benefits and unlocking of growth potential will only be realised once the infrastructure is actually built and operational. The timing of this is notoriously fickle with a subsequent announcement on Mill Road reconsidering the merits of the project.

TOD Considerations

The Drury Centre development, being situated adjacent to an important commuter rail station and link to Auckland, is intended to be a Transit Oriented Development (**TOD**). A TOD development envisages higher employment densities than might otherwise be anticipated in centres to encourage greater levels of employment in areas with strong rail links to provide increased opportunity for commuter travel by rail. This is also designed to help ease vehicle growth on the road infrastructure across Auckland.



Given the Drury Centre is proposed to be the main commercial centre for this high growth area in southern Auckland, Property Economics has analysed (at a high level) the employment densities across other main metropolitan centres in the region to provide some broad comparative context, excluding St Lukes which is considered more a stand-alone single use (retail) destination rather than a more comprehensive mixed-use centre for the purposes of this analysis.

It is important to be mindful that the employment densities reflect centre densities given each centre's current phase of its development / life cycle. Some centres are more established than others as they have been developed for a longer period of time and have had a more historic role and function to draw on (i.e. Newmarket) compared to newer centres that are in the early stages of their lifecycle (i.e. Albany). As such, the employment densities vary, and the analysis is focused on identifying some appropriate baseline measures for the new Drury Centre taking a longer-term perspective. The Auckland CBD is included for comparative context only and not intended to represent a density target the Drury Centre should strive for.

The results are shown in Table 1 for the retail and commercial property sectors, and a total employment density across all property sectors for the nine Metropolitan Centres and the Auckland CBD.

Additionally, a percentage is determined to highlight the retail and commercial employment proportion of total centre employment. Note that these values represent the core densities given the geographic extent of a centre and the statistical meshblock boundaries do not always align.

TABLE 1: EMPLOYMENT DENSITIES PER HA

Metropolitan Centre	Retail Employment Density /ha	Commercial Employment Density /ha	Total Employment Density /ha	Commercial and Retail Percentage
Sylvia Park	65	10	80	94%
Takapuna	80	165	310	79%
New Lynn	35	10	70	68%
Botany	40	10	55	90%
Henderson	25	25	70	69%
Manukau	25	25	85	64%
Newmarket	50	115	235	70%
Papakura	20	20	65	61%
Albany	20	15	45	84%
Auckland CBD Core	100	400	650	76%

Source: Property Economics, Statistics NZ

W: www.propertyeconomics.co.nz



For Metropolitan centres, the highest density centres are Takapuna (310) and Newmarket (235), the latter of which is close to the city centre with the majority of buildings at least two stories high. It is the second largest transport hub with high-frequency bus stops and connection to multiple train lines. Takapuna on the other hand has a relatively small land area of the Metropolitan Centres examined and aside from the CBD is the closest centre to waterfront amenity. Drury realistically could not be expected to achieve these densities for retail and commercial activities given its urban fringe location.

On the other end of the spectrum, Albany and Botany both exist closer to the extremities of Auckland's urban area, are comparatively younger in their life cycle and exhibit the lowest employment densities. These centres do not have the rail and TOD capability as Drury though. As a likely result of cheaper and a greater availability of land, these two Metropolitan Centre Zones both feature a number of large format centres and larger areas of single level parking.

Albany in particular has large tracts of open vacant commercial land within the Metropolitan Centre Zone that would result in a lower employment density than the mall itself would exhibit. Albany has multiple new commercial office developments currently under construction which will increase its commercial, and subsequently, total employment density considerably. Employment densities this low are not considered appropriate as a long-term target density for Drury as these centres are relatively young and still house significant development potential to be realised.

The ME RFI response indicated an employment base in the Drury Centre of around 5,400+ jobs by 2048, while stating the masterplan indicates circa 6,000 jobs could be provided. Applying the higher masterplan employment figure of 6,000 employees across the 95 hectares of PC48 equates to an employment density of around 63 per hectare.

My understanding is that for a TOD a total centre employment density of around 80 employees as a minimum is targeted. The current indicative masterplan employment density of around 63 per hectare would be lower and represent a missed opportunity for a TOD if higher employment densities could not be achieved.

A target total centre employment density of 80 employees per ha for a TOD is an entirely feasible long-term target when considered in a comparative context with other Metropolitan Centres. However, it would be unreasonable to expect this level of density during the centre's formative years of its lifecycle. There are number of well-established centres that are sitting on 70 employees per ha and below, but these tend not to have SH1 motorway access and / or rail connections – Drury has both long term.

Staging of Proposed Drury Centre

As mentioned earlier, realistically any significant development of the Drury Centre is unlikely to occur pre-2033 when the surrounding market has developed and anticipated infrastructure development advanced. If growth in the market does not occur at the rate assumed in the ME



modelling, then the potential for a higher degree of adverse impacts on the Papakura and Pukekohe centres increases.

The timing around this is dependent on the speed the catchment of the Drury Centre develops. If residential uptake in and around the more localised Drury catchment is slower that anticipated, and the Drury Centre develops ahead of the market demand, then the Drury Centre will rely on attracting more retail spend out of the Papakura and Pukekohe local areas, and therefore respective centres.

At present, as Property Economics understands, there is nothing in the proposed policy settings that prevent Kiwi Property No.2 Limited from developing the Drury Centre to a scale it sees fit at any point if PC48 is approved, irrespective of market growth in and around the Drury catchment. Property Economics consider it would de-risk potential adverse effects on Papakura and Pukekohe in particular if some broad staging mechanism was put in place that linked development of the Drury Centre (acknowledging staged centre development is typically in large 'chunks' and not linear) and aligned with market demand in the catchment the Drury Centre is primarily designed to service.

Another reason for this approach is some of the larger infrastructure projects that the Drury Centre is relying on getting developed (in the ME modelling), i.e., Mill Road, whilst been officially announced could also be reconsidered, delayed, withdrawn or altered in the future changing current market assumptions in the demand analysis. There remains a lot of 'ifs' and 'maybes' in relation to infrastructure funding at present which suggest a more circumspect approach may be appropriate.

With the caveats in the foregoing commentary, Property Economics consider the potential risk of significant adverse effects being generated without any staging mechanism is primarily related to retail activity. Property Economics do not consider risks associated with early development of office activity to be a meaningful issue as it is unlikely to drive consequential diversion of office activities out of Papakura and Pukekohe Town Centres. Rather any such development in Drury is likely to introduce new office activity to the area and support the development of Drury as a TOD.

In terms of retail staging thresholds Property Economics consider a 2033 and 2038 threshold should be contemplated in this circumstance to neutralise adverse impact risk with commensurate demand for the catchment. As such, based on Figure 6.4 of the ME report, retail GFA thresholds of no more than 20,500sqm retail GFA prior to 2033, and no more than 40,000sqm retail GFA prior to 2038 is considered an appropriate approach that represents a fair reflection balancing adverse impact risks and growth in retail demand. '



2. SUBMISSIONS

There are five primary submissions relevant to economic effects matters in relation to PC48:

- #11 Papakura Business Association
- #25 Pukekohe Business Association
- #22 Auckland Council
- #23 Waka Kotahi NZTA
- #27 Auckland Transport

#11 - Papakura Business Association

The general thrust of both the business association submissions Property Economics has addressed in the body of this overview. However, for completeness, the Papakura Business Association seeks to have an alternative lower order zoning on the PC48 land to limit the scope of potential development within the plan change area to ensure there is no adverse impact on Papakura playing a Metropolitan Centre role and function in the future.

Property Economics consider the likelihood and propensity for the Papakura Centre to play a Metropolitan Centre role and function in the future not plausible. Its existing location is not conducive to enabling the centre fulfil such a role and function, there are significant growth constraints that limit the feasible and practical expansion of the centre to enable it to better fulfil a Metropolitan Centre role, the growth in the wider area can more efficiently be serviced by the new Drury Centre, and importantly the projected growth in the Drury – Opaheke and wider Pukekohe and Paerata areas can support the establishment of a new Metropolitan Centre in a location that can efficiently create better access opportunities for retail, commercial and wider employment opportunities in a more consolidated manner. The proposed Drury Centre location can more efficiently manage the high volumes of vehicle, people and train movements required to sustain a Metropolitan Centre and employment densities sought in TODs.

#25 - Pukekohe Business Association

The Pukekohe Business Association's economic concerns can be consolidated into three main points:

- 1. Ensure there is a catchment to serve the Metropolitan Centre before progressing and stage the centre development as required by residential growth;
- 2. Reconsider whether the size and scope of the Metropolitan Centre is necessary;
- 3. Do not delay business development in Pukekohe or prioritise Drury East of Pukekohe.

The first point relates to earlier commentary in this review regarding the merits and basis for incorporating some staging thresholds in PC48 to ensure the Drury Centre grows at a rate commensurate with growth in its core market, and thereby not relying on attracting / diverting



retail spend away the Pukekohe Town Centre if developed ahead of market demand. This is a point Property Economics thinks can be incorporated without undermining the development potential or timing of development within the Drury Centre.

In terms of point 2, Property Economics' own analysis indicates the size and scope of the proposed Drury Centre is appropriate for the anticipated population base of the catchment in over the longer term. Increased certainty can be provided by zoning for this future scale now, albeit managing its growth over the formative years would appear a measured response to some of the potential economic effects concerns raised in these submissions.

In terms of point 3, incorporate staging thresholds into PC48 would provide greater comfort that the development of the Drury Centre is appropriately scaled and does not take priority over development opportunities being advanced in Pukekohe. Development opportunities in Pukekohe would likely align with the rate of growth realised in the local Pukekohe market over the next 20-30 years. A balance needs to be struck to ensure the Pukekohe Town Centre is well positioned to take advantage of those opportunities when they arise, but not stopping development of another centre where appropriate to stifle competition. A staging mechanism could assist in ensuing an appropriate balance is in place.

#22 - Auckland Council & #27 Auckland Transport

Both Auckland Council and Auckland Transport submissions want the full extent of the Drury Centre zone and total business capacity for the catchment to be considered in light of the total extent of the Drury Centre. This includes an extension of the Business - Metropolitan Centre zone west along Flanagan Road to Waihoehoe Road.

Property Economics' earlier 2018 business land assessments indicated a larger business zone area could be sustained at Drury than that currently proposed once the catchment was fully developed. This included retail and office-based activities across the ANZSIC categories but excluded land for urban parks, community facilities and residential activities which are proposed to form part of Drury Centre. As such over the longer term a more expansive business zone is considered sustainable by the market on the basis the Drury Centre is planned to become the preeminent commercial hub for this new southern catchment of Auckland. Therefore, an expansion of Business – Metropolitan Centre zone to Waihoehoe Road along Flanagan Road is considered to have merit from an economic perspective.

#23 - Waka Kotahi NZTA

At a broad level, point 4 of this submission seeks amendments to PC48 that would expand the Business - Metropolitan Centre zone to incorporate proposed sub-precinct E so PC48 is in accordance with NPSUD and the zone extension represents a better outcome for the future train station.

Based on the position outlined in response to submissions #22 and #27 above, Property Economics would be comfortable with extending the Business - Metropolitan Centre zone of



sub-precinct A to incorporate sub-precinct B from an economic perspective. However, an extension of the Business - Metropolitan Centre zone would increase the necessity for a staging regime to be incorporated into the plan change in Property Economics view as it would increase the land area of the centre zone and potentially incorporate multiple landowners. Therefore, there is a need for increased surety that development of the centre occurs in a coordinated, integrated and efficient manner that delivers the best centre possible for the community, rather than haphazard development in different parts of the (larger) zone that could potentially split the centre.



Memo 11/05/2020

To: Michael Luong, Plans and Places

cc: Charlie Brightman, Engineering & Technical Services

From: Claudia Harford, Engineering & Technical Services

Subject: Kiwi Property No.2 - Drury Structure Plan Area, Private Plan Change – Geotechnical assessment

Project: 199

Status: Draft for comment Version: 0

Document ID: AKLC-1201561183-536

1 Introduction

We have been requested by Michael Luong from Auckland Council (AC) Plans and Places to review geotechnical aspects of the private plan change application information supplied by Kiwi Property No. 2 Ltd. (Kiwi Property) and provide any queries pertaining to geotechnical matters in relation to the Plan Change area shown on Figure 1.



Figure 1: Aerial photograph showing the location of the site. Kiwi Property's landholdings are shown in red and their wider areas of interest in blue [Source: B & A, Private Plan Change Request report].

Initial findings of the review were provided on 13 December 2019 and a formal response was issued on 17 February 2020 (refer Appendix A) and incorporated into Council's Request for Further Information (RFI). The geotechnical review highlighted areas where the level of detail provided in the submission was



considered inadequate in terms of the lack of factual information, the ways in which ground related hazards were assessed which consequently affected the submission's proposed mitigations of adverse effects.

We also queried the general lack of detail surrounding consideration of benefits and costs and consideration of the efficiency and effectiveness of the proposals, as well as broader areas of concern relating to the consideration of best practice guidelines.

Following receipt of the RFI response (dated 23 March 2020), AC requested a meeting with the applicant's geotechnical advisers and planners. Following this meeting AC received copy of the available ground investigation factual data. The applicant declined to provide any further information.

2 Scope and purpose of memo

2.1 Scope

The scope of this memo is to provide a high-level assessment of the submission, RFI response and supplementary information provided by the applicant.

2.2 Purpose and limitations

The purpose of this review is to assess if the response to the Request for Further Information submitted by Kiwi Property is sufficient to inform Council's consideration of the application under Clause 25 of the RMA, on a sufficiently informed basis.

This report is provided expressly for advising Auckland Council Plans and Places. It is not intended to be used or copied in whole or part for other audiences or purposes without the prior approval of Auckland Council Engineering & Technical Services.

3 Bibliography and references

The following documents have been reviewed for this memo:

- Drury Centre Private Plan Change RFI response (ENGEO Ltd., reference 13451.000.000_23, dated 23 March 2020).
- Geotechnical and Environmental Due Diligence Investigation, 133 Fitzgerald Road, Drury, Auckland (ENGEO Ltd., reference 13451.000.000_05, dated 25 January 2017).
- Slope Stability Assessment for Western Slopes of Project Emerald, 133 Fitzgerald Road, Drury, Auckland (ENGEO Ltd., reference 13451.000.000_12, dated 22 December 2017).
- Geotechnical and Environmental Due Diligence Investigation, 44 Flanagan Road, Drury, Auckland (ENGEO Ltd., reference 13451.000.000_09, dated 18 July 2017).

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- Geotechnical and Environmental Due Diligence Investigation, 64 66 Flanagan Road, Drury, Auckland (ENGEO Ltd., reference 13451.000.000_10, dated 18 July 2017).
- Planning and engineering guidance for potentially liquefaction-prone land, Resource Management Act and Building Act aspects (MBIE, EQC, MFE, dated September 2017).

4 Discussion

4.1 General

From a geotechnical perspective, areas where the level of detail originally provided was considered to have been inadequately assessed in terms of the impact on the development potential of the site fell into two categories:

- The adequacy of the geotechnical investigations (distribution and total number of investigation points).
- The lack of high-level consolidation and liquefaction assessment to inform an analysis of benefits and costs, and the efficiency and effectiveness, and any possible alternatives to the request.

4.2 Geotechnical investigations

The geotechnical report included with the submission referenced geotechnical investigations but did not provide the supporting factual data. This information was requested and subsequently provided by the applicant as a series of interpretive reports prepared throughout 2017.

The distribution and density of investigation points as well as the coverage of the various geological units has been reviewed taking into account what we consider to be current best practice guidelines (MBIE, 2017) and found to be adequate for the purposes of the plan change request.

4.3 Assessment of ground related hazards

The applicant has not adequately addressed the potential impacts of ground related hazards (geohazards) on the proposed development. Current best practice guidance (MBIE, 2017) clearly outlines a risk-based approach to assessing liquefaction risk in land-use planning and development decision making. The applicant acknowledged that they were not aware of the guidelines and therefore did not consider them in their assessment.

The submission report states that soils prone to consolidation and liquefaction should be anticipated in the vicinity of creeks and tributaries and also states that identification and consideration of these soft soils should be undertaken when necessary in areas proposed for development. It is our view that the areas proposed for development are largely known (from the Masterplan) and that the identification and consideration of geohazards should have been carried out as part of the submission in line with the

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guidance set out in MBIE 2017. The lack of such assessments means that measures to mitigate the associated risks have not been presented/discussed.

It is noted from the RFI response that the applicant proposes to carry out such assessments at Resource/Building Consent stage. Failure to carry out high-level assessments of liquefaction and consolidation risk represent gaps in the information that must be identified to Council as a risk, to inform the decisions to adopt/accept/reject the plan change.

This review considers that there is significant residual uncertainty around the potential to develop the site in a cost-effective manner and that the lack of adequate assessments means that possible mitigations and alternatives have not been considered. The likely consequence of this is significant additional work at resource consent stage, with Council being exposed to most of the residual risk/uncertainty. It is also possible that deferral of such assessments could result in the entire plan change area being reconsidered if mitigation measures are found to be prohibitively expensive to implement. There are recent examples where these risks have impacted on developments.

Further, it should be noted that the level of geohazard assessment presented in the submission is not consistent with the level detail that other disciplines (e.g. transport and stormwater) have presented as part of the same application.

5 Conclusions

It was requested that the applicant update their submission to include a high level assessment of liquefaction and consolidation risk, and to consider and discuss the constraints and opportunities associated with geohazards on the site.

The applicant's response indicates that they propose to carry these assessments out at Resource/Building Consent stage.

We consider that the available best practice guidelines clearly set out the level of detail required of a Plan Change assessment, we also consider that the submission currently does not align with these guidelines and does not adequately address liquefaction and consolidation in a way that informs Council on the benefits and costs, and the efficiency and effectiveness, and any possible alternatives to the request.

6 Summary comments

We consider that liquefaction and consolidation effects and mitigation measures are not adequately addressed in the submission. Specific concerns relate to the potential for significant risks to be identified after a decision on the Plan Changed has been made, resulting in increased risk exposure to council both reputationally and financially.

No further information is required from the applicant in regard to the clause 23 response.

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Concerns are being noted here to inform Council's consideration of the application under clause 25 of the RMA on a sufficiently informed basis.



7 Quality assurance

Reviewed and approved for	r release by
Reviewer	[Sign-off status]
This memo is satisfactorily checked all information inc	completed to fulfil the objectives of the scope. I have reviewed, and quality luded in this memo
Author	Claudia Harford
File location	https://aklcouncil.sharepoint.com/sites/EXT/ETS/Shared Documents/Memo template ETS.docx
Date printed	11/06/2021 10:20 am

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

12 May 2021

To: David Mead, Hill Young Cooper Ltd

From: Ashleigh Richards, Senior Parks Planner, Parks, Sport and Recreation, Auckland

Council

Subject: Private Plan Change – PPC 48 - Kiwi property – Drury Centre Precinct, Drury –

Parks, Sport and Recreation Assessment

1.0 Introduction

1.1 I have undertaken a review of the private plan change, on behalf of Auckland Council in relation to Parks Sport and Recreation (PSR) effects.

- 1.2 I hold a Master of Resource and Environmental Planning from Massey University (2013) and a Bachelor of Science from Waikato University (2009) majoring in Chemistry.
- 1.3 I have 7 years of experience in environmental planning, parks planning and project management. I have been employed by Council in the Parks Planning team since September 2019. During that time I have gained experience implementing Precinct plans by providing parks specialist input to the subdivision process.
- 1.4 In writing this memo, I have reviewed the following documents:
 - Appendix 1 Drury Centre Plan Change
 - Appendix 2- Plan Change Zoning Map
 - Appendix 6 AUP objectives and policies assessment
 - Appendix 7 Urban Design Assessment
 - Appendix 11 Ecological Assessment
 - Appendixes 12-12d- Stormwater Management Plan
 - Appendix 25 NPS FWM and AUP Comparative Analysis
 - Appendix 26 Comparison of Auckland Wide Zone and Precinct Provisions
 - Appendix 28 Landscape and visual effects assessment
 - Plan Change Summary
- 1.5 Auckland Council Documents referred to include:
 - Drury-Opāheke Structure Plan
 - Open Space Provision Policy 2016
 - Parks and Open Space Acquisition Policy 2013
 - Southern Structure Plan Area Neighbourhood Design Statement (Revision B Drury-Opaheke and Pukekohe-Paerata) 2019
 - Papakura Greenways: Local Paths Plan (2016)

2.0 Key Parks, Sport and Recreation Issues

- 2.1 This assessment covers the open space provision of the Precinct Plan that may be vested in Council for the proposed Homestead Park, Station Plaza and Town Square, for esplanade purposes and to address the interface with open space including the Hingaia Stream.
- 2.2 The proposed Drury Centre Plan Change anticipates a medium to high density development supporting approximately 7000 new dwellings, rail station, bus interchange, approximately 8.5ha of public open spaces, set within a wider Mixed Use and Metropolitan Centre zoned area.
- 2.3 The regulatory framework for Parks, Sport and Recreation assessment is set out within the below regulatory mechanisms, with key points noted:
 - The Resource Management Act 1991, which at s229 and 230 requires the provision of esplanade reserves for the purposes of protecting conservation values and enabling public access and recreational use to or along any sea, river, or lake.

- The National Policy Statement Urban Development (NPSUD) which at Policy 2.2, requires urban environments have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport.
- The National Policy Statement for Freshwater Management (NPSFM) which, at Policies 6 and & 7 require that there is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted, and the loss of river extent and values is avoided to the extent practicable.
- The Auckland Regional Policy Statement, which at B2.7.1 and B2.7.2 requires that
 recreational needs of people and communities are met through the provision of a range of
 quality, connected, accessible open spaces and recreation facilities. At B7.3 and B7.4, the
 RPS requires the maintenance and enhancement of freshwater through integrated
 management.
- The Auckland Unitary Plan framework, in particular:
 - Open Space Zone Objective H7.2.(1) Recreational needs are met through the provision of a range of quality open space areas that provide for both passive and active activities and (2) The adverse effects of use and development of open space areas on residents, communities and the environment are avoided, remedied or mitigated.
 - Subdivision Urban Objective E38.2.3 Land is vested to provide for esplanades reserves, roads, stormwater, infrastructure and other purposes.
- 2.4 In addition to this, the Drury Opāheke Structure Plan sets out to holistically address the open space aspects of the environment. This includes a 'Blue-Green Network Map' that identifies an indicative distribution of neighbourhood and suburb parks and a network of natural environment green corridors alighted with streams.
- 2.5 The Drury Opāheke Structure Plan includes the following outcomes for the Drury Centre Precinct and surrounding high-density residential areas:
 - ensure that residents will be able to access all the services and facilities they need within no more than 10 minutes' walk
 - provide for community and social infrastructure.
 - protect and enhance the blue-green network that supports the area including through water sensitive design, tree planting, parks, greenways and riparian enhancement margins.

Neighbourhood park provision

- 2.6 The description of neighbourhood parks in the 'Open Space Provision Policy 2016' is that they offer 'basic informal recreation and social opportunities within a short walk of surrounding residential areas'. Provision targets for neighbourhood parks identified in this policy are that they are available within a 400m walk to residents in high and medium density residential areas, which is approximated by a 300m radial distance. The expected catchment area for a neighbourhood park in high and medium density residential areas is 28.3 hectares which is the area of a circle with a 300m radius, although the catchment area is reduced where walking barriers such as rivers and highways are within the circle. As noted in the 'Open Space Provision Policy' new neighbourhood parks are typically between 0.3 to 0.5 hectares. Network principles are embedded in this policy, and directives include to 'Create a connected network of parks, open spaces and streets that delivers a variety of recreation, ecological, transport, stormwater, landscape and health benefits', and that open spaces are linked together so that 'Open space is core infrastructure that people use to get around their community'. The neighbourhood park network shown in the Drury Opāheke Structure Plan approximates a distribution using 300m radial distances.
- 2.7 The Drury-Opaheke Structure Plan indicates one potential new neighbourhood park of 03.-0.5ha or more that would be sought by Council via acquisition within the plan change area, though the north-east of the plan change area is intended to be served by a suburb park as indicated in figure 1 below.

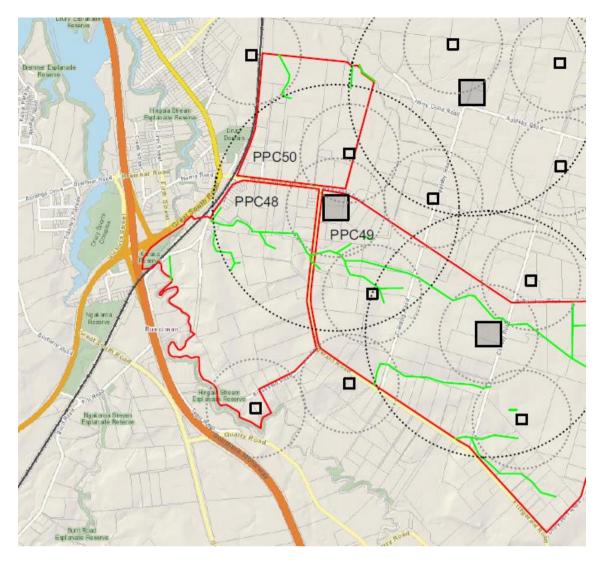


Fig 1. Open space anticipated by Drury Opāheke Structure Plan for PPC48 with PPC49 and 50 for context. Small squares identify neighbourhood parks and large squares identify suburb parks.

2.8 The large mixed-use areas proposed (sub precincts C, E and F) may accommodate a substantial number of dwellings, which may generate additional open space demands. Furthermore, the National Policy Statement on Urban Development 2020 (NPS-UD) enables further density which may also generate additional open space demands. Two neighbourhood parks - Station Plaza and Homestead Park- are identified within the Drury Centre Precinct Plan and these are identified in figure 2 below.

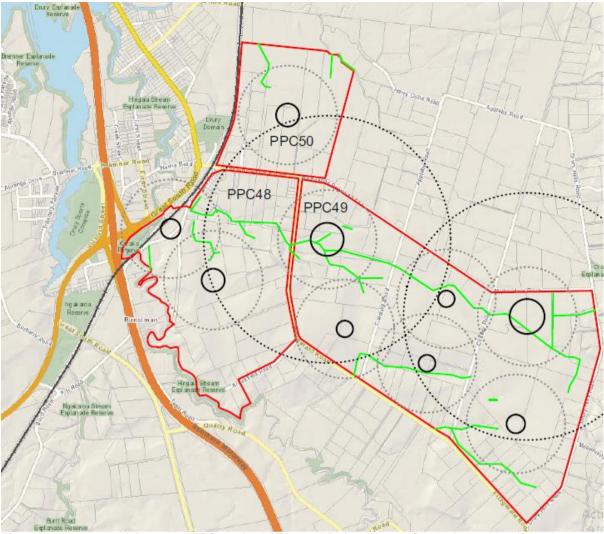


Fig 2. Open space anticipated by PPC48 with PPC49 and 50 for context. Small circles identify neighbourhood parks and large circles identify suburb parks.

2.9 Both figure 1 and figure 2 result in an under provision of open space access for a large portion of the PC48 area. Open space shown on Drury-Opāheke Structure Plan maps is indicative only, although it is based on Auckland Council open space policy. Exact alignment with the structure plan is not considered essential by the Council due to the changing nature of the regulatory environment, such as the NPS-UD. However, alignment with open space policy is still considered paramount. The placement of Homestead Park, fixed due to the location of the Homestead, is not supportable as it does not meet Council's open space acquisition criteria. It is recommended this is located further south within the plan change site as shown in figure 3 below:

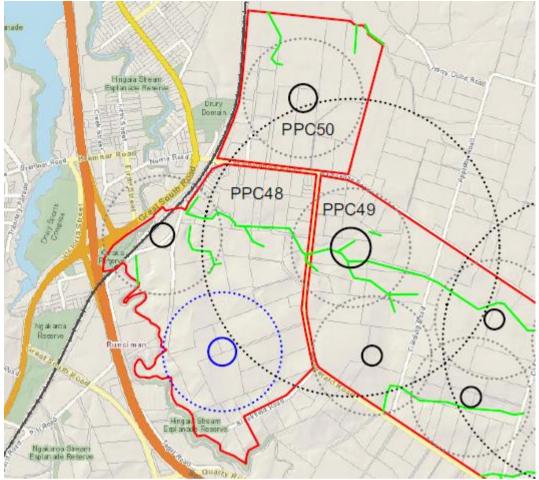


Fig 3. Open space supported by Parks, Sport and Recreation with PPC49 and 50 for context. Small circles identify neighbourhood parks and large circles identify suburb parks. Blue circle identifies approximate location of supported neighbourhood park.

2.10 If Auckland Council ownership is proposed for any open space, then this must meet the Council's open space acquisition criteria. If Council acquisition does not occur, then suitable plan mechanisms need to be in place to ensure on-going access to and maintenance of publicly accessible spaces.

Greenways

- 2.11 The northern most portion of the plan change area, being the open space zoned land north of the rail line, is covered by the Papakura Greenways Local Paths Plan 2016 which indicates a greenway parallel to the rail line. The remainder of the plan change site is not covered by a greenways plan, as shown in figure 4 below. However, the Southern Structure Plan Area Neighbourhood Design Statement (Revision B Drury-Opaheke and Pukekohe-Paerata) 2019, shown in figure 5 below, indicates greenways running alongside the Hingaia Stream and key transport routes. The Drury-Opaheke Structure Plan 'generally proposes a 20m riparian restoration margin along streams', and notes that 'riparian margins... will be protected by either esplanade reserves or other methods'.
- 2.12 NZTA are proposing to extend the cycleway alongside the motorway to Drury on the western side of the plan change site and a link to this cycleway is important.

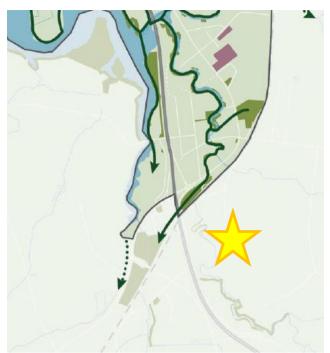


Fig 4. Papakura Greenways Local Paths Plan 2016, subject site marked with a star.

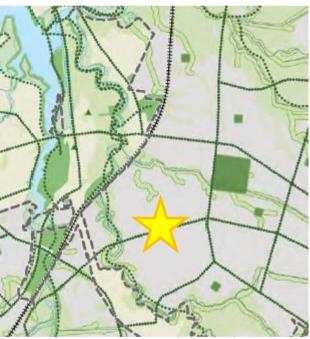


Fig 5. Greenways as shown in Southern Structure Plan Area Neighbourhood Design Statement (Revision B Drury-Opaheke and Pukekohe-Paerata) 2019

- 2.13 The Plan Change only identifies areas for walking and cycling within the road network and within open spaces greater than 1,000m² and doesn't provide a clear network of walkways within the proposed open space and riparian reserve network. The precinct plans do not indicate that a greenways link is envisioned on the plan change site and the wording of the plan provisions exclude many of the open spaces such as riparian margins that would normally form part of a greenways link.
- 2.14 There are significant opportunities to develop a greenway network that should be identified on the precinct plan and enabled via plan provisions.

Hingaia Stream Open Space

2.15 8.5ha of Open Space – Informal Recreation Zone is proposed along the eastern side of the Hingaia stream, the flood prone areas associated with the Hingaia Stream, and the transmission corridor associated with two transmission lines. This proposed open space exceeds the standard

20m esplanade width required under s230 of the RMA, and neither the floodplain land nor the transmission corridor land beyond the standard 20m esplanade width meet the Council's open space acquisition criteria or objectives and policies within the Open Space Zone of the AUP. The zoning of this land needs to be reconsidered.

Esplanade Reserve, riparian reserves and accessways

- 2.16 The Drury Centre Precinct identifies riparian margins of permanent or intermittent streams must be planted either side to a minimum width of 10m measured from the top of bank of the stream, with buildings set back at least 20m from the bank of a river or stream measuring 3m or more in width, consistent with the requirements of E38.7.3.2. As mentioned above, the Drury-Opaheke Structure Plan generally proposes 20m riparian restoration margin along streams, and notes that 'riparian margins... will be protected by either esplanade reserves or other methods'.
- 2.17 IX.9 provides special information requirements for the associated riparian planting plan to be submitted with any application for land modification, development and subdivision. There are no standards around the vesting of such land to Council and the provision of pedestrian/ cycle paths within these margins if they are located in open space zoned land of under 1000m².

Development adjoining open space

- 2.18 The Drury Centre Precinct Plan restricts building height and dominance, and encourages passive surveillance adjoining Station Plaza and Homestead Park and other publicly accessible open spaces greater than 3,000m². The effects of building height and dominance are not addressed for spaces less than 3,000m².
- 2.19 Retaining walls adjoining open space within sub-precincts A, B and D has been addressed within the Drury Centre Plan Change, however, retaining is not adequately addressed for sub-precincts C, E and F, which contain permanent streams, as shown in figure 6 below.

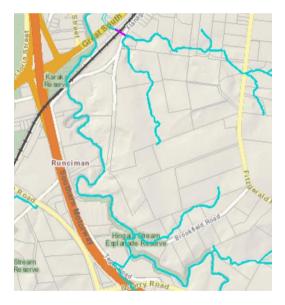


Fig 6: Permanent stream network within the Drury Centre Precinct Plan Change site.

3.0 Applicant's assessment

Local park provision

3.1 The s32 Assessment Report by Rebecca Saunders, Barker and Associates explains at 5.1.7.5 that Station Plaza and Homestead Park are identified on the 'Drury Centre Precinct Plan 2 – Spatial features Plan' given these open spaces are generally fixed at a broad scale, due to the existing Homestead on site, and location of the Karaka Reserve and railway lines. Guidance as to how these spaces are intended to be developed is provided by assessment criteria identified under provision IX.8.2(2)(a) of the Plan Change. Parks note that the station platforms are likely to shift north and the Station plaza may shift due to submissions on this plan change. The precinct

- plan does not clarify whether Station Plaza and Homestead Park are intended to be vested to Auckland Council.
- 3.2 The s32 report further outlines, at 10.8.2, that the intention is to retain the Homestead for a community purpose within an open space area. This would be assessed through a future resource consent application noting that assessment criterion IX7.2(2)(b) of the Plan Change encourages the existing Homestead building to be retained, repurposed and incorporated into a high amenity open space which forms a focal point for Drury Centre.
- 3.3 It is noted that it is not within Parks, Sport and Recreation's scope to comment on the appropriateness of the retention of the Homestead building, which is a Heritage matter. However, the location of the proposed Homestead Park is inconsistent with the council's open space and parks acquisition and provision policies, despite Council's submission on this point (see table 2 point 22.19 below), as it results in an under-servicing of open space to the southern area of the plan change site.
- 3.4 The s32 assessment states that other open spaces, including neighbourhood parks, will be determined by future development and subdivision applications, relying on Policy E38.2(18) of the AUP to capture provision of neighbourhood parks, and IX.8.2(2)(b) of the Drury Centre Precinct. The final development layout and positioning of proposed open space will be guided through the Plan Change provisions but determined at the detailed design/resource consent process, and that to allow this flexibility indicative locations for these open spaces have not been shown on a precinct plan. If not established at precinct plan, it is my opinion that establishment through subsequent resource consent processes is not assured.
- 3.5 In addition to these areas, the Precinct provisions also refer to a 'civic space', for example IX8.2(2)(f). It is unclear whether this civic space is intended to be vested in Council. The mixed-use sub precincts (C, E and F) may generate substantial residential development (given height limits). This will also generate open space demands.
- 3.6 For open spaces that will not be vested, but which have an important amenity/urban design role, precinct provisions should enable appropriate management methods to be put in place, such as extent of public access, landscape treatment and maintenance.
- 3.7 It is recommended that the precinct plan for the PC48 area is amended to show a neighbourhood reserve in a location where it will provide for the majority of future residents. This recommendation is shown on the plan in table 1.
- 3.8 It is also recommended that if Auckland Council ownership is proposed, the precinct wording must not require Auckland Council ownership, as the open spaces must be consistent with the council's open space and parks acquisition and provision policies. Further assessment would be needed by the Council Social Policy and Community Investment team in relation to location and acquisition.

Greenways

- 3.9 The urban design report prepared by Cam Wallace acknowledges the Drury-Opaheke Structure Plan outcome of protecting and enhancing the blue-green network that supports the area including through water sensitive design, tree planting, parks, greenways and riparian enhancement margins. Within the site opportunities and constraints at 3.5, his view is that existing permanent and intermittent streams provide the potential to integrate with the wider area and provide amenity to support future development.
- 3.10 At 10.2 within the s32 assessment, Barker and Associates have summarised that the proposed parks will create an integrated public open space network that protects and enhances the existing stream network and is highly accessible to the community offering both visual and recreational amenity. The report relies on the urban subdivision provisions included within Chapter E38 of the AUP, including Policy E38.3(18), to ensure subdivision will provide for the recreation and amenity needs of residents by providing for open spaces which enable pedestrian and/or cycle linkages, stating that this will ensure that there are provisions in place to ensure there is accessible open spaces of a range of sizes to service the future population.
- 3.11 The Precinct plan does not identify any greenways and Assessment criteria IX.8.2(2) for development of publicly accessible open space greater than 1000m² does not have specific

- criteria for discretion over the provision a greenway link. Furthermore, assessment criteria are only provided for open spaces greater than 1000m², which excludes many of the open spaces such as riparian margins that would normally form part of a greenways link.
- 3.12 Maintenance and enhancement of permanent and intermittent streams is more likely to be achieved on development if indicative permanent and intermittent streams are shown on precinct plans. The Drury 1 precinct is an example of this practice. This helps to implement the RPS B7.3 and 7.4 and other regional provisions of the AUP, and permanent and intermittent streams should be identified on the precinct plan.
- 3.13 The lack of greenways indicated on the precinct plan, and assessment criteria for the provision of greenways, means that there is the potential for an under provision of public greenways within the plan change site.
- 3.14 It is recommended that greenways are identified on the precinct plan.

Open Space - Hingaia Stream

- 3.15 Within the urban design assessment, at 6.2.1, Mr Wallace points out that there are a number of challenges to potential urban development within this area including the presence of two transmission lines, proximity to the Southern Motorway, the 1 in 100-year flood plain and steep topography adjacent to the Stream. I note that these challenges have formed the basis for the 8.5ha of open space zoned land adjacent to the Hingaia Stream.
- 3.16 Mr Wallace identifies that the proposed zoning will help to provide a buffer between development and the Hingaia Stream and provides the opportunity to link into existing open space zones and future esplanade reserves on the eastern banks of the Hingaia Stream extending down to Drury South.
- 3.17 At page 11 of the s32 report Ms Saunders states that the urbanisation of land close to the National Grid, the strategic road network and the railway corridor has the potential to give rise to reverse sensitivity effects. The report notes that the National Grid Corridor overlay will apply, which will adequately manage reverse sensitivity effects relating to the National Grid.
- 3.18 It is not the function of Open Space to provide mitigation for reverse sensitivity caused by uses not associated with open space, and the zoning of the area to provide mitigation for the transmission lines is inconsistent with objectives and policies of the Open Space Zone within the AUP. As noted above, the National Grid Corridor overlay will adequately manage reverse sensitivity effects relating to the National Grid.
- 3.19 The proposed open space along the margins of the Hingaia Stream exceeds the standard 20m esplanade width required under s230 of the RMA, and neither the floodplain land nor the transmission corridor land beyond the standard 20m esplanade width meet the Council's open space acquisition criteria. It is not feasible in terms of either capital or operating cost for the Council to assume ownership of all this area of land and the open space zoning along Hingaia Stream should be reduced to a 20m wide strip adjoining the stream.
- 3.20 It is recommended that an alternative zoning is identified for the land that is outside the future esplanade reserve.

Esplanade Reserve, riparian reserves and accessways

- 3.21 In the urban design assessment at 6.6, Mr Wallace states that the Precinct promotes the protection and enhancement of riparian margins throughout the Site. In support of this, Mr Wallace refers to I.1.6.3, however it is noted that these references appear to have changed on the final submitted Plan Change. It is assumed Mr Wallace is referring to standard IX.6.4. which states:
 - (1) Riparian margins of permanent or intermittent streams must be planted either side to a minimum width of 10m measured from the top of bank of the stream. This rule shall not apply to road crossings over streams.
 - (2) A building, or parts of a building, must be setback at least 20m from the bank of a river or stream measuring 3m or more in width, consistent with the requirements of E38.7.3.2.

- 3.22 The standard does not clarify the ownership of the riparian areas nor does it ensure the provision of pedestrian/ cycle paths within these margins.
- 3.23 The Urban Design Report also notes an additional development standard I1.6.3(2): Any planting required, will be implemented on accordance with a council approved landscape plan and must use eco-source native vegetation, be consistent with local biodiversity and planted at a density of 10,000 plants per hectare. However, IX.9 Special information requirements (1) Riparian planting plan states:

An application for land modification, development and subdivision which adjoins a permanent or intermittent stream must be accompanied by a riparian planting plan identifying the location, species, planter bag size and density of the plants. Plant species should be native.

- 3.24 Assessment criteria IX.8.2(2) (Development of publicly accessible open space greater than 1000m²) does not have criteria for pedestrian and/or cycle paths within Sub-Precinct A (sub precincts shown in figure 7 below). Within any other open spaces greater than 1000m², criteria j below applies:
 - (j) Where pedestrian and/or cycle paths are proposed within proposed open spaces, whether they are located adjacent to, and not within the 10m planted riparian area.
- 3.25 It is recommended that appropriate provision for pedestrian / cycle paths be considered for all open spaces, within all sub precincts, and where a greenway is identified on the Precinct Plan, or where a riparian margin is required by the Precinct Plan provisions. Clarification should be provided around the formation and construction of such assets, along with the vesting of these assets.

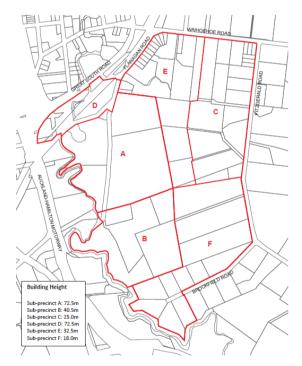


Fig 7: Sub-precincts

Development adjoining open space

3.26 Within the Urban Design report, Mr Wallace notes at 6.2.2 that the sub-precinct height strategy contributes to a quality compact urban form, including by way of a high-quality built environment, a more efficient use of the land and infrastructure including public transport and open space. Mr Wallace mentions at footnote 4 that the 72.5m height limit along the western boundary of the proposed Metropolitan Centre zone, which borders all open space zones, would be impacted by height-in-relation-to-boundary controls for sites adjoining open space zones. The effect of this would be that the 72.5m height limit is not achievable within 56m of the proposed open space zones (ignoring the effects of contours).

- 3.27 Within the s32 report, Ms Sanders states that the assessment criteria are included to ensure that buildings within Sub-Precinct A, B and D provide adequate sunlight access to publicly accessible open spaces, achieve a reasonable level of street activation and ensure that development in Sub-Precinct B contributes to the visual quality and interest of streets and other public spaces consistent level of amenity expected in Metropolitan Centre zones.
- 3.28 Building height, dominance and passive surveillance adjoining open space has been addressed at IX.6.1, within IX.10.1 Drury Centre Precinct Plan 1, and within the assessment criteria at IX.8.2(3). This restricts the height and form of buildings.
- 3.29 Retaining walls adjoining open space within sub-precinct A, B and D is addressed at IX.8.2(3)(h) and required to be minimised where practicable, stepped and landscaped. Retaining is not addressed for sub-precinct C, E and F, which contain permanent streams, as shown in figure 6.
- 3.30 It is recommended that the proposed provisions are amended to address building height, dominance and passive surveillance for open spaces less than 3,000m², which has the potential to exclude effects upon the esplanade reserve or greenways network.
- 3.31 It is also recommended that assessment for retaining adjoining open space is expanded to include sub-precincts C, E and F, to avoid height and dominance effects from retaining upon riparian and greenways areas.

National Policy Statement on Urban Development 2020

3.32 This policy statement was released in August 2020 and requires that Local Authorities must be satisfied that the additional infrastructure to service the proposed development capacity is likely to be available. The application does not demonstrate that sufficient public infrastructure including open space has been provided for future residents. There are no impediments on most greenfields sites to provision of an open space network that meets Auckland Council policies. This application fails to demonstrate that necessary community infrastructure will be provided in relation to greenways and parks provision.

Review summary

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3.33 It is my assessment that the plan change as proposed does not provide sufficient assurance that the outcomes anticipated by RPS, AUP, the National Policy Statement on Urban Development or Auckland Council policies and plans including the creation of a connected and integrated open space system will be achieved in later resource consent processes, or to demonstrate that appropriate community infrastructure will be provided.

4.0 Proposed amendments to Plan Change

4.1 The proposed Duruy Centre Plan Change text is considered in Table 1 below, and recommended additions to the text are suggested.

Table 1: Proposed Plan Change Text relevant to parks planning

Reference	Proposed text	Comment / Addition					
IX.1 Precinct De	IX.1 Precinct Description						
y in recondition of	The precinct provides for a wide range of activities that will support the establishment of a new metropolitan centre in Drury. The precinct comprises of the core centre, anchored by a future train station in the north, a retail main street and quality open spaces. The main street will provide a vibrant pedestrian experience, typically with fine grain retail frontages and a high amenity street environment. There is a network of streams throughout the Drury Centre Precinct, including the Hingaia stream and Fitzgerald stream. The precinct seeks to maintain and enhance these waterways	There is no wording in the precinct description that talks about open space network providing greenways, walkways, and cycleways, and this is recommended to be added to as per below to give effect to the AUP Open Space objective H7.2 and the RPS. The Drury Centre Precinct open space network seeks to provide a range of quality open space areas that for greenways, walkways, and cycleways.					
	and integrate them with the open space network as a key feature.						
IX.2 Objectives							

There are no objectives in the proposed precinct plan unique to the Drury Centre that are considered relevant to the open space network. It is recommended that an objective providing a network of trails and walkways along streams, parks and open space is added:

- (x) Parks and open space green corridors are provided along the stream network and off road accessways to achieve an integrated, attractive and safe open space network across the precinct that integrates stormwater management, and ecological and recreational functions, while enhancing the amenity of cyclists and pedestrians who will have access through these open space areas.
- (xx) Recognising the importance of the stream network and its connection to Hingaia stream while providing for the protection of ecological function and providing for passive recreational opportunities alongside the stream network as part of the greenway network.

IX.3 Policies

- (6) Ensure that development provides a local road network that achieves a highly connected street layout and integrates with the collector road network within the precinct, and the surrounding transport network, and supports the safety and amenity of the open space and stream network.
- (8) Manage building height and form where adjacent to large publicly accessible open spaces to minimise shading effects.
- (11) Recognise that residential at ground floor may be appropriate on some local roads in Sub-Precinct A away from the Key Retail Street, including where residential adjoins public open space.
- (14) In addition to matters (a)-(c) of Policy E38.3.18, ensure that the location and design of publicly accessible open spaces contributes to a sense of place for the Drury Centre, including by:
 - (a) incorporating distinctive site features;
 - (b) reinforcing legibility within the centre; and
 - (c) integrating with the stream network.
- (20) Support improvements to water quality and habitat, including by providing planting on the riparian margins of permanent and intermittent streams.

Policy 14 ensures that open space is integrated within the stream network, which is important for this site, however there are a lack of policies that refer to how the precinct plan enables the integration of pedestrian links and greenway networks and open space to coordinate infrastructure and open space provision.

Make the following additions to the policies as follows:

- (8a) Ensure the configuration of sites and dwellings creates a positive frontage to any adjacent roads, parks and open spaces, encourages passive surveillance and enhances perceptions of safety.
- (8b) Enable extensive active walking and cycling network and futureproof key walkway/cycleway routes including along the indicative greenway route, stream network, and areas of open space in a manner that encourages movement within the precinct and toward Hingaia stream and the proposed Drury Centre and train station, and vest these key routes in the Council.

Amend policy 14 as follows:

- (14) In addition to matters (a)-(c) of Policy E38.3.18, ensure that the location and design of publicly accessible open spaces contributes to a sense of place for the Drury Centre, including by:
 - (a) incorporating distinctive site features;
 - (b) reinforcing legibility within the centre; and
 - (c) integrating with the stream network., and

(d) ensuring open spaces are accessible by pedestrians and cyclists and will be well maintained; and

(e) if Auckland Council ownership is proposed, the open spaces must be consistent with the council's open space and parks acquisition and provision policies.

Amend Policy 20 as follows:

- (20) Support Ensure improvements to water quality, and habitat and biodiversity, including by providing planting on the riparian margins of permanent and intermittent streams. (x) Enable a network of open space, riparian corridors and
- park edge roads that provides for:
 - potential ecological corridors along streams between Te-Manukanuka-OHoturoa (Manukau Harbour) and the Hunua;
 - <u>improvement of freshwater and coastal</u> <u>water systems; and</u>
 - a safe and attractive walking and cycling network.

Table IX.4.1 Activity table

(A2) Development of publicly accessible open spaces greater than 1000m²

This should be amended as below to include all open spaces:

(A2) Development of publicly accessible open spaces greater than 1000m² IX.6 Standards IX.6.4 Riparian Margins This should be amended to provide pedestrian and cycle paths and clarify the ownership and vesting of these margins. (1) Riparian margins of permanent or intermittent streams must be planted either side to a minimum width of 10m measured Purpose: to maintain and enhance water quality and aquatic from the top of bank of the stream. This rule habitats; enhance existing native vegetation; and reduce stream shall not apply to road crossings over streams. bank erosion (2) A building, or parts of a building, must be setback at least (1) Riparian Margins of permanent or intermittent streams 20m from the bank of a river or stream measuring 3m or more in must be planted either side to a minimum width of width, consistent with the requirements of 10m measured from the top of bank of the stream. F38 7 3 2 or from the centreline of the stream where the bank cannot be physically identified by ground survey. This rule shall not apply to road crossings over streams (2) A building, or parts of a building, must be setback at least 20m from the bank of a river or stream measuring 3m or more in width, consistent with the requirements of E38.7.3.2. (3) Pedestrian/cycle paths shall be located adjacent to, and not within the 10m planted strip. (4) Riparian margins must be offered to Council for vesting at no cost to Council where a walkway is to be provided, and where there is a greenway link indicated on the Precinct Plan. This should be on land vested to a minimum of 20m either side of a permanent stream with at least the first 10m width planted. To address dominance and provide passive surveillance riparian margins, the following standard should be added to the Precinct

IXXX6.5 Sites adjoining public open space

Purpose: To provide privacy for dwellings while enabling opportunities for passive surveillance of the open space.

Where a site or dwelling adjoins open space shown on the Drury Centre Precinct plan the following must apply:
 (a) fences or walls or a combination of these structures within the yard adjoining the open

space must not exceed either:
 (i) 1.2m in height, measured from the ground level at the boundary; or

(ii) 1.8m in height provided that any fencing above 1.2m in height is at least 50% visually permeable.

IX.8 Assessment – restricted discretionary activities

IX.8.1 Matters of discretion

(2) Development of publicly accessible open space greater than 1000m2:

(a) Location and design of the indicative publicly accessible open spaces shown in 10.X.1 Precinct Plan 2;

- (b) Location and design of any other publicly accessible open spaces greater than 1000m2; and
- (c) Matters of discretion IX8.1 (2)(a) (b) apply in addition to the matters of discretion in E38.12.1.
- (4) New buildings, alterations and additions to buildings not otherwise provided for in the underlying zone within Sub-Precincts C, E and F:
 - (a) The design and layout of buildings and development insofar as it affects the existing and future residential amenity values and the amenity values of public streets and open spaces;
- (7) Infringement to standard IX6.4 Riparian Margins: (a) Effects on water quality and stream habitat.

The following assessment criteria should be added to the Precinct Plan.

(x) Greenways

(a) The greenways shown on Precinct Plan:

- Where they are on land subject to a subdivision that contains a stream that does not qualify for esplanade reserve, if the reserve is vested in Council, the walkway shall be provided in addition to the 10m riparian margin so a 20m riparian reserve is to be vested.
- Where there is no stream where the off-road greenway is indicated this shall be a minimum width of 10m where it is to be vested.
- where they are on land subject to any resource consent application, are constructed to a walking track standard similar to that constructed in Regional Parks, and may be vested in the Council, or in the case where the greenway follows vested roads, constructed to normal footpath standards as appropriate.
- connections to greenways on public or private land outside the land subject to resource consent, are futureproofed by constructing track access to the boundary of the application site.

(b) A walkway network, generally in accordance with Precinct Plan xx including roads and open space area, is created to ensure an interconnected neighbourhood.

The following amendments should be made to existing assessment criteria:

IX.8.1 Matters of discretion

- (2) Development of publicly accessible open space greater than 1000m2:
 - (a) Location and design of the indicative publicly accessible open spaces shown in 10.X.1 Precinct Plan 2;
 - (b) Location and design of any other publicly accessible open spaces greater than 1000m2; and (c) Matters of discretion IX8.1 (2)(a) (b) apply in addition to the matters of discretion in E38.12.1.
- (7) Infringement to standard IX6.4 Riparian Margins:
 (x) Effects on the ability to provide for any proposed paths,
 cycleways, infrastructure and facilities outside the 10m wide
 strip of riparian planting.

IX.8.2 Assessment criteria

- (1) Development of public and private roads:
 - (e) Whether the street network provides safe and legible pedestrian and cycle connections to the operational Drury Central train station as development occurs over time. In particular, whether the following is provided, or an alternative is provided that achieves an equal or better degree of connectivity:
 - ... (ii) Development in Sub-Precinct A provides for a direct, legible and safe pedestrian and cycle connection to the Drury Central train station via the Key Retail Street and/or any connecting local or collector roads and/or open spaces; (iii) Development in Sub-Precincts C and E provides for a direct and legible connection to the Drury Central train station via Drury Boulevard and any connecting local or collector roads and/or open spaces.
- (2) Development of publicly accessible open space greater than 1000m2:

Location and design of publicly accessible open spaces greater than 1000m2 in Sub-

Precinct A

- (a) Whether Homestead Park and Station Plaza are provided in locations generally consistent with their indicative locations shown on IX.10.2 Drury Centre Precinct Plan 2 and have adequate street frontage to ensure the open spaces are visually prominent and safe:
- (b) Encourage the existing Homestead building to be retained, repurposed and incorporated into a high amenity urban park for informal recreation, which forms a focal point of the Drury Centre:
- (c) Whether existing indigenous trees are retained within Homestead Park where possible;
- (d) Whether Station Plaza is designed as a open space which will act as a major entrance way to Drury Centre, integrating the train station with the Drury Centre;
- (e) Whether any buildings or kiosks which locate in the Station Plaza are designed to ensure they do not compromise or dominate the use of the space for public recreational use.
- (f) Whether a civic open space is integrated with the Key Retail Street that functions as an urban plaza and is a focus of civic and public activity.

Location and design of any other open spaces greater than 1000m² including any riparian planting

- (g) Whether the subdivision or development provides for the recreation and amenity needs of residents by providing suitably sized open spaces that are prominent and accessible to pedestrians within a neighbourhood;
- (h) Encourage the location and design of open spaces to integrate with surrounding natural features including the network of permanent and intermittent streams;

IX.8.2 Assessment criteria

(2) Development of publicly accessible open space greater than 1000m2:

Location and design of publicly accessible open spaces greater than 1000m2 in Sub-Precinct A

- (a) Whether the neighbourhood park Homestead Park and Station Plaza are provided in locations generally consistent with their indicative locations shown on IX.10.2 Drury Centre Precinct Plan 2 and have adequate street frontage to ensure the open spaces are visually prominent and safe;
- (b) Encourage the existing Homestead building to be retained, repurposed and incorporated into a high amenity urban park for informal recreation, which forms a focal point of the Drury Centre:
- (c) Whether existing indigenous trees are retained within Homestead Park where possible;
- (d) Whether Station Plaza is designed as a open space which will act as a major entrance way to Drury Centre, integrating the train station with the Drury Centre:
- (e) Whether any buildings or kiosks which locate in the Station Plaza are designed to ensure they do not compromise or dominate the use of the space for public recreational use. (f) Whether a civic open space is integrated with the Key
- Retail Street that functions as an urban plaza and is a focus of civic and public activity.
- \dots Location and design of any other open spaces greater than $1000 \mathrm{m}^2$ including any riparian planting
 - (g) Whether the subdivision or development provides for the recreation and amenity needs of residents by providing suitably sized open spaces that are prominent and accessible to pedestrians within a neighbourhood:
 - (h) Encourage the location and design of open spaces to integrate with surrounding natural features including the network of permanent and intermittent streams:
 - (i) Whether a network of pedestrian and cycle paths are provided along both sides of permanent streams and one side of intermittent streams within proposed open spaces; and
 - (j) Where pedestrian and/or cycle paths are proposed within proposed open spaces, whether they are located adjacent to, and not within the 10m planted riparian area.
 - (x) Whether riparian margins of permanent or intermittent streams are planted either side to a minimum width of 10m measured from the top of bank of the stream, or from the centreline of the stream where the bank cannot be physically identified by ground survey.

- (i) Whether a network of pedestrian and cycle paths are provided along both sides of permanent streams and one side of intermittent streams within proposed open spaces; and (j) Where pedestrian and/or cycle paths are proposed within proposed open spaces, whether they are located adjacent to, and not within the 10m planted riparian area.
- (3) New buildings, and alterations and additions to buildings not otherwise provided

for, within Sub-Precinct A, B and D:

- ... (b) Whether the height and form of buildings provides for four hours of sunlight access to over 75% of the net site area of Station Plaza and Homestead Park and other publicly accessible open spaces greater than 3,000m2, between the hours of 10am-4pm during the Equinox (22 September. Demonstrating this may require the height of buildings to be reduced below that allowed by Rule IX.6.1 Building Height. (c) Whether buildings along the Key Retail Street shown on IX.10.2 Drury Centre: Precinct Plan 2 maximise pedestrian amenity, safety and visual quality through:
 - (i) achieving an appropriate level of definition and sense of enclosure to the street by providing a frontage height of at least 8m;
 - (ii) providing activities that engage and activate the street and open space at ground and first floor levels;
 - (iii) ensuring buildings are generally aligned with the street and have continuous verandah cover except where open space is provided;
 - (iv) locating clearly identifiable and accessible pedestrian entrances to the street;
 - (v) requiring internal space at all levels within buildings to maximise outlook onto the street and open space; and
- ... (e) Whether buildings fronting Homestead Park and Station Plaza provide activities that engage and activate the open space at ground floor level.
- ... (h) Whether the height of retaining walls to streets and public open spaces are minimised where practicable. Where retaining walls are required, they should be stepped and landscaped.
- ...(k) Whether the bus interchange is designed and located to minimise conflict with the pedestrian focused Station Plaza:
 - (i) Prioritising pedestrian amenity (active frontages, building entrances etc) on collector roads;
 - (ii) Screening carparking areas from streets and open spaces; and
- (4) New buildings, and alterations and additions to buildings not otherwise provided for, within Sub-Precinct C, E and F: below;
 - ...(b) Whether residential development contributes to achieving attractive and safe streets and open spaces. Methods to achieve this include:
 - (i) Providing windows and entrances to the street to encourage passive surveillance;
 - (ii) Use of soft landscaping and planted elements to the street;
 - (iii) Minimising the visual dominance of garage doors and car parking areas to the street;
 - (iv) Minimising the frequency of vehicle crossings to the street and encouraging rear access, taking into account the context of the site, including orientation and topography
 - (c) Whether residential development:
 - (i) orientates and locates windows to optimise privacy and encourage natural cross ventilation within the dwelling;
 - (ii) optimises sunlight access based on orientation, function, window design and location, and depth of the dwelling floor space;
 - (iii) provides secure and conveniently accessible storage for the number and type of occupants the dwelling is designed to accommodate;
 - (iv) provide the necessary waste collection and recycling facilities in locations conveniently accessible and screens from streets and public open spaces.
- (6) Infringement to standard IX.6.4 Riparian Planting (a) Whether the infringement is consistent with Policy IX.3(20).

- (4) New buildings, and alterations and additions to buildings not otherwise provided for, within Sub-Precinct C, E and F: below:
 - ...(b) Whether residential development contributes to achieving attractive and safe streets and open spaces. Methods to achieve this include: Providing windows and entrances to the street or open space to encourage passive surveillance;

.....(x)Use of low or visually permeable boundary treatments adjoining open space, in accordance with IXXX6.5 Sites adjoining public open space

- (6) Infringement to standard IX.6.4 Riparian Planting
- (a) Whether the infringement is consistent with Policy IX.3(20).
 - (x) Whether the infringement is consistent with Policy

8b.

(xx) effects on:

- a) Public open space network
- b) Greenways network
- c) Amenity and character
- the ability to provide for any proposed paths, cycleways, infrastructure and facilities outside the 10m wide strip of riparian planting.

(10) Infringements to standard H9.6.5 – Residential at Ground Floor on local streets within Sub-Precinct A

(a) Whether dwellings establishing at ground floor in Sub-Precinct A are located away from the Key Retail Street and positively contribute to the adjoining street or open space while achieving privacy and a good standard of amenity for occupiers of the dwelling.

IX.9 Special information requirements

(1) Riparian planting plan

An application for land modification, development and subdivision which adjoins a permanent or intermittent stream must be accompanied by a riparian planting plan identifying the location, species, planter bag size and density of the plants. Plant species should be native.

The below changes should be made to the IX.9 Special Information Requirements, including the addition of a new subsection (2):

(1) Riparian Planting plan

An application for land modification, development and subdivision which adjoins a permanent or intermittent stream must be accompanied by a riparian planting plan identifying the location, species, planter bag size and planting to a density of 10,000 plants per hectare of the plants. Plant species should be predominantly native eco-sourced native vegetation.

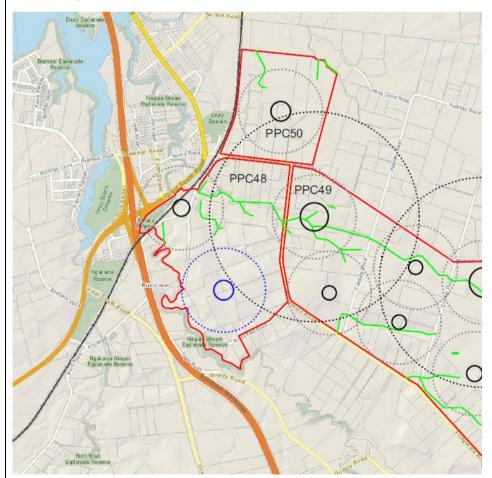
(2) Permanent and intermittent streams and wetlands

All applications for land modification, development and subdivision must include a plan identifying all permanent and intermittent streams and wetlands on the application site.

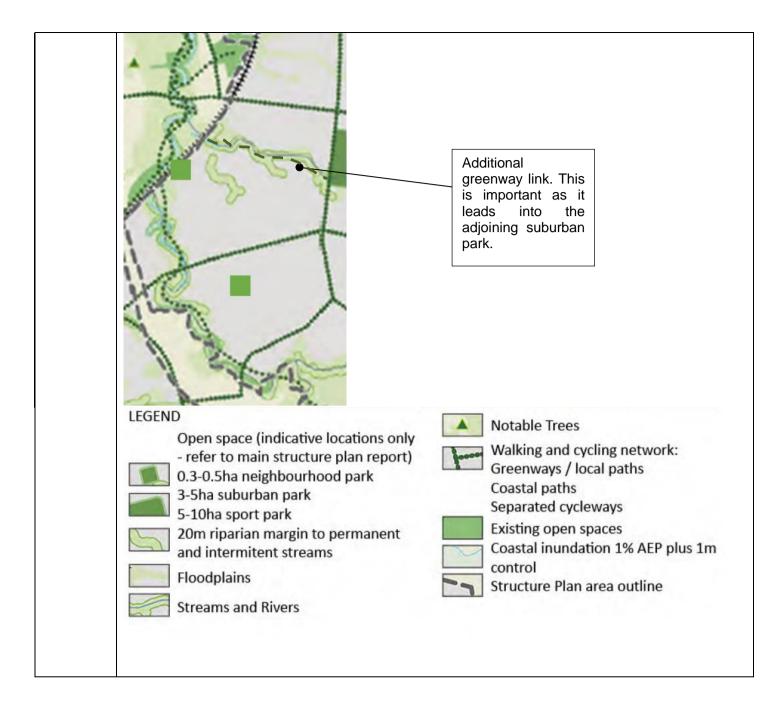
Drury Centre Precinct Plan 2 - Spatial features

The precinct plans do not identify permanent and intermittent streams, greenways or indicative open space.

The below map of 'indicative open space' should be included in the precinct plan for PC48 and open space should be recorded as such in the legend.



The below map of 'indicative greenways' should be included in the precinct plan and greenways should be recorded as such in the legend.



5.0 Submissions

5.1 Matters raised within the submissions and further submissions to the PC48 plan change relevant to Parks, Sport and Recreation are summarised and considered in Tables 2 and 3 below.

Table 2: Comment on submissions received relevant to parks planning

Sub #	Sub point	Submitter	Summary	Response
6		Michael and Rachel Gilmore	Supports PC48 in its notified form and supports more quality greenspaces, urging that developers provide playgrounds.	Support more quality greenspaces and playgrounds, though these must be in keeping with Auckland Council Policy.

10	10.1 Transpower NZ Retain the application of the National Grid Corridor Overlay and associated Unitary Plan provisions to the plan change site.		Support , this does not impact ability to reduce Open Space zoning.	
			On the basis the National Grid Corridor Overlay and associated provisions continue to apply to the plan change site, Transpower is neutral on the plan change itself and on the location of the boundary between the Open Space Zone and Metropolitan Centre Zone, noting the same National Grid Corridor provisions apply regardless of the zoning.	Zoring.
12	4b	Oyster Capital	Supports PC48 in its notified form. The Metropolitan Centre zone will support a wide variety of uses and services for the local community within a walkable distance and provide opportunities to establish new community facilities and a range of public open spaces. The centre will contain the key open spaces and the key retail streets that are the focal point for intensive retail, commercial and civic development and pedestrian activity within the precinct.	Disagree , PC48 cannot be supported without open space amendments as outlined in this report.
15	Support the Plan Change with amendments. Amend policy 19 as follows: In addition to the matters in Policy E.3.3(13), recognise that there may be no practicable alternative to stream works, including culverting, diversion and/or reclamation, where they are required to construct critical infrastructure. (a) provide for stream works, including culverting, diversion and/or reclamation, required to construct the Drury Boulevard, where it can be demonstrated that there is no practicable alternative, and where there is a functional need to construct it in the location generally shown on Precinct Plan 1. (b) enable the planted riparian margins of identified streams to contribute to offsetting the effects of any stream works assessed under Policy (19)(a).		Support – riparian margins of identified streams are required to be planted by the precinct plan provisions.	
	15.6	Kiwi Property	Amend building height limits on Precinct Plan 1 within sub precincts as follows: Sub-precinct E - 40.5m (was 32.5m) Sub-precinct C - 32.5m (was 25m) Sub-precinct F - 26m (was 18m).	Support in part - ensure increased heights do not result in adverse amenity outcomes for open spaces
20	20.2	Ministry of Housing and Development	Enable further open space through zoning (primarily refers to the PC49 area).	While the submission refers to a different private plan change, this may have been an error.
21	21.6 Ngati Te Ata Waiohua Decline the plan change, but if approved make changes. Apply a minimum of 20 metre riparian margin for all waterways, especially those to contain walkways / cycleways.		Support in part, however, the precinct plan needs to show a greenway network of walkways/cycleways along the green links and connecting via the road network.	
	21.9	Ngati Te Ata Waiohua	Confirm park edge design adjacent to all waterways.	Support for esplanade reserves to generally have road frontage for improved public access, CPTED outcomes and easier parks maintenance.
22	Council Retain and amend IX.6.4(1) by including a cross reference to the matter		Decline the plan change, but if approved make amendments. Retain and amend IX.6.4(1) by including a cross reference to the matters in Appendix 15.6(3)(b-f) and (4) of the Auckland Unitary Plan.	Support.
	22.11	Auckland Council	Replace standard IX.6.4(2) with a new standard and consequential amendments to effect that the riparian yards set for buildings in tables H13.6.5.1 Yards and H9.6.6.1 Yards read as follows: "Riparian - 4020m from the edge of all permanent streams and 10m from the edge of all intermittent streams" Other yards in these tables are not amended.	Support.
	22.12	Auckland Council	Add the following matters of discretion to IX.8.1(7):(b) Effects on floodplain management taking into account maximum probable development, climate change and the roughness coefficient of existing and planned planting. (c) Effects on stream bank stability taking into account the cohesiveness of the soil and steepness of the bank angle. (d) Effects on the ability to provide for any proposed paths, cycleways, infrastructure and facilities outside the 10m wide strip of riparian planting. Add related assessment criteria at IX.8.2(6).	Support.
	22.13	Auckland Council	Include indicative permanent and intermittent streams and wetlands on the precinct plan.	Support, maintenance and enhancement of permanent and intermittent streams is more likely to be achieved on development if indicative permanent and intermittent streams are shown on precinct plans.
	22.14	Auckland Council	Include the indicative blue-green corridor within the precinct plan based on the urban concept in the Urban Design Assessment	Support

	Auckland Council Amend policy IX.3(20) and add a new policy as follows, together with any other amendments that may be required to give effect to these matters: (20) Suppert Ensure improvements to water quality, and habitat and biodiversity, including by providing planting on the riparian margins of permanent and intermittent streams. (x) Enable a network of open space, riparian corridors and park edge roads that provides for: • potential ecological corridors along streams between Te-Manukanuka-OHoturoa (Manukau Harbour) and the Hunua; • improvement of freshwater and coastal water systems; and • a safe and attractive walking and cycling network. Amend policy IX.3(14) to read as follows: (14) In addition to matters (a)-(c) of Policy E38.3.18, ensure that the location and design of publicly accessible open spaces contributes to a sense of place for the Drury Centre, including by: (a) incorporating distinctive site features; (b) reinforcing legibility within the centre; and (c) integrating with the stream network.; and (d) if Auckland Council ownership is proposed, the open spaces must be consistent with the council's open space and parks acquisition and provision policies.		Support, it is important to provide a walking and cycling network that can achieve greenways outcomes.	
			Support.	
	22.18	Auckland Council	Reduce the open space zoning along Hingaia Stream to a 20m wide strip adjoining the stream.	Support.
	22.19 Auckland Council Include indicative open spaces in the precinct plan as shown in Attachment 1 to the submission.		Oppose, the indicative open spaces should be located as outlined within this report at Table 2 'Drury Centre Precinct Plan 2 - Spatial features', as the indicative open spaces within Attachment 1 result in a lack of provision in the southern region of the plan change.	
23	23.2	The New Zealand Transport Agency	References to pedestrians and cyclists should be replaced with "active transport".	Support.
27	27.24	Auckland Transport	Decline the plan change, but if approved make amendments. Amend the Precinct Description as follows: There are five Sub-precincts in the Drury Centre Precinct: • Sub-precinct A is zoned Business - Metropolitan Centre Zone and contains the primary retail area, Key Retail Main Street and civic and green open spaces. The sub-precinct is the focal point for intensive retail, commercial and civic development, with safe and convenient active transport access to and from the Drury Central rail station being enabled and prioritised and pedestrian activity; • Sub-precinct B is zoned Business – Metropolitan Centre Zone and is intended to be the primary location for large format retail, while also providing for other commercial and residential activities allowed in the zone. Development in this sub-precinct should ensure that a quality street environment is achieved with the provision of safe and convenient active transport access to and from the Drury Central rail station being enabled and prioritised; • Sub-precinct E is zoned Business – Mixed Use Zone and provides for high density residential and a range of commercial activities that will complement the core centre and maximise the efficient use of land close to the rapid transport network. Eight to ten storey buildings are enabled, and flexible ground floor designs are encouraged in the sub-precinct with the provision of safe and convenient active transport access to and from the rail station being enable and prioritised, reflecting its close proximity to the Drury Central train rail station;	Support.
	27.26 Auckland Transport Amend Objective IX.2(4) as follows: (4) Drury Centre is a walkable centre, with a street-based environment that provides a high standard of pedestrian amenity, safety and convenience quality pedestrian experience, with a particular emphasis on the Key Retail Street.		Support , in that a network of open space supports this outcome.	
	27.27			Support, in that a network of open space supports this outcome.
	Auckland Transport Amend Policy IX.3(17) as follows: (17) Provide for <u>bus</u> , <u>pedestrian and cycling</u> the staging of <u>pedestrian and cycling</u> connections to the Drury Central train <u>rail</u> station <u>upon its completion</u> to encourage the <u>immediate</u> use of public and active modes of transport <u>as soon as practically possible.</u>		Support , in that a network of open space supports this outcome.	

	follows: Whether Homestead P generally consistent wi Precinct Plan 2 and ha are visually prominent i (d) Whether Station Pla major entrance way to Centre; (e) Whether any buildir designed to ensure the public recreational use		Whether Homestead Park and Station Plaza are is provided in a locations generally consistent with their indicative locations shown on IX.10.2 Drury Centre Precinct Plan 2 and have adequate street frontage to ensure the open spaces are visually prominent and safe; (d) Whether Station Plaza is designed as an open space which will act as a major entrance way to Drury Centre, integrating the train station with the Drury Centre; (e) Whether any buildings or kiosks which locate in the Station Plaza are designed to ensure they do not compromise or dominate the use of the space for public recreational use.	Neither support nor oppose, but note that Parks, Sport and Recreations position within this report is that the indicative open spaces should be located as outlined within this report at Table 2 'Drury Centre Precinct Plan 2 - Spatial features', as the propsoed result in a lack of provision in the southern region of the plan change.	
	27.48	Auckland Transport	Amend Policy IX.3(6) as follows: (6) Ensure that development <u>and subdivision</u> provides a local road network that achieves a highly connected street layout and integrates with the collector road network within the precinct, and the surrounding transport network, and supports the safety and amenity of the open space and stream network.	Support in principle.	
	27.55	Auckland Transport	Amend Assessment criteria IX.8.2 (1)(d) as follows: (d) Whether the layout of the street network provides a good degree of accessibility and connectivity, and supports the development of Drury Centre Precinct as a walkable centre and community street network. As a general principle, the length of a block should be no greater than 180m, and the perimeter of the block should be no greater than 500m;	Support	
29			Support more quality open space, though this must be in keeping with Auckland Council Policy.		
	29.9	Ministry of Education	Retain objectives and policies relating to the provision of safe and legible walking and cycling connections through communities.	Support	
30	30.1	Leith McFadden	Support in part, request increased commitment by the way of open space zoning. To ensure a positive community outcome, Zone areas for Parks and Public Space.	Support more quality open space, though this must be in keeping with Auckland Council Policy.	
31	31.2	Heritage New Zealand Pouhere Taonga	Retain and re-use Flanagan Homestead R12/1125 in situ on its original site, with the park including an appropriate extent of its setting (including plants and trees with historical association to the homestead).	Neither support or oppose, this must be in keeping with Auckland Council Policy and acquisition of this park must not be required by the precinct plan.	
	31.9	Heritage New Zealand Pouhere Taonga	Extend the open space zoning slightly to the east in the northern part of the precinct where the Mixed Use zoning is closest to the Hingaia Stream.	Oppose, as the extent of open space zoning here is already not in line with Auckland Council Policy.	
33	33.1	Kianga Ora	Approve the plan change, subject to: •Identifying local open space areas within the Precinct and strengthening precinct provisions to provide an integrated and connected open space network; •The inclusion of spatial zoning (i.e. Special Purpose Zone) and corresponding precinct provisions to enable the provision of identified future tertiary and hospital activities within the precinct provisions that are necessary to support the intensity of urbanisation sought; •Consequential amendments as-required to give effect to the relief sought.	Support, the identification of open space areas and strengthening precinct provisions to provide an integrated and connected open space network	
	33.2	Kianga Ora	Retain the Drury Centre Precinct description (with any consequential amendments to reflect Kāinga Ora's submission).	Oppose , precinct description amendments required as per this report.	
	35.6	Ngati Tamoho	Apply a minimum of 20 meter riparian margin for all waterways especially those to contain walkways / cycleways.	Support in part, however, the precinct plan needs to show a greenway network of walkways/cycleways along the green links and connecting via the road network.	
	35.9 Ngati Confirm park edge design adjacent to all waterways. Tamoho		Support for esplanade reserves to generally have road frontage for improved public access, CPTED outcomes and easier parks maintenance.		

Table 3: Comment on further submissions received relevant to parks planning where further issues raised

Sub	Sub	Submitter	Summary	Response
#	point			-

Kaianga Ora		Supports in part submission 22.16 to the extent it is consistent with Kāinga Ora's original submission. However, there is a risk via the proposed amendments that despite the streams and other corridors being 'indicative' they will 'lock in' a particular stream classification or wetland location.	Oppose, maintenance and enhancement of permanent and intermittent streams is more likely to be achieved on development if indicative permanent and intermittent streams are shown on precinct plans.
	Kaianga Ora	Opposes in part submission 22.17 to the extent that acquisition policy sits outside of the Unitary Plan and is implied through existing vesting processes.	Oppose, appropriate assessment of open space acquisition is ensured by this provision.
	Counties Power	Neutral on submission 20.2 The location of any increased open space zoning; and the category of open space zoning (e.g. recreation, conservation, etc) should be informed by the location of existing and proposed Counties Power assets. Consideration should also be given to the nature of the reserve land (e.g. Open Space – Recreation, Conservation, etc) so that adequate provision is made for accessing Counties Power assets on reserve land; or are accessed via reserve land.	Oppose in part, note Counties Power assets should not be located on reserve land as this is not the purpose of reserve land.
	NZHTP	Support submission 20.2 to enable further open space through zoning. Heritage NZ supports the submission in that the provision of open space should be appropriate to the scale and nature of the proposal. The provision of sufficient open space is further supported to enable the achievement of multiple objectives within these spaces including their potential alignment with the extents of historic and cultural heritage features located within the development area allowing for their identification, retention and/or interpretation and contribution to a sense of place.	Support in part, but note that Parks, Sport and Recreations position within this report is that the indicative open spaces should be located as outlined within this report at Table 2 'Drury Centre Precinct Plan 2 - Spatial features', as the proposed result in a lack of provision in the southern region of the plan change.
	NZHTP	Support submission 22.19 to include indicative open spaces in the precinct plan as shown in Attachment 1 to the submission. This will provide for a transparent starting point for discussion, including in relation to the potential for open spaces to encompass historic heritage features located within the area enabling their retention, interpretation and contribution to a sense of place.	As above
	NZHTP	Support submission 33.1 to identify local open space areas within the Precinct and strengthen precinct provisions to provide an integrated and connected open space network. Heritage New Zealand supports the submission which identifies that few methods are identified to ensure open space linkages throughout the planned development are delivered. Heritage New Zealand supports the submission such that the precinct provisions ensure adequate open space will be delivered through development which has the potential to locate in proximity to/encompass the full extent of historic heritage features located within the area enabling their retention, interpretation and contribution to a sense of place.	As above

6.0 Conclusions and recommendations

- 6.1 It is my conclusion that the assessment provided by the applicant does not provide sufficient assurance that the outcomes anticipated by the RPS, AUP and associated Auckland Council policies and plans including the creation of a connected and integrated open space system will be achieved in later resource consent processes, or to demonstrate that appropriate community (parks) infrastructure will be provided. The proposal is not consistent with the Regional Policy Statement or the AUP which require that open spaces are provided for the recreation and amenity needs of residents, (RPS Objective B2.7.1, B2.7.2, AUP Subdivision Policy E38.3).
- 6.2 The private plan change is not supported as it needs to include a spatial provisions plan that includes indicative locations of open space, streams to be retained and riparian areas to be enhanced, proposed esplanade reserve along the Hingaia stream, and an indicative greenway route.
- 6.3 It is recommended that the blue-green network is identified on the structure plan, including alignment with movement networks and other recreational outcomes, and that the creation and

- development of these areas is consistent with the Southern Structure Plan Area Neighbourhood Design Statement and Policy B2.7.2 (1) of the Regional Policy Statement.
- 6.4 It is recommended that two indicative open spaces of 3000-5000m² are shown on the proposed Drury Centre Precinct Plan in the indicative locations defined in table 1 of this report (the exact location can be refined through the subdivision and resource consenting processes).
- 6.5 It is recommended that no wording is added to the proposed plan change that implies (and potentially creates a legitimate expectation) that any of the indicative open space on proposed Drury Precinct Plan will be acquired by the Council. This includes land underlying the indicative greenway routes and the 3000-5000m² shown on the Drury Opaheke Structure Plan and the Auckland Council submission. This also applies to land that is to be acquired at no cost (land acquisition can be addressed during the subdivision and resource consenting processes).
- 6.6 Comment is provided above in relation to submissions and further submission to the proposed plan change.

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

19 May 2021

To: David Mead, Consultant Planner, Auckland Council

From: Trent Sunich, Consultant Stormwater Technical Specialist

Subject: Private Plan Change – PPC48 Drury Centre Precinct, Drury – Stormwater

Assessment

1.0 Introduction

I have undertaken a review of the private plan change, on behalf of Auckland Council in relation to stormwater management associated with the development of the precinct.

I hold a Bachelor of Technology (Environmental) which I obtained from the United Institute of Technology in 2001. I have approximately 20 years' experience in the field of natural resource planning and environmental engineering. My expertise is in integrated catchment management planning, stormwater quality management, and assessing associated development related effects where previously I have held roles with the Auckland Regional Council and URS New Zealand Limited. I am currently employed by 4Sight Consulting as a Senior Environmental Consultant.

In writing this memo, I have reviewed the following documents:

- Drury-Opaheke Structure Plan Future Urban Zone, Draft Stormwater Management Plan, April 2019
- Kiwi Property Holdings No.2 Limited Private Plan Change Request S32 Assessment Report August 2020,
- Drury East Stormwater Management Plan, Rev A, dated 30/06/2020.
- Response to Auckland Council Further Information Request on Stormwater Matters for Drury. East, dated 25 March 2020.
- Ngati Te Ata Cultural Values Assessment Report dated 2019.
- Drury/Opaheke Plan Change Cultural Values Assessment: Ngāti Tamaoho Trust.
- Ngai Tai Ki Tamaki Cultural Values Assessment dated 10 December 2018.
- Te Akitai Cultural Values Assessment dated 2019.
- Response to Auckland Council Further Information Request on Stormwater Matters for Drury East, T&T/Woods, dated March 2020.

2.0 Key Stormwater Management Issues

The plan change proposes the development of approximately 95 hectares of future urban zoned land to Metropolitan Centre, Mixed Use and Open Space zones. Land use in the proposed precinct area is currently predominantly rural type in pastoral farming with some existing residential development and greenhouses in the northern area of the plan change area. The plan change area is located within the Hingaia Stream catchment where the Hingaia Stream flows along the western boundary. The Fitzgerald Stream conveys flow east-west across the plan change area to join with the main Hingaia Stream Channel which then flows north through the Drury township and ultimately to the tidal reaches of the Drury Creek and wider Manukau Harbour. The Hingaia Stream discharges into the Drury Creek which is a Significant Ecological Area (SEA), Marine 1 and 2.

The proposed change in land use will be to a predominantly urban environment with the corresponding development of impervious surfaces increasing stormwater runoff flow volumes and flow rates along with the generation of stormwater borne contaminants associated with urban land use being total suspended solids, metals and hydrocarbons. The plan change is also currently subject to flooding where and culvert infrastructure capacity is limited in places, resulting in overtopping of roads during large order events. Downstream the Drury Township also suffers from frequent and extensive flooding.

The applicant has proposed a set of stormwater management related objectives and policies as follows. These are in addition to the existing AUP(OP) objective and policies. While in some case there in no direct reference to stormwater management, there is alignment with the concept of integrated management by seeking to manage receiving environment adverse effects:

IX.2 Objectives:

- (3) Development of the Drury Centre creates a distinctive sense of place, including by incorporating distinctive natural and built site features, responding to landform and respecting Mana Whenua values.
- (6) Development is supported by appropriate infrastructure.
- (7) Freshwater and sediment quality is progressively improved over time in the Drury Centre Precinct.

IX.3 Policies

Infrastructure and Staging

(16) Ensure that development in Drury Centre Precinct is coordinated with supporting stormwater, wastewater and water supply infrastructure.

Ecology

- (18) In addition to the matters in Policy E1.3(8), manage erosion and associated effects on stream health and values arising from development in the precinct, including parts of the Fitzgerald and Hingaia streams, and enable in-stream works to mitigate any effects.
- (20) Support improvements to water quality and habitat, including by providing planting on the riparian margins of permanent and intermittent streams.

IX.6 Standards

IX.6.3 Riparian Margin

- (1) Riparian margins of permanent or intermittent streams must be planted either side to a minimum width of 10m measured from the top of bank of the stream. This rule shall not apply to road crossings over streams.
- (2) A building, or parts of a building, must be setback at least 20m from the bank of a river or stream measuring 3m or more in width, consistent with the requirements of E38.7.3.2.

IX.6.6 Stormwater Quality

(1) The activity rules and standards in E9 apply to development in the Drury Centre precinct as if the reference to 'high use roads', was a reference to 'all roads'.

IX.8.2 Assessment criteria

(3) New buildings, and alterations and additions to buildings not otherwise provided for, within Sub-Precinct A, B and D:

Servicing

- (n) Whether there is adequate capacity in the existing or proposed public reticulated water supply, wastewater and stormwater network to service the proposed development having particular regard to the capacity of the Fitzgerald culvert and culverts under Great South Road;
- (o) Where adequate network capacity is not available, whether adequate mitigation or staging is proposed.

The Auckland Council's Healthy Waters department reviews each SMP document where the purpose is to have the document adopted under the Auckland Council's Stormwater Network Discharge Consent (NDC). The status of adoption means the stormwater mitigation proposed for

the development aligns with the objectives and outcomes of the NDC and authorises future stormwater discharges under the NDC should the proposed plan change be approved. At the time of drafting this memorandum, Healthy Waters had reviewed the SMP document and had provided further comments for review by the applicant's engineering consultant.

Authorisation under the NDC is not mandatory where the alternative would be to seek stormwater discharge consents(s) through Chapter E8 of the AUP. However this would mean all stormwater infrastructure servicing the PCA would remain privately owned and operated which is an unlikely scenario at this scale of development.

3.0 Applicant's assessment

In the SMP document and corresponding reporting in the plan change request's Section 32 analysis, the applicant has outlined current and future site characteristics (e.g. topography, stream systems, site hydrology, flood plains), and in the context of the proposed land use types has detailed how adverse effects are proposed to be mitigated through selected stormwater methods that can be applied to a range of scenarios. The three main effects - contaminants management, hydrology mitigation and flood hazard management - are discussed as follows:

Stormwater Contaminants

The applicant has proposed to treat all impervious surfaces subject to varying volumes of traffic, this includes all roads and carparks (greater than 30 vehicles) utilising treatment devices compliant with the Auckland Council's GD01¹ document. Other impervious surfaces such as jointly owned accessways or small carparks will receive water quality treatment through hydrology mitigation bio retention devices or through communal treatment devices. Prevention of the generation of contaminants (i.e. contaminant source control) is also included as an option in the SMP through the specification of inert building material typically being no exposed unpainted copper or cladding materials containing higher concentrations of zinc.

Hydrology Mitigation

In terms of hydrology mitigation, the proposed stormwater management response to this is firstly reducing stormwater volumes discharging to stream systems by promoting soakage to ground or non-potable rainwater harvesting, and secondly through stormwater detention which is holding and releasing stormwater flows at a controlled rate prior to discharge to stream. In the SMP document, the applicant has detailed the suite of stormwater devices which will assist in achieving hydrology mitigation outcomes for the plan change area across the differing zoning types. This includes bioretention devices such as raingardens, tree pits, vegetated swales, rainwater tanks and permeable paving.

Consistent with the commentary above regarding implementation of best practice, the applicant is proposing hydrology mitigation equivalent to Stormwater Management Flow Area 1 (SMAF 1). This is the more conservative of the two SMAF types stipulated in the AUP thereby managing a detention volume for the 95th wile rainfall event. The inclusion of the SMAF 1 overlay through the plan change area will also trigger future land use consents under the E10 rule set of the AUP.

Flood Hazards

As is summarised in the Section 32 report, SMP and Further Information Request (RFI), the proposed precinct area is identified on the Auckland Council's GIS mapping system as currently being subject to overland flow paths and flood plains, and is within flood prone areas. In order to assess post development flood hazard effects, the applicant developed an integrated flood model that also includes the proposed development within the Plan Change 49² area to the east Plan Change 48 and the influence of the Drury South Precinct Plan Change (the catchment model), including post development impervious areas and land forms of that area.

As reported by the applicant, the findings from the flood modelling and flood hazard assessment indicate:

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¹ Stormwater Management Devices in the Auckland Region December 2017 Guideline Document 2017/001

² The Drury East Stormwater Management Plan documents proposed Plan Changes 48 and 48.

- The existing flood extent is along the Hingaia Stream (western boundary) and along the Fitzgerald stream adjacent to the northern boundary of the Metropolitan Centre.
- Development will result in some localised changes to flood levels (increases and decreases) within the plan change area.
- For the 10yr ARI storm event including climate change, there were several locations where flood level increases were observed outside the plan change area including:
 - the main Hingaia Stream branch to the south and west of the plan change area near Brookfields Road (increases up to 60mm);
 - the confluence of the minor tributaries to the west of the Cossey Road and Fitzgerald Road intersection (increases up to 150mm); and
 - the existing Drury Township downstream of the Plan Change Area (increases up to 80mm).

Following lodgement of the plan change, additional flood modelling was undertaken to assess the potential flooding mechanisms and effects caused by a "development only flood' scenario. This scenario assumes rainfall (2, 10, 100-year ARI rainfall) in the lower catchment only (over existing Drury and the Plan Change areas). The analysis showed that the total number of habitable floor flooded are unchanged, for the 'Development only' post development modelling scenario and for the scenario using the wider catchment model. This analysis confirms there is no additional flood risk to habitable floor or properties with the proposed development in place.

It is noted the flood hazard modelling assumed a 'pass forward' approach to management of flood flows meaning no peak flow attenuation to match pre development flow rates is considered necessary. This approach avoids the coincidence of storm peak flows from the upper catchment, thereby preventing exacerbation of flood risk associated with development of the plan change area.

Notwithstanding the above commentary regarding habitable floors, the SMP indicates the capacity of the existing Flanagan/Railway and Great South Road culverts is inadequate to support future development within the Drury Centre and Drury East plan change areas and that the culverts will need to be upgraded to provide additional capacity before flows from the full development are able to be passed forward without onsite peak flow attenuation. The upgrades of these culverts needs coordination between Auckland Council, Auckland Transport, KiwiRail and other stakeholders.

As a solution to this, the applicant indicates peak flows resulting from partial development could possibly be passed forward without culvert upgrades but this approach would need to be tested and modelled further to confirm as which point developed will start exacerbating flood risk. Further, the SMP indicates an interim solution is to provide on-site flood attenuation for the difference between the predevelopment and post-development flows for up to the 100-year ARI storms for development within Zone A of the Drury East PCA or Drury Centre PCA eastern areas. This could enable development of the PCAs before the future culvert upgrade(s). The attenuation devices could then be removed once the Flannagan/Railway and Great South Road culverts are upgraded and the "pass flows forward" is made viable. It is understood the detail of now the temporary attenuation devices could operate is being discussed with Healthy Waters at the time of drafting this memorandum.

Plan Change Area Objectives and Policies

The stormwater management related plan change objectives and policies generally relate to the suitable provision of infrastructure including for the management of stormwater, noting in Policy IX.3 (16) that this is carried out in a coordinated manner. Receiving environment related objectives include IX.2 (7) stipulating the progressive improvement of freshwater and sediment quality along with policies which include management of erosion and associated effects on stream health (IX.3 (18)) and supporting improvements to water quality and habitat (IX.3 (20)).

With regard to stormwater runoff treatment from roads, the applicant has sought to clarify in IX.6.6 that the activity rules and standards in Chapter E9 of the Auckland Unitary Plan apply to

development in the Drury East precinct as if the reference to 'high use roads', was a reference to 'all roads'.

The issue discussed above regarding upgrading of the culverts has been included as an assessment criteria item under IX.8.2(3)(n) requiring assessment whether there is adequate capacity in the existing or proposed stormwater network to service the proposed development having particular regard to the capacity of the Fitzgerald culvert and culverts under Great South Road.

4.0 Assessment of stormwater effects and management methods

In the Auckland Unitary Plan (Operative in Part) (the AUP), the stormwater management objectives and policies are detailed in Chapters B7, E1 and E36. Consistent themes throughout the objective and policy frameworks relate to minimising the discharge of contaminants and adverse effects on freshwater and coastal receiving environments. Consistent with the NPSFM 2020 the E1 chapter also details stormwater management policies and introduces the integrated stormwater management approach seeking retention of natural hydrological features, reduction of stormwater flows and contaminants and land use integration to minimise adverse effects on receiving environments. Minimisation of flood hazard, including floodplains and overland flow paths during subdivision use and development is managed through the E36 objective, policy and rule set.

In accordance with current practice for the management of stormwater runoff associated with green field development in the Auckland Region, the applicant has developed an SMP document to provide a road map for the construction and operation of a reticulated stormwater system responding to receiving environment attributes with a suite of devices and methods to be designed in accordance with best practice stipulated in GD01. In summary this is:

- Water quality treatment of contaminant generating impervious surfaces (e.g. roads, car parks, access ways) and prevention of the generation of contaminants by stipulating the use of inert building materials (i.e. contaminant source control):
- Hydrology mitigation to manage post development stormwater volumes seeking to minimise stream bank erosion. This complements the ecological benefits provided by riparian enhancement such as steam bank stabilisation and shading; and
- Adoption of a 'pass forward' approach to flood hazard management to safely pass flood flows to the lower catchment without exacerbating flood risk to downstream properties and avoiding a coincidence of flood peaks from the developed upper catchment (including the developed Drury South area).

As is discussed in the section above, some development dependencies exist due to capacity constraints of culverts within and downstream of the plan change area. As an alternative to upgrading the culverts immediately, the applicant is proposing temporary stormwater attenuation and/or associated development staging. At the time of writing this memorandum this is a matter that is to be addressed in the SMP as the adoption of the document under the Auckland Stormwater NDC progresses with Healthy Waters.

In reviewing the applicable objectives and policies in the regional policy statement and regional plan of the AUP, the proposed stormwater management methodology outlined in the SMP document and the objectives and policies in the proposed plan change, overall at a high level there is alignment in seeking to achieve suitable receiving environment outcomes associated with the development. In brief there are:

- Proposed integrated management of land use and freshwater systems by providing stormwater infrastructure implemented with assistance of catchment planning (B7.3);
- Minimisation of the generation and discharge of contaminants in stormwater runoff through the proposed use of contaminant source control and water quality treatment devices (B7.4);
- Implementation of hydrology mitigation to minimise or mitigate new adverse effects associated with stormwater running off impervious surfaces (E1(9)); and
- Through catchment and development-based flood hazard modelling, adoption of the 'pass forward' option for management of flood flows, thereby avoiding exacerbation of existing flood risk (E1(11)).

Notwithstanding this assessment, some improvements could be made to the precinct objective and policy framework and is discussed as follows. Further analysis of the objectives and policies is also included in the section below responding to submissions.

- In terms of the stormwater management related objectives, policies and methods in the proposed precinct chapter, given the role of the SMP in development of the catchment, it would be appropriate to include a reference to that document and compliance with the associated Auckland Stormwater Network Discharge Consent. This would be consistent with other precincts in the region and although adoption of SMPs and their implementation as development progresses is a function of Healthy Waters (as the holder on the NDC), this would nonetheless provide a helpful linkage to assist in achieving the specific outcomes sought by the Precinct (or should the ultimate landowner/developer seek their own discharge consent).
- Objective 7 reads as follows:
 - (4) Freshwater and sediment quality is progressively improved over time in the Drury Centre Precinct.

It is unclear why the term progressively improved is used in this objective which in the context of Chapter E1 relates to existing stormwater discharges and brownfield redevelopment. Further, improvement to sediment quality is typically not an outcome which can be directly influenced by a change in land use. Therefore I recommend the following edits to this objective:

(4) Freshwater and sediment quality is progressively improved ever time in the Drury Centre Precinct.

It is noted future stormwater diversions associated with the development would be permitted activities under Chapter E8 (A1) providing the development demonstrates compliance with the SMP document. Other land use stormwater rule chapters in the AUP being E9 (Stormwater quality - High contaminant generating car parks and high use roads) and E10 (Stormwater management area - Flow 1 and Flow 2) any associated land use consent requirements will still apply.

5.0 Submissions

Assessment of stormwater management related submissions and further submissions is as follows:

05 Wendy Hannah 228 Flanagan Road Drury

<u>Submission</u>

We are in support of the plan change but due to close proximity to our property we would need further clarification of how the change would affect our property i.e. access to roading, transport, flooding, services, utilities, visual, and environmental issues.

Assessment

A review of the flood hazard maps in the appendices of the SMP document does not indicate flood hazard extent will change significantly at the 228 Flanagan Road address. Additionally there does not appear to be any habitable dwellings on the property. No further assessment is considered necessary.

15 Kiwi Property Holdings No.2 Limited

Submission

The proposed approach to managing stormwater within the PPC48 area is to utilise the
existing AUP provisions. It is proposed to apply the Stormwater Management Area Control –
Flow 1 (SMAF 1) across the Plan Change area to manage the increase in stormwater
discharge to sensitive stream environments. In accordance with the Council's recently

approved Network Discharge Consent, a Stormwater Management Plan (SMP) has been prepared by Tonkin & Taylor, and is included at Appendix 12 to the Plan Change application. This SMP is proposed to be adopted by the Council to form part of the Network Discharge Consent and outline the stormwater management requirements in the Plan Change area.

Kiwi Property is proposing amendments to the Drury Centre Precinct to clarify this approach
to stormwater management within the Plan Change area. In particular it is proposed to add
an additional policy and amend Standard IX6.6 Stormwater Quality. The proposed
amendments are set out below:

Stormwater Management

Policy IX.3(21): Require subdivision and development to be consistent with any approved network discharge consent and supporting stormwater management plan including the application of water sensitive design to achieve water quality and hydrology mitigation.

IX6.6 Stormwater Quality

- (1) The activity rules and standards in E9 apply to development in the Drury Centre precinct as if the reference to 'high use roads', was a reference to 'all roads'.
- (2) For all other impervious surfaces inert building materials should be used.
- Currently the policies within the Drury Centre Precinct do not provide specific direction for the
 approach to stormwater management within Drury Centre. There is no recognition that
 subdivision and development will have to be in accordance with the SMP which is adopted
 under the Network Discharge Consent. The proposed policy will clarify this relationship and
 is consistent with the approach taken within the proposed approach in Plan Change 51 Drury
 2 Precinct.
- The SMP aims to align the proposed stormwater management approach for the Plan Change area with the requirements of the AUP, taking into account the catchment specific issues, constraints and opportunities. An integrated stormwater management approach has been proposed as a 'Stormwater Management Toolbox' which incorporates a range of measures to manage potential effects associated with the proposed change in land use and outlines the devices proposed within each of the proposed zones.
- The 'Stormwater Management Toolbox' is proposing a higher standard of stormwater management than what is required within SMAF 1 and the AUP. In particular the SMP proposes to manage water quality through appropriately designed SMAF 1 devices, treatment of all roads (rather than just high use roads as required by Chapter E9 of the regional rules) and the use of inert building materials.
- Standard IX6.6 Stormwater Quality is proposed to be included within the Drury Centre Precinct to recognise that a higher standard of stormwater treatment for roads than what is currently provided for within the AUP is proposed in Drury Centre. Chapter E9 of the AUP does not include provisions that require the use of inert building materials on impervious surfaces to manage the quality of stormwater runoff. As such Standard IX6.6 Stormwater Quality should be amended to recognise that the required use of inert building materials is also a higher standard of stormwater treatment than what is currently provided for within the AUP.

<u>Assessment</u>

I agree with the proposed reference to the SMP document as this aligns with the approach for other precincts and with the clarification regarding standard IX6.6. I propose a further edit as follows to specify SMP documents that have been adopted by Healthy Waters, thereby verifying their status for implementation:

Require subdivision and development to be consistent with any approved network discharge consent and supporting stormwater management plan <u>adopted by Council under that discharge consent</u>, including the application of water sensitive design to achieve water quality and hydrology mitigation.

In principle provisions relating to the use of inert materials have merit and align with the objectives of the AUP and the implementation of contaminant source control. In relation to zinc

cladding some clarification may be needed regarding zinc content (%). The purpose of this clarification is to not unduly exclude zinc aluminium based cladding materials.

21 Ngāti Te Ata Waiohua

Submission

- Wai (Water): PPC48 does not give effect to Te Mana o te Wai and risks damaging the mauri
 of wai within the project area. This includes through PPC48's proposed treatment of
 waterways and its proposed stormwater and wastewater solutions.
- · Relief sought:
 - (g) A minimum of a two-treatment train approach for all stormwater prior to discharge to a waterway;
 - (h) Roof capture for reuse and groundwater recharge.

Assessment

There is merit in specifying a treatment train approach as this aligns with best practice with regard to the reduction of contaminants entrained in stormwater runoff. I suggest this is added to the SMP to take a risk-based approach to operate a treatment train for stormwater running off contaminant generating impervious surfaces. It is noted the term treatment train is not defined in the AUP, or in GD01. Examples of a treatment train of stormwater management interventions responding to a particular risk could be:

- High contaminant concentrations generated from a car park discharging through a series of treatment devices;
- Gross pollutant treatment at source then further contaminant treatment (e.g. through bioretention); and
- Contaminant source control through the specification of inert building materials and further management through hydrological mitigation (e.g. rainwater reuse and detention tanks).

Roof water capture and/or groundwater recharge is discussed in the SMP and is a requirement in implementing the E10 Stormwater Management Area Flow rule set in the AUP.

22 Auckland Council

Submission

 Stormwater Management Plans (SMP(s)) identify effects of stormwater and how effects should be managed both to achieve the RPS, NPSFM and regional plan and to be in accordance with the region-wide Network Discharge Consent (NDC) granted by the Environment Court on 30 October 2019. Without an SMP approved by the Network Utility Operator there is uncertainty if the SMP adequately manages effects and if there are sufficient provisions to enact the direction that the SMP would provide.

Policy and matters of discretion/assessment criteria are required to ensure that consenting of subdivision and land uses is consistent with the SMP in its final adopted form which may be included in the council's NDC.

Relief Sought:

Amend the precinct to include additional policies and rules to manage the effects of stormwater as described in an approved SMP. This includes:

- New policy: Require subdivision and development to be assessed for consistency with any approved network discharge consent and supporting stormwater management plan including the application of water sensitive design to achieve water quality and hydrology mitigation.
- Additional matters of discretion/assessment criteria that would apply to any restricted discretionary activity in the area of the precinct to ensure that new development and subdivision can be assessed for consistency with the NDC and SMP.
- Any other rules necessary to give specific effect to the SMP during development.

Assessment

Consistent with earlier commentary, I agree some reference to the implementation of the SMP should be incorporated into the precinct objectives and policies including the version approved by the network utility operator (Healthy Waters). Associated assessment criteria and/or matters of discretion would also be of assistance. It is unclear what benefit an associated rule framework would have as Healthy Waters is responsible for certification of developments through the conditions of the NDC which in my opinion is a satisfactory regulatory pathway.

Submission

Stormwater management area flow 1 (SMAF 1), as proposed in PC 48, is a control which
provides a framework for hydrology mitigation where there will be discharges into a stream
environment. SMAF 1 has both a retention and detention volume and the combination of
these is intended to reduce erosive flows in streams, maintain stream baseflow and support
the recharge of aquifers. It is the default minimum required under the region wide NDC and
based on current knowledge is the most practicable option.

Relief Sought:

Retain application of SMAF 1 to the plan change area.

Assessment

I agree that the SMAF 1 overlay should be retained for the precinct.

 A new policy relating to the treatment of impervious surfaces is requested to give effect to the SMP and protect the receiving environment of the Te-Manukanuka-O-Hoturoa (Manukau Harbour).

Relief Sought:

Insert a new policy to the following effect:

Ensure that all impervious services are treated through a treatment train approach to enhance water quality and protect the health of stream and marine environments.

Assessment

Consistent with my commentary above, I agree there is merit in the application of a treatment train but consider this best sit in the SMP document so that the meaning of a treatment train can be explained/clarified. I recommend the proposal to add a new policy be rejected.

Relief Sought:

Insert a new policy to the following effect:

Provide sufficient floodplain storage within the Drury Centre precinct to avoid increasing flood risk upstream and downstream and manage increased flood risk within the precinct unless downstream infrastructure capacity means this is not required. This is subject to the upgrade of the downstream culvert upgrade.

Insert rules to give effect to this.

<u>Assessment</u>

I agree with the proposed policy and reinforces the proposed option stipulated in the SMP document to provide flood storage in lieu of the document stream culvert upgrades. I have proposed a further edit to add clarification in this regard:

<u>Provide sufficient floodplain storage, including attenuation storage within the Drury East</u> precinct to avoid increasing flood risk upstream and downstream and manage increased flood

<u>risk within the precinct unless downstream infrastructure capacity means this is not required. This</u> is subject to the upgrade of the downstream culverts. upgrade.

I do not agree with the submission to add addition rules to give effect to this policy.

Submission

Proposed standard IX6.6 (1) Stormwater Quality is supported in principle but cross references to the activity rules and standards in E9, including the parent rule 9.6.1.4 which has additional, and in some cases, confusing exemptions. These undermine its effectiveness because many roads, private roads and carparks may not be required to have stormwater treatment. Consequently, they are not sufficient to protect the upper Te-Manukanuka-O-Hoturoa (Manukau Harbour) from contaminant accumulation from the combined contaminant discharges from all the new, existing or upgraded roads, access ways and parking areas. The requested amendment includes all these areas in the precinct rules to provide for treatment of these areas. Alternative methods of achieving the same outcome could be considered. This gives effect to the RPS B7.3 objectives and policies relating to freshwater systems, RPS B7.4 objectives and policies relating to coastal water and freshwater, the NPS-FM, and the New Zealand Coastal Policy Statement 2010.

Relief Sought:

Retain and amend standard IX6.6 (1) Stormwater Quality but amend it to read as follows:

The activity rules and standards in E9 apply to development in the Drury Centre precinct as if the reference to 'high use roads', was where a reference to 'all existing, new, upgraded or redeveloped roads accessways and carparks', or other amendments that would achieve the same environmental outcome.

Assessment

I agree that as proposed standard IX6.6 (1) may result in confusion in its implementation when viewed on the context of the high use road and high contaminant generating car park definitions in the AUP. The proposed text also aligns with the water quality treatment outcomes sought by the SMP. I recommend accepting the proposed additions.

Submission

Additional matters of control or discretion are proposed to ensure that stormwater treatment assets are collectively constructed to be efficient and have low long term operating costs.

Relief Sought:

Insert new matters of control and discretion, in addition to those in E9, to the effect of:

- How the location and design of stormwater treatment assets reduces their operating costs.
- The consolidation and community scale of stormwater treatment assets.
- The location of stormwater treatment assets where they will be most effective in reducing contaminants.

Assessment

I agree with the proposed matters for control and discretion and reflect policy guidance in Chapter E1 of the AUP and recommendation the relief sought.

Submission

• The receiving environments downstream of the plan change sites are highly sensitive to additional contaminants and are Significant Ecological Areas (SEAs). The NPS-FM requires that the health of freshwater receiving environments is prioritised above other uses and needs. This and other existing AUP objectives and policies direct that freshwater quality is maintained where it is good and enhanced where degraded. The existing provisions do not go far enough to achieve this. The SMP notes a mix of methods will be used including

treatment of roads and use of inert building materials. A new standard relating to the exterior materials on buildings is requested.

Relief Sought:

Include a new standard to the effect that:

<u>Buildings cannot have exterior materials with exposed surfaces that are made from contaminants</u> of concern to water quality including zinc, copper and lead.

Assessment

I agree with the intent of the drafting of this standard and a similar outcome is sought in the SMP. As discussed earlier, care should be taken in drafting the standard so as not to unintentionally exclude building products which are demonstrated to have inert qualities (e.g. zinc aluminium coated roofing and cladding materials). This matter is clarified in the SMP document.

Submission

Extended 20m riparian building setbacks are appropriate on permanent streams for the following reasons:

- 20m riparian margins are recommended in the Drury-Opāheke Stormwater Management Plan 2019
- it is important to maintain and enhance freshwater quality, systems and processes
- to allow stream meander paths and floodplains to evolve with less risk to property or intervention to protect property
- it provides space for flood conveyance management and higher stream flows due to increased rainfall
- it provides space for stormwater infrastructure and potential future instream works to stabilise banks so that instream erosion and sediment loss is managed to protect the Manukau Harbour

Relief Sought:

Replace standard IX.6.4 with a new standard:

Riparian Margins

4020m from the edge of all permanent streams and 10m from the edge of all intermittent streams.

Assessment

Considering the assessment on stream erosion risk presented by the applicant and the stream erosion mitigation measures proposed in the SMP (including the application of SMAF 1 Hydrological Mitigation), there is limited validated evidence (in direct response to stormwater discharges from the precinct) to support the relief sought in this submission. Assessment of the ecological and amenity benefits in response to this submission has been assessed by other Council technical specialists.

27 Auckland Transport

Submission

Auckland Transport acknowledges the benefits of using rain gardens as a stormwater detention/treatment device. However, the blanket rule of requiring the establishment of rain garden on all roads is not practical and may not necessarily achieve the best environmental outcomes. For example, rain gardens are not suitable for areas with steep slopes, the volume of stormwater detention and/or runoff reduction can also be limited depending on the size of the rain gardens, and they are known to be expensive to maintain and/or service and hence may not be the most cost-effective solution.

Relief Sought:

Auckland Transport therefore seeks to delete the reference to rain gardens in IX.11 Appendix 1. The relevant stormwater management requirements are covered in E8 and E9 the Stormwater Discharge and Diversion and the Stormwater Quality Chapters of the AUPOP.

Assessment

I recommend the addition of text to each rain garden reference in Appendix 1 such as *'Trees/Rain garden (where feasible)'* assists to capture the submission raised by Auckland Transport.

32 Drury South Limited

Submission

There is a lack of any policies addressing the issue of avoiding earthworks and development that will exacerbate the known risk of upstream and downstream flooding outside the PC48 area. This is contrasted with the Policies I410.3 (15) and (16) in the adjacent Drury South Industrial Precinct which address the need detain the 1% AEP event without adverse effects on the extent of flooding of upstream and downstream areas and provide sufficient floodplain storage to avoid increasing flood risk upstream and downstream.

Relief Sought:

Insert new policies to:

- (a). Make adequate provision within the PC48 area to detain the 1% AEP event without adverse effects on the extent of flooding of upstream and downstream areas; and
- (b). Provide sufficient floodplain storage within the PC48 area to avoid increasing flood risk upstream and downstream, and manage increased flood risk within the precinct, to habitable rooms for all flood events.

Assessment

This submission to insert a new policy is seeking a similar outcome to that discussed above from the Auckland Council. I have recommended adopting that policy with a minor amendment.

Submission

IX6.6 Stormwater Quality. The proposed standard is supported insofar as it deals with stormwater quality issues, but it does not address flooding issues in the catchment which affect upstream and downstream areas.

<u>Assessment</u>

Refer commentary above, I have recommended the addition of a new policy regarding flood hazard management.

33 Kāinga Ora

Further Submission

Kāinga Ora opposes the submission by Kiwi Property Holdings No.2 Limited to include the new policy IX.3 (21) as compliance with an NDC is already required and administered by existing AUP(OP) provisions (Chapter E8) and the RMA framework.

Kāinga Ora also opposes a similar outcome sought by the Auckland Council.

Assessment

I recommend rejecting this further submission, as is discussed above, some reference to the implementation of the SMP should be incorporated into the precinct objectives and policies including the version approved by the network utility operator (Healthy Waters). This clarifies the

role of the SMP and also includes reference to the correct version adopted by the network utility operator.

Further Submission

Kāinga Ora opposes the submission by Ngāti Te Ata Waiohua to apply a minimum of a two-treatment train approach for all stormwater prior to discharge to a waterway. Kāinga Ora opposes the submission as such matters would be addressed through an NDC and the existing management framework within the AUP(OP).

Kāinga Ora also opposes the similar submission by Ngāti Tamaoho.

Assessment

For the reasons discussed earlier, I reject this submission and have recommended the related Auckland Council submission for a new policy reflecting the implementation of a treatment train should be include in the plan change suite of policies.

Further Submission

Kāinga Ora opposes the submission by Ngāti Te Ata Waiohua to require roof capture for reuse and groundwater recharge.

Assessment

I note rain water reuse or groundwater recharge is stipulated in the SMP and given the proposed SMAF 1 overlay over the plan change area will support the outcome sought by the Ngāti Te Ata Waiohua submission.

Further Submission

Kāinga Ora opposes the Auckland Council's proposed policy wording change for IX6.6(1) and the inclusion of related matters of control and discretion. The proposed amendments generally relate to considerations for the vesting of assets. These are better managed through those processes.

Assessment

I recommend rejecting this submission as the policy clarifies the water quality expectation throughout the proposed plan change area as well as not creating inconsistency with the Chapter E9 requirements.

Further Submission

Kāinga Ora opposes the submission as restricting the use of certain building materials is already managed by the AUP(OP) in respect of water quality to sensitive environments (i.e. discharges to aquifers, from High Contaminant Generating activities etc). If there is a specific requirement this should be administered through an NDC / SMP.

<u>Assessment</u>

I note the reference to the use of inert building materials is in the SMP document and therefore ultimately will be administered via the NDC (providing the SMP document is formally adopted by Healthy Waters). I recommend rejecting this further submission as there is value in having policy assisting with achieve the intended source control water quality outcome.

Further Submission

Regarding the Drury South Limited submission to add flooding related policies to IX.3, Kāinga Ora opposes the submission to the extent it is inconsistent with its original submissions. Flooding issues are administered through Chapter E36 Natural Hazards chapter of the AUP(OP).

Assessment

Refer to earlier commentary regarding the addition of a new policy regarding flood hazard management.

34 Watercare

Submission

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.

Relief Sought:

Amend Policy 16 as follows:

(6) Ensure that development in Drury East Precinct is coordinated with, <u>and does not precede</u>, supporting stormwater, wastewater and water supply infrastructure, having particular regard to the capacity of the Fitzgerald culvert and culverts under Great South Road.

Add new Policy 16A as follows:

(6A) Manage subdivision and development to avoid, remedy or mitigate adverse effects on infrastructure, including reverse sensitivity effects or those which may compromise the operation or capacity of existing or authorised infrastructure.

Assessment:

This submission and relief sought is supported and reinforces some of the sensitivity of existing infrastructure (e.g. the receiving culverts) to the development proposal.

35 Ngati Tamaoho

Submission

Wai (Water): PPC48 does not give effect to Te Mana o te Wai and risks damaging the mauri of wai within the project area. This includes through PPC48's proposed treatment of waterways and its proposed stormwater and wastewater solutions.

Relief sought:

- (g) A minimum of a two-treatment train approach for all stormwater prior to discharge to a waterway;
- (h) Roof capture for reuse and groundwater recharge;

Assessment

See assessment above regarding Ngāti Te Ata Waiohua submission and the Auckland Council submission.

6.0 Conclusions and recommendations

The applicant is proposing to develop a new precinct comprising Metropolitan Centre, Mixed Use and Open Space zones resulting in the large-scale creation of impervious surfaces with associated stormwater related effects (flow/volume, contaminants, flood hazard) requiring management and mitigation with a supporting new stormwater network.

In order to support the proposed development and enable future construction and operation of the associated stormwater network, a SMP accompanies the plan change application with associated stormwater related objectives and policies in the proposed precinct chapter. Broadly the two documents are consistent with the stormwater related objectives and policies in the regional policy statement and the regional plan requirements stipulated in E1. The E1 objective and policies regarding implementation of integrated management frame Stormwater NDC

requirements and adoption of the SMP by Healthy Waters where demonstration of consistency with E1 is a certification requirement stipulated in Schedule 4 of the NDC.

At the time of writing this memorandum, the SMP was being reviewed by Healthy Waters and detail requiring construction staging so as not to exacerbate flood risk in the absence of downstream culvert upgrades associated with the development of the precincts is required and may be addressed in further SMP document updates.

Various submissions have raised additions and deletions to the precinct objectives and policies and my recommendations to adopt or reject the relief sought are discussed in the section above. It is noted the edits and new additions are aimed at strengthening the existing objective and policy framework and associated implementation of the SMP and it is unlikely significant adverse effects would result if the matters are not addressed. The recommended changes are summarised as follows:

Additions are underlined, deletions are strikethrough.

IX.2 Objective 7

 (4) Freshwater and sediment quality is progressively improved ever time in the Drury Centre Precinct.

IX.3 Policy 16

 (16) Ensure that development in Drury Centre Precinct is coordinated with, and does not precede supporting stormwater, wastewater and water supply infrastructure.

Add new Policy 16A as follows:

 (16A) Manage subdivision and development to avoid, remedy or mitigate adverse effects on infrastructure, including reverse sensitivity effects or those which may compromise the operation or capacity of existing or authorised infrastructure.

Add new policy

Provide sufficient floodplain storage, including attenuation storage within the Drury Centre
precinct to avoid increasing flood risk upstream and downstream and manage increased
flood risk within the precinct unless downstream infrastructure capacity means this is not
required. This is subject to the upgrade of the downstream culverts.

Standard IX6.6 (1)

The activity rules and standards in E9 apply to development in the Drury Centre precinct as if
the reference to 'high use roads', was where a reference to 'all existing, new, upgraded or
redeveloped roads accessways and carparks', or other amendments that would achieve the
same environmental outcome.

Addition to Standard IX6.6

 Buildings cannot have exterior materials with exposed surfaces that are made from contaminants of concern to water quality including zinc, copper and lead.

New matters of control or discretion:

- How the location and design of stormwater treatment assets reduces their operating costs.
- The consolidation and community scale of stormwater treatment assets.
- The location of stormwater treatment assets where they will be most effective in reducing contaminants.

All raingarden references in Appendix 1 Road Cross Section Details:

Trees/Rain garden(where feasible)

Taking these matters into account, my recommendation is to support the proposed plan change and stormwater related objectives and policies.





Project: PPC48: Drury Centre Precinct Plan Change

Title: Transportation Hearing Report

Document Reference: P:\ACXX\395 Drury East Private Plan Change - Kiwi

Property\Reporting\R1E210610 - PC48 Hearing report.docx

Prepared by: Mat Collins/Terry Church

Reviewed by: Terry Church

Revisions:

Date	Status	Reference	Approved by	Initials
21 Jan 2021	Draft for Council review	R1A210121	Terry Church	RUL
16 Feb 2021	Update for further submissions	R1B210216	Mat Collins	wal.
3 May 2021	Updated with Council Planner's comments	R1C210503	Terry Church	PLL
7 May 2021	Minor amendments	R1D210507		
10 June 2021	Additions added as a result of the Government announcement on South Auckland transport projects	R1E210610	Terry Church	PLI

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EXECUTIVE SUMMARY

Auckland Council (Council) has requested Flow Transportation Specialists (Flow) to review the transportation matters associated with Private Plan Change 48 (PPC48), which has been lodged by Kiwi Property No.2 Limited (Kiwi Property). PPC48 seeks to rezone 95 hectares of Future Urban zoned land to a mix of Business - Metropolitan Centre, Business - Mixed Use and Open Space-Informal Recreation zones.

This report has been completed by Terry Church (Senior Associate) with assistance from Mat Collins (Associate).

I note that the Government announced on 4th June 2021 that the funding for the Mill Road project and elements of the Papakura to Bombay Project, being the widening of the Southern Motorway (SH1) between Drury Interchange and a new Drury South Interchange (Stage 2) which connects to Mill Road has been deferred. While these projects are included in ATAP (an agreement between Council and Government on Auckland roading projects), I note that ATAP is not a statutory document, with the relevant document being the Regional Land Transport Programme which is currently in draft format subject to consultation (2021 – 2031 RLPT).

It has been my view throughout the review of this application that the Mill Road project is an important project for the development of Drury East as it provides a secondary access option and relieves pressure from Waihoehoe Road, the Waihoehoe/Great South Road intersection and the immediate roading network which is very much rural in nature. As such, the transport assessment and the transport planning provisions that have been framed around the applicant's notified transport assessment are in my view considered obsolete following the announcement.

The majority of this report remains unchanged as a result of the Government announcement, given my view that the inclusion of the Mill Road project by 2028 was ambitious. I have made minor amendments throughout my report and expect the applicant to update Council and submitters on the impacts of the announcement leading up to the hearing, where I hope to receive updated information from which to consider transport impacts and appropriate provisions which allow for an integrated land use and transport outcome.

I have reviewed the following documents

- Section 32 Assessment Report (as lodged), prepared by B&A, dated December 2019, including
 - o Appendix 1 Drury Centre Plan Change
 - o Appendix 7 Urban Design Assessment
 - o Appendix 10 Integrated Transport Assessment, dated November 2019
- Drury East Modelling Report, prepared by Stantec, dated November 2019
- Section 32 Assessment Report (as notified), prepared by B&A, dated December 2019, including
 - o Appendix 1 Drury Centre Plan Change
 - Appendix 10 Integrated Transport Assessment, dated May 2020

- Clause 23 responses, received from B&A on 25 March 2020
- Submissions and additional submissions, as outlined in Section 5, including additional traffic modelling information provided as Attachment C to Kiwi Property No. 2 Ltd's submission (submission #15)
- ◆ Auckland Transport Alignment Project 2021 2031 Investment Programme (ATAP 2021 2031).

Thirty-five submissions were received, fourteen of which related to transport matters. Key themes from submissions regarding transport matters include

- Proposed internal transport network structure including direct access to Drury Interchange, road alignments, intersection locations, cross section details, and provision for active transport and public transport users
- Some submitters were concerned that the transport infrastructure upgrades identified by the applicant are not sufficient to manage the cumulative effects of PPC48
- Further to the point above, some submitters were concerned about the timing and responsibility for funding and delivery of enabling/supporting transport infrastructure, including projects that are assumed to be within the NZUP and DTIPs programmes
- The administration and monitoring of proposed thresholds included in the notified Provisions
- Assumed location of the Drury Central Train Station
- Various amendments to Precinct provisions.

I generally support submitters' comments and requests. However, there are several submission points which I oppose and/or seek further advice from Council's Planner, as discussed in Section 6.

Six further submissions related to transport matters were received. No new information related to transport matters was included within the further submissions.

In my view, PPC48 as notified does not adequately manage the likely and potential effects on the transport network

- While the masterplan for PPC48 is generally consistent with RPS Objectives B2.2.1(1) and B3.3.1(1), I consider that the Precinct provisions give little certainty that integrated land use and transport outcomes will be achieved. Development within PPC48 if developed in accordance with the proposed provisions is unlikely to satisfactorily address safety and efficiency effects on the surrounding transport network. The provisions lack surety that the development will put in place a transport network that is focused on access to Drury Station and local bus services. The provisions lack surety that integrated staging of land use and transport investment will enable the uptake of public transport and active transport modes as part of a safe and effective transport network.
- In my view there are some significant infrastructure assumptions made by the applicant, which affect the transport investment thresholds put forward in the notified Precinct Provisions. These assumptions include
 - Third-party transport infrastructure investment and delivery assumptions, including Mill Road being constructed in some form by 2028. The recent June 2021 announcement by

the Government has since deferred the Mill Road project, confirming my view that reliance on this upgrade by 2028 places considerable risk on how the transport network is predicted to operate and how provisions are then framed around this

- Designations, which the applicant relies upon, are in place
- Land within the above designations has been acquired by the designating authority
- Vehicle trip rates and public transport mode shares assumed in the traffic modelling.
- I am concerned that transport infrastructure needed to support PPC48, such as the Waihoehoe Road upgrade and Mill Road may not be delivered in a manner that integrates with development in PPC48. The traffic modelling used to support PPC48 assumes that Mill Road (in some form) will be operational by 2028. While Mill Road is contained within ATAP 2021 2031 (an agreement between Council and Government which is a non-statutory document), there is uncertainty over the time it may take to designate the route, acquire properties, and construct the project.
- Given the uncertain development programmes of each PPC area, I am of the view that the prescriptive nature of the transport upgrade provisions in the Precinct is not appropriate due to impracticalities of administering and monitoring the thresholds proposed by the applicant. Further, I have significant concerns about the assumptions and methodology used in the traffic modelling, which the applicant has relied upon in setting these thresholds.
- To address the uncertainty in development programmes and third-party infrastructure provision (including that contained within ATAP 2021 2031), and my concerns about the traffic modelling assumptions relied upon by the applicant, I consider that Standard IX.6.2 and IX.6.3 should be replaced in their entirety. I am of the view that provisions that are performance based in this instance give the consenting authority greater flexibility in determining mitigation required following an assessment of the environment at the time of development occurring. This also provides clearer ownership as to who is responsible for delivering the mitigation. Precinct provisions are required for this, as reliance on Chapter E27 Transport of the Auckland Unitary Plan Operative in Part (AUP(OP)) is unlikely to capture the need to assess and upgrade key intersections about the area (including intersections and rural roads).
- Based on the current provisions, I consider that there is a sizeable risk that there will be consequential adverse outcomes for economic well-being (in terms of transport network efficiency) and social well-being (including road user safety). This may result in Auckland Transport and Waka Kotahi NZTA (as road controlling authorities) being left to address substantial off-site cumulative safety and efficiency effects on the transport network beyond what would be expected from normal development or business as usual upgrades to the network, due to uncertainty around infrastructure scale, funding and timeframes. A number of third-party infrastructure improvements, including projects within ATAP 2021 2031, NZUP and the Drury Transport Investment Programme (DTIP), now referred to as the Drury Infrastructure Funding Framework (DIFF) are assumed in the transport assessment albeit the extent of the projects, funding and timing for delivery of some projects is not yet committed. As an example, Mill Road has been assumed in some form throughout the transport assessment, with the June 2021 announcement deferring the entire Mill Road project. Provisions that enable an assessment against the network at the time land use activities are being applied for would provide greater

control on what mitigation is required given the environment at that time, which may also include greater certainty on wider infrastructure timeframes.

- It is unclear as to whether the layouts proposed by the applicant for the Great South Road/Waihoehoe Road intersection can physically fit within the area that Auckland Transport has issued a Notice of Requirement for and allow for bus priority (as per the Auckland Transport Supporting Growth network), capture pedestrian crossings on all four approaches and provide the necessary facilities to ensure the corridor operates safely and efficiently for all transport modes. I do not support the current upgrades included in the proposed Precinct provisions at IX.6.2 and IX.6.3 associated with the Great South Road/Waihoehoe Road intersection.
- ◆ Until Mill Road connects to the development and provides a secondary connection (to the north and south), reliance on the Great South Road/Waihoehoe Road intersection and Waihoehoe Road will be much greater than that currently predicted in the transport assessment and that from which the current provisions are framed. A number of third-party infrastructure improvements, including projects within ATAP 2021 − 2031, NZUP and DTIPs, are assumed in the transport assessment albeit the extent of the projects, funding and delivery is not clearly understood. It is for this reason that the requirement to assess the mitigation required as development progresses is a better option, noting the uncertainty as to when wider area infrastructure is in place. I am therefore of the view that the timing or triggers requiring the upgrades captured in IX.6.2 and IX.6.3 are not appropriate as currently drafted as they do not consider effects and therefore upgrades necessary prior to the full Mill Road corridor being constructed and open.
- The thresholds set out in the notified Provisions for upgrading the Great South Road/Waihoehoe Road are not robust as I consider there are underlying flaws in the modelling assumptions used to set these thresholds. Further, the upgrades of this intersection as proposed in IX6.2 and IX6.3 have the potential to cause ongoing disruption to the transport network during works and will require the acquisition of third-party land and widening/replacement of the Waihoehoe Road rail overbridge, which is not identified in the Precinct Provisions. I am therefore of the view that the timing or triggers requiring the upgrades captured in IX.6.2 and IX.6.3 are not appropriate as currently drafted as they do not consider the need for third-party land, the widening/replacement of the Waihoehoe Road rail overbridge, the additional construction traffic effects due to the proposed multiple upgrades to the intersection and the uncertainty around the extent of the Mill Road project.
- In my view the notified Provisions fail to address likely safety effects on existing rural roads. I consider that existing rural roads, including Waihoehoe Road, Fitzgerald Road, and Brookfield Road should be upgraded to urban standard prior to each respective road experiencing an increase in traffic due to occupied development within PPC48. Further, the existing Flanagan Road/Waihoehoe Road intersection should be closed, and an alternative access provided, prior to any development which connects to Flanagan Road.
- In my view the Precinct provisions should include Standards relating to the early provision of the Drury Central train station, bus priority measures westbound on Waihoehoe Road, walking and cycling connectivity between development and the Drury Central train station, and a continuous collector road network to enable Auckland Transport to provide bus services as staged development occurs. Further, I recommend that funding is allocated to enable early provision of

- public transport services, noting that this sits outside of the Plan Change process and is not considered the responsibility of the applicant.
- I am of the view that changes are required to the Precinct Provisions in order to better assess and respond to the environment as development progresses. The assessment in my view places a lot of weight and reliance on government led transport network upgrades being delivered and in place prior to 2028. I consider that there are risks associated with this assumption and the provisions the Precinct currently frames around their assessment which relies on this.
- I consider that the main concerns which the Precinct provisions need to address are
 - Early delivery and operation of the Drury Central train station and bus priority measures on Waihoehoe Road, (particularly westbound)
 - Early delivery of active mode infrastructure (walking and cycling) including connections to trip generators and most importantly the Drury Central train station
 - Delivery of safety and capacity improvements (for all modes) to existing rural roads to manage the transition from a rural to urbanised environment
 - Performance and safety of the Waihoehoe Road/Great South Road intersection and the approaches to it (including the Waihoehoe Road rail overpass) for all road users (walking, cycling, public transport, and general traffic).
- It is my view that the train station should be open and operating prior to any development being occupied. I am also of the view that supporting connections are also provided for from the outset, such as
 - the 'Key Retail Street' which provides an essential connection between the rail station and the wider site, namely Precinct B for active modes and those connecting with the rail station
 - The collector road network, being the sections that connect to the train station and any land being developed, again ensuring connectivity with the train station is available
 - And that Sub-Precinct D and the desire for Park-and-Ride should be reviewed in light of a train station shift further to the East
- The traffic modelling contains assumptions that, in my opinion, result in an underestimation of potential traffic effects. These assumptions include
 - between the lodgement with Auckland Council and subsequent notification, there has been an increase in the extent of THAB in PPC50, with Mixed Housing Urban zone being removed
 - under estimation of vehicle trips through the Great South Road/Waihoehoe Road intersection, in the instance that Mill Road (between Waihoehoe Road and Manukau) is not in place
 - under estimation of the number of vehicle trips generated by PPC48, due to assumed high uptake of walking, cycling and public transport, although the surety that infrastructure to support high non-car based travel will be delivered in conjunction with development is lacking in the precinct provisions

- o under estimation of effects on the Great South Road/Waihoehoe Road intersection prior to signalisation, due to the under estimation of the number of vehicle movements through the intersection and that it is modelled as a two-lane roundabout whereas the provisions do not require the existing single lane roundabout to be upgraded.
- In response to the trip generation assessment, I retain my view that the prescriptive provisions in IX.6.2 and IX.6.3 should be removed in their entirety and replaced with provisions that are performance based. Further, I consider that the Provisions need greater emphasis placed on delivering infrastructure that provides improved safety and connectivity, so that the necessary transport outcomes to achieve TOD, such as mode share, are achieved.

In response to my concerns noted above, and my concerns with the practicalities of implementing proposed Standards IX6.2 and IX6.3. I recommend that

- Standard IX.6.2 and Tables IX.6.2.1 and IX.6.2.2 are replaced, in their entirety, with thresholds to support transit orientated development outcomes (high public transport and active mode share and safety interventions)
- Standard IX6.3 Trip Generation Limit and Tables IX.6.3.1 and IX.6.3.2 are replaced in their entirety with a Standard that adopts performance-based thresholds for key intersections
- Other amendments to provisions as discussed in Section 5 and in response to submissions as discussed in Appendix A

I support the intensity and mix of land-uses proposed by the applicant, as I consider that the proposed Drury Station presents a relatively unique opportunity to enable development consistent with Transit Oriented Development (TOD) principles.

However, I consider that the thresholds linked to transport infrastructure identified in the provisions lack robustness and will be unwieldy and impracticable to monitor. Further, the provisions lack sufficient evidence as to how thresholds have been determined and acknowledgement of safety effects on existing rural roads, and enablement of active modes and public transport.

Unless amendments are made to the provisions per my recommendations and commentary on submissions, I consider that PPC48 is unlikely to result in integrated land use and transport outcomes as required by the AUP(OP), and that development within PPC48 is unlikely to satisfactorily address safety and efficiency effects on the transport network.

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APPENDICES

APPENDIX A SUBMISSION SUMMARY

APPENDIX B **CLAUSE 23 REQUEST SUMMARY (PC48)**

APPENDIX C CLAUSE 23 REQUEST SUMMARY (DRURY EAST MODELLING REPORT)

1 INTRODUCTION

Auckland Council (Council) has requested Flow Transportation Specialists (Flow) to review the transportation matters associated with a Private Plan Change (PPC48), which has been lodged by Kiwi Property No.2 Limited (Kiwi Property). PPC48 seeks to rezone 95 hectares of Future Urban zoned land to a mix of Business - Metropolitan Centre, Business - Mixed Use and Open Space-Informal Recreation zones and establish the Drury Centre Precinct (Precinct).

This report has been completed Terry Church (Senior Associate) with assistance from Mat Collins (Associate). Both Mat and I are experts in the field of transport planning and engineering. We both have a sound knowledge of the Auckland Unitary Plan and the application of the plan to land use developments. Mat and I frequently attend Council Hearing and Environment Court mediation and hearings as transport experts for local government, road controlling authorities or private concerns.

I note that the Government announced on 4th June 2021 that the funding for the Mill Road project and elements of the Papakura to Bombay Project, being the widening of the Southern Motorway (SH1) between Drury Interchange and a new Drury South Interchange (Stage 2) which connects to Mill Road has been deferred. While these projects are included in ATAP (an agreement between Council and Government on Auckland roading projects), I note that ATAP is not a statutory document, with the relevant document being the Regional Land Transport Programme which is currently in draft format subject to consultation (2021 – 2031 RLTP).

It has been my view throughout the review of this application that the Mill Road project is an important project for the development of Drury East as it provides a secondary access option and relieves pressure from Waihoehoe Road, the Waihoehoe/Great South Road intersection and the immediate roading network which is very much rural in nature. As such, the transport assessment and the transport planning provisions that have been framed around the applicant's notified transport assessment are in my view considered obsolete following the announcement.

The majority of this report remains unchanged as a result of the Government announcement, given my view that the inclusion of the Mill Road project by 2028 was ambitious. I have made minor amendments throughout my report and expect the applicant to update Council and submitters on the impacts of the announcement leading up to the hearing, where I hope to receive updated information from which to consider transport impacts and appropriate provisions which allow for an integrated land use and transport outcome.

I have reviewed the following documents

- Section 32 Assessment Report (as lodged), prepared by B&A, dated December 2019, including
 - o Appendix 1 Drury Centre Plan Change
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- o Appendix 1 Drury Centre Plan Change
- Appendix 10 Integrated Transport Assessment, dated May 2020
- Clause 23 responses, received from B&A on 25 March 2020
- Submissions and further submissions, as outlined in Section 5
- ◆ Auckland Transport Alignment Project 2021 2031 Investment Programme (ATAP 2021 2031).

The scope of this report includes the following

- a summary of PPC48, focusing on transport matters
- a review of the material (that covers transportation matters) provided to support the PPC48 application
- summary of submissions, relating to transport matters only
- my recommendations, again specifically relating to transport matters.

2 THE PROPOSAL

Kiwi Property is applying for a Private Plan Change to rezone 95 hectares of Future Urban zoned land to a mix of Business - Metropolitan Centre, Business - Mixed Use and Open Space-Informal Recreation zones (PPC48). Concurrent to PPC48, private plan change (PPC) applications have been received from Fulton Hogan Land Development (FHLD) (PPC49) and Oyster Capital (Oyster) (PPC50) on the adjacent land about the Drury East area.

The three PPCs total approximately 328 hectares of Future Urban Zoned land.

The three PPC areas and the proposed zonings are shown in Figure 1.

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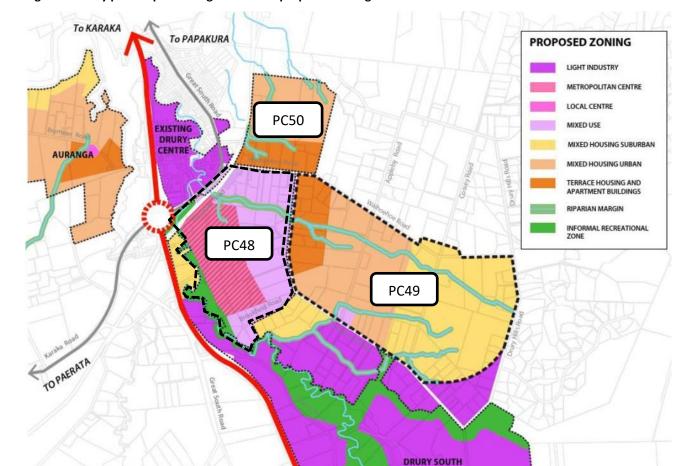
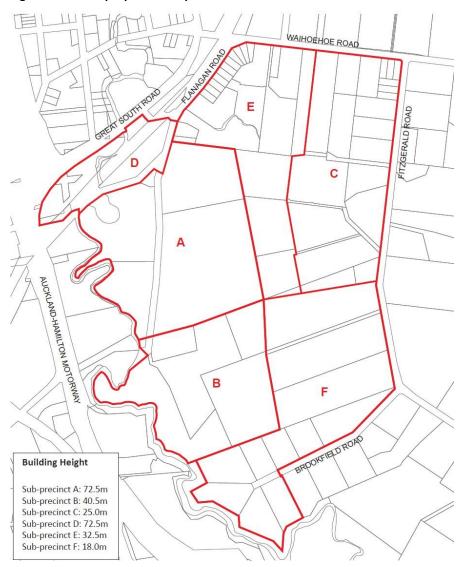


Figure 1: Drury private plan change areas and proposed zoning

PPC48 proposes the establishment of the Drury Central Precinct (Precinct), which includes the following five sub-precincts (shown in Figure 2)

- Sub-precinct A is zoned Business Metropolitan Centre Zone and contains the primary retail area,
 Main Street and civic and green open spaces
- Sub-precinct B is zoned Business Metropolitan Centre Zone and is intended to be the primary location for large format retail
- Sub-precinct C and E are zoned Business Mixed Use Zone and provides for high density residential and a range of commercial activities
- Sub-precinct D is zoned Business Metropolitan Centre Zone and provides for the establishment
 of a train station and associated Park-and-Ride and transport interchange
- Sub-Precinct F is zoned Business Mixed Use Zone and applies to the south eastern part of the Drury Centre Precinct

Figure 2: PPC48 proposed sub-precincts



3 KEY ISSUES

A summary of all the transportation matters raised throughout my review is contained in Appendix B and Appendix C. Key transport matters/issues raised during my review are summarised below and discussed further in Section 4.

Consistency with transport related Regional Policy Statements in the AUP(OP)

While the masterplan for PPC48 is generally consistent with RPS Objectives B2.2.1(1) and B3.3.1(1), I consider that the Precinct provisions give little certainty that integrated land use and transport outcomes will be achieved. Development within PPC48 if developed in accordance with the proposed provisions is unlikely to satisfactorily address safety and efficiency effects on the surrounding transport network. The provisions lack surety that the development will put in place a transport network that is focused on access to Drury Station, provides for bus priority along Waihoehoe Road and local bus services. The provisions lack surety that integrated staging of land use and transport investment will enable the uptake of public transport and active transport modes as part of a safe and effective transport network.

Refer to my discussion in Section 4.1.

Key assumptions made by the applicant

In my view there are some infrastructure assumptions made by the applicant, which affect the transport investment thresholds put forward in the notified Precinct Provisions. These assumptions include

- Third-party transport infrastructure investment and delivery assumptions, including Mill Road being constructed in some form by 2028. The recent June 2021 announcement by the Government has since deferred the Mill Road project, confirming my view that reliance on this upgrade by 2028 places considerable risk on how the transport network is predicted to operate and how provisions are then framed around this
- Designations, which the applicant relies upon, are in place
- Land within the above designations has been acquired by the designating authority
- Vehicle trip rates and public transport mode shares assumed in the traffic modelling.

Refer to my discussion in Section 4.2.

The inter-related nature of the three plan changes

I am concerned that transport infrastructure needed to support PPC48, such as the Waihoehoe Road upgrade (that delivers bus priority) and Mill Road (between Manukau and Drury South), may not be delivered in a manner that integrates with development in PPC48. The traffic modelling used to support PPC48 assumes that Mill Road will be operational by 2028. While Mill Road is contained within ATAP 2021 – 2031 (but recently deferred by the Government), there is uncertainty over the time it may take to designate the route, acquire properties, and construct the project.

Given the uncertain development programmes of each PPC area, I am of the view that the prescriptive nature of the transport upgrade provisions in the Precinct is not appropriate due to impracticalities of

administering and monitoring the thresholds proposed by the applicant. Further, I have significant concerns about the infrastructure assumptions and methodology used in the traffic modelling, which the applicant has relied upon in setting these thresholds.

To address the uncertainty in development programmes and third-party infrastructure provision (including that contained within ATAP 2021 – 2031 and noting the recent Government announcement around Mill Road), and my concerns about the traffic modelling assumptions relied upon by the applicant, I consider that Standard IX.6.2 and IX.6.3 should be replaced in their entirety. I am of the view that provisions that are performance based in this instance give the consenting authority greater flexibility in determining mitigation required following an assessment of the environment at the time of development occurring. This also provides clearer ownership as to who is responsible for delivering the mitigation. Precinct provisions are required for this, as reliance on Chapter E27 Transport of the Auckland Unitary Plan – Operative in Part (AUP(OP)) is unlikely to capture the need to assess and upgrade key intersections about the area (including intersections and rural roads).

Refer to my discussion in Section 4.3 and recommended amendments to provisions in Section 5.

The form, timing and responsibility of supporting transport infrastructure

Based on the current provisions, I consider that there is a sizeable risk that there will be consequential adverse outcomes for economic well-being (in terms of transport network efficiency) and social well-being (including road user safety). This may result in Auckland Transport and Waka Kotahi NZTA (as road controlling authorities) being left to address substantial off-site cumulative safety and efficiency effects on the transport network beyond what would be expected from normal development or business as usual upgrades to the network, due to uncertainty around infrastructure scale, funding and timeframes. A number of third-party infrastructure improvements, including projects within ATAP 2021 – 2031, NZUP and DTIPs, are assumed in the transport assessment albeit the extent of the projects, funding and timing for delivery of some projects is not yet committed.

Provisions that enable an assessment against the network at the time land use activities are being applied for would provide greater control on what mitigation is required given the environment at that time, which may also include greater certainty on wider infrastructure timeframes.

Refer to my discussion in Section 4.4 and recommended amendments to provisions in Section 5.

The Great South Road/Waihoehoe Road intersection

It is unclear as to whether the layouts proposed by the applicant for the Great South Road/Waihoehoe Road intersection can physically fit within the area that Auckland Transport has issued a Notice of Requirement for and allow for bus priority (as per the Auckland Transport Supporting Growth network), capture pedestrian crossings on all four approaches and provide the necessary facilities to ensure the corridor operates safely and efficiently for all transport modes. I do not support the current upgrades included in the proposed Precinct provisions at IX.6.2 and IX.6.3 associated with the Great South Road/Waihoehoe Road intersection.

Until Mill Road connects to the development and provides a secondary connection (to the north and south), reliance on Waihoehoe Road and the Great South Road/Waihoehoe Road intersection will be

much greater than that currently predicted in the transport assessment and that from which the current provisions are framed. A number of third-party infrastructure improvements, including projects within ATAP 2021 – 2031, NZUP and DTIPs, are assumed in the transport assessment albeit the extent of the projects, funding and delivery is not clearly understood. It is for this reason that bus priority measures on Waihoehoe Road (in particular westbound) are provided for from the outset (i.e. prior to activities being occupied) and the need to assess the mitigation required as development progresses is a better option, noting the uncertainty as to when wider area infrastructure is in place.

I am therefore of the view that the timing or triggers requiring the upgrades captured in IX.6.2 and IX.6.3 are not appropriate as currently drafted as they do not consider effects and therefore upgrades necessary prior to the full Mill Road corridor being constructed and open.

The thresholds set out in the notified Provisions for upgrading the Great South Road/Waihoehoe Road are not robust as I consider there are underlying flaws in the modelling assumptions used to set these thresholds. Further, the upgrades of this intersection as proposed in IX6.2 and IX6.3 have the potential to cause ongoing disruption to the transport network during works and will require the acquisition of third-party land and widening/replacement of the Waihoehoe Road rail overbridge, which is not identified in the Precinct Provisions.

I am therefore of the view that the timing or triggers requiring the upgrades captured in IX.6.2 and IX.6.3 are not appropriate as currently drafted as they do not consider the need for third-party land, the widening/replacement of the Waihoehoe Road rail overbridge, bus priority measures on Waihoehoe Road, the additional construction traffic effects due to the proposed multiple upgrades to the intersection and the uncertainty around the extent of the Mill Road project.

Refer to my discussion in Section 4.5 and recommended amendments to provisions in Section 5.

Safety effects on existing rural roads

In my view the notified Provisions fail to address likely safety effects on existing rural roads. I consider that existing rural roads, including Waihoehoe Road, Fitzgerald Road, and Brookfield Road should be upgraded to urban standard prior to each respective road experiencing an increase in traffic due to occupied development within PPC48. Further, the existing Flanagan Road/Waihoehoe Road intersection should be closed, and an alternative access provided, prior to any development which connects to Flanagan Road.

Refer to my discussion in Section 4.6 and recommended amendments to provisions in Section 5.

Enabling walking, cycling and public transport as viable transport options

In my view the Precinct provisions should include Standards relating to the early provision of walking and cycling connectivity between development and the Drury Central train station, and a continuous collector road network to enable Auckland Transport to provide bus services as staged development occurs.

Further, I recommend that funding is allocated to enable early provision of public transport services, noting that this sits outside of the Plan Change process and is not considered the responsibility of the applicant.

Refer to my discussion in Section 4.7 and recommended amendments to provisions in Section 5.

Prescriptive nature of the transport provisions

Based on the above assessment, I am of the view that changes are required to the Precinct Provisions in order to better assess and respond to the environment as development progresses. The assessment in my view places a lot of weight and reliance on government led transport network upgrades being delivered and in place prior to 2026-28. I consider that there are risks associated with this assumption and the provisions the Precinct currently frames around their assessment which relies on this.

I consider that the main concerns that need to be addressed by the Precinct provisions are

- Early delivery and operation of the Drury Central train station and bus priority measures on Waihoehoe Road (particularly westbound)
- Early delivery of active mode infrastructure (walking and cycling) including connections to trip generators and most importantly the Drury Central train station
- Delivery of safety and capacity improvements (for all modes) to existing rural roads to manage the transition from a rural to urbanised environment
- Performance and safety of the Waihoehoe Road/Great South Road intersection and the approaches to it (including the Waihoehoe Road rail overpass) for all road users (walking, cycling, public transport, and general traffic).

Refer to my discussion in Section 4.8 and recommended amendments to provisions in Section 5.

The location and connectivity of the Drury Central train station

I consider that the exact location of the Drury Central train station does not need to be confirmed as part of PPC48, and that both land development and planning of the supporting transport network can be expected to inform each other as both aspects progress.

It is my view that the train station should be open and operating prior to any development being occupied. I am also of the view that supporting connections are also provided for from the outset, such as

- the 'Key Retail Street' which provides an essential connection between the rail station and the wider site, namely Precinct B for active modes and those connecting with the rail station
- The collector road network, being the sections that connect to the train station and any land being developed, again ensuring connectivity with the train station is available
- And that Sub-Precinct D and the desire for Park-and-Ride should be reviewed in light of a train station shift further to the East

I support the intensity and mix of land-uses proposed by the applicant, as I consider that the proposed Drury Station presents a relatively unique opportunity to enable development consistent with Transit

Oriented Development (TOD) principles. Refer to my discussion in Section 4.10 and recommended amendments to provisions in Section 5.

Access options

I recommend the removal of all thresholds in IX6.2 and IX6.3 relating to Access A to/from Drury Interchange.

I recommend that a Standard be included in the provisions which requires an assessment and any mitigation works for the Great South Road/Quarry Road and SH22/Great South Road intersections, upon any road connection between Brookfield Road and Quarry Road and/or Pitt Road.

Refer to my discussion in Section 4.11 recommended amendments to provisions in Section 5.

Traffic modelling

The traffic modelling contains assumptions that, in my opinion, result in an underestimation of potential traffic effects. These assumptions include

- between the lodgement with Auckland Council and subsequent notification, there has been an increase in the extent of THAB in PPC50, with Mixed Housing Urban zone being removed
- under estimation of vehicle trips through the Great South Road/Waihoehoe Road intersection, in the instance that Mill Road is not in place
- under estimation of the number of vehicle trips generated by PPC48, due to assumed high uptake
 of walking, cycling and public transport, although the surety that infrastructure to support high
 non-car based travel will be delivered in conjunction with development is lacking in the precinct
 provisions
- under estimation of effects on the Great South Road/Waihoehoe Road intersection prior to signalisation, due to the under estimation of the number of vehicle movements through the intersection and that it is modelled as a two-lane roundabout whereas the provisions do not require the existing single lane roundabout to be upgraded.

In response to the trip generation assessment, I retain my view that the prescriptive provisions in IX.6.2 and IX.6.3 should be removed in their entirety and replaced with provisions that are performance based. Further, I consider that the Provisions need greater emphasis placed on delivering infrastructure that provides improved safety and connectivity, so that the necessary transport outcomes to achieve TOD, such as mode share, are achieved.

Refer to my discussion in Section 4.11 recommended amendments to provisions in Section 5.

4 DISCUSSION OF TRANSPORT MATTERS

Each of the key issues highlighted in Section 3 have been discussed in further detail below, based on the assessment of the application as contained within the notified documentation.

4.1 Consistency with Regional Policy Statements in the AUP(OP)

I have considered the consistency of PPC48 with relevant objectives within Regional Policy Statements (RPS) in the AUP(OP), as discussed in Table 1.

Table 1: RPS commentary

RPS Objective	Flow comment				
B2.2.1.	While I consider that the masterplan supporting PPC48 is				
(1) A quality compact urban form that enables all	generally consistent with B2.2.1(1) and B3.3.1(1), I				
of the following:	consider that the Precinct provisions provide little in the				
(a) a higher-quality urban environment;	way of surety that PPC48 will achieve efficient provision of new infrastructure, improved and more efficient				
(b) greater productivity and economic growth;	public transport, reduced adverse environmental effects, nor facilitate transport choice.				
(c) better use of existing infrastructure and efficient provision of new infrastructure;	I consider that the proposed Drury Station presents a relatively unique opportunity to enable development				
(d) improved and more effective public transport;	consistent with Transit Oriented Development (TOD) principles.				
(e) greater social and cultural vitality;	However, unless amendments are made to the				
(f) better maintenance of rural character and	provisions per my recommendations and commentary				
rural productivity; and	on submissions, I consider that PPC48 is unlikely to result				
(g) reduced adverse environmental effects.	in integrated land use and transport outcomes, and that				
B3.3.1	development within PPC48 is unlikely to satisfactorily				
(1) Effective, efficient and safe transport that:	address safety and efficiency effects on the transport network. I consider that the Precinct provisions give				
(a) supports the movement of people, goods and services;	little certainty that integrated land use and transport outcomes will be achieved.				
(b) integrates with and supports a quality compact urban form;	The provisions lack surety that the development will put in place a transport network that is focused on access to				
(c) enables growth;	Drury Station and local bus services. The provisions lack				
(d) avoids, remedies or mitigates adverse effects on the quality of the environment and amenity values and the health and safety of people and communities; and	surety that integrated staging of land use and transport investment will enable the uptake of public transport and active transport modes as part of a safe and effective transport network.				
 (e) facilitates transport choices, recognises different trip characteristics and enables accessibility and mobility for all sectors of the community. 	I consider that, based on the provisions, there is a reasonable likelihood that future development will be car-oriented and not facilitate alternative transport modes.				

Outcome: While the masterplan for PPC48 is generally consistent with RPS Objectives B2.2.1(1) and B3.3.1(1), I consider that the Precinct provisions give little certainty that integrated land use and

transport outcomes will be achieved. Development within PPC48 if developed in accordance with the proposed provisions is unlikely to satisfactorily address safety and efficiency effects on the surrounding transport network. The provisions lack surety that the development will put in place a transport network that is focused on access to Drury Station and local bus services. The provisions lack surety that integrated staging of land use and transport investment will enable the uptake of public transport and active transport modes as part of a safe and effective transport network

4.2 Key assumptions made by the applicant

PPC48 relies on a series of assumptions, some of which I have concerns about. I have highlighted these assumptions below in Table 2, and discuss them further in the following sub-sections.

Table 2: Applicants key assumptions that I am concerned about

Applicant assumption	Flow comment
Notices of requirement are lodged and resolved, and designations are in place for Waihoehoe Road, including rail overbridge upgrade and intersection with Great South Road Mill Road, between Manukau and Drury South Interchange Drury Interchange upgrade Drury South Interchange Land has been acquired for the above designations, and construction is complete	Should designations not be in place, key infrastructure assumed in the ITA, as discussed in Table 3 below, will not be able to be delivered. I am concerned that transport infrastructure needed to support PPC48, such as the Waihoehoe Road upgrade and Mill Road (between Manukau and Drury South), may not be delivered in a manner that integrates with development in PPC48. This project has recently been deferred by Government, confirming my concerns with the delivery of this project and the need to have provisions that reflect this uncertainty). The traffic modelling used to support PPC48 assumes that Mill Road will be operational by 2028. There is uncertainty over the time it may take to designate the route, acquire properties, and construct the project, meaning it is unlikely to be operational at the time development within PPC48 starts to become operational. Refer to my discussion in Sections 4.3, 4.4, 4.5, 4.8, 4.11, and 4.12.
High uptake of public transport during commuter peak periods.	In my opinion this is unlikely unless the infrastructure and services to support public transport uptake, such as the Drury Train Station, bus priority measures on Waihoehoe Road, frequent train services, local bus services, safety upgrades, and walking and cycling facilities are delivered before or in line with development. Refer to my discussion in Sections 4.3, 4.4, 4.6, 4.7, 4.8, 4.10, and 4.12.5.
The vehicle trip rates assumed in the traffic modelling	I consider that the traffic modelling underpredicts the number of vehicle movements that may be generated during peak periods. This is as a result of the assumed high uptake of public transport, as discussed above, and the questionable

assumptions regarding commercial trips, as discussed in Section 4.12.2. The three major land owners remain in In my opinion the prescriptive nature of the transport control of existing land holdings and work thresholds identified in the Precinct provisions are likely to be together to deliver infrastructure unwieldy in terms of monitoring and implementation, as discussed in Sections 4.3 and 4.8. This would be exacerbated collaboratively by any further fragmentation of land ownership over the three PPCs. I understand that Council has experienced difficulty administering threshold type precinct rules where multiple land owners are involved, for example in the Redhill Precinct. The upgrades to the Great South In determining the thresholds for the upgrade of this Road/Waihoehoe Road intersection intersection, the applicant has assumed the intersection will proposed in the Precinct provisions will ultimately be four traffic lanes wide on the eastern approach and four lanes wide on the southern approach. This layout is integrate with the NoR lodged by Auckland Transport for the upgrade this intersection shown in Figure 3-3 of the Drury East Modelling Report (Appendix A to the Integrated Transport Assessment, PDF page 101/178), and shown below. The applicant has assumed that all lanes would be used by general traffic. However, I understand that Auckland Transport's NoR for this intersection allows for four lanes on the eastern approach and that one of these lanes may be reserved for bus priority, which would reduce capacity for general traffic. The NoR also allows for only three lanes on the southern approach rather than the four assumed by the applicant.

Further, Precinct provisions do not discuss the replacement of the Waihoehoe Road rail overbridge. However, this will be required to implement the signalised Waihoehoe Road intersection layout assumed in the traffic modelling.

Refer to our discussion in Sections 4.4, 4.5, and 4.8.

That Mill Road will be constructed in its entirety by 2028.	As noted in Table 3 below, the Mill Road project is likely to be delivered in stages. It is this project which dampens the traffic demand and therefore potential effects at the Great South Road/Waihoehoe Road intersection.			
	As set out in the Government announcement, the Mill Road project has been reduced in scale, with safety improvements being the focus between Redoubt Road (in Manukau) and Papakura. The extent of Mill Road, including a new corridor the provides connectivity of the Drury East development to the north and south has been deferred.			
	A such, there is uncertainty over the time it may take to designate the route, acquire properties, and construct the project. Following the Government announcement, it is now uncertain as to when the project will occur. Refer to my discussion in Sections 4.4 and 4.5.2.			
That the Drury Central train station is beneficial, but not essential to development in the short term	It is my view that the train station should be open and operating prior to any development being occupied. I am also of the view that supporting connections are also provided for from the outset. Refer to my discussion in Sections 4.7, 4.8, 4.10, and 4.12.5			

Outcome

In my view there are some infrastructure assumptions made by the applicant, which affect the transport investment thresholds put forward in the notified Precinct Provisions. These assumptions include

- Third-party transport infrastructure investment and delivery assumptions, including Mill Road being constructed from Manukau to Drury South interchange by 2028. The recent June 2021 announcement by the Government has since deferred the Mill Road project, confirming our views that reliance on this upgrade by 2028 places considerable risk on how the transport network is predicted to operate and how provisions are then framed around this
- Designations, which the applicant relies upon, are in place
- Land within the above designations has been acquired by the designating authority
- Vehicle trip rates and public transport mode shares assumed in the traffic modelling.

4.3 Inter-related nature of the three plan changes

While the three PPCs have been lodged separately, they rely on a shared traffic modelling assessment prepared by Stantec (Drury East Modelling Report dated November 2019) and therefore the effects associated with the PPCs are cumulative, rather than being isolated to each individual application. While a cumulative assessment allows a holistic understanding of the network effects to be provided, isolating the responsibility as to who delivers the necessary transport upgrades presents some challenges.

As the three PPCs are separately lodged they must, in my view, also be considered in isolation so that if, for any reason, the PPCs become separated and require processing separately as stand-alone proposals,

or development timeframes differ to that currently anticipated, the potential transport effects of each PPC, the mitigation required and therefore the proposed planning provisions can be individually assessed.

I queried during the pre-notification phase the extent to which PPC48 relies on PPC49 and PPC50, and how the delay or rejection of one or both PPCs might affect PPC48, particularly in relation to the delivery of transport infrastructure. The applicant's response to this matter was provided in the Planning RFI response from B&A, at Section 1.2, where the applicant sees the risk sitting with the integrated delivery of transport infrastructure. The delivery of infrastructure is discussed in the following section, drawing on what I know about the ATAP 2021 - 2031, NZUP, and the Drury Transport Infrastructure Programme (DTIP) which the applicant views as the response to the issue.

While noting the reliance on wider infrastructure, I note that the assessment of the Drury East area is contingent on all PPCs being approved and developing in accordance with the assumptions of the ITA. By way of example, there is a high reliance on movement remaining within the Precinct, as people live, work and play across the three PPCs. Should the balance of these activities shift, then I would expect a greater level of external (outside Drury East) to internal (inside Drury East), and internal to external trips which would then impact on the predicted effects about the wider transport network. As such, should one or two PPCs be delayed, I would expect that the transport effects and therefore mitigation to alter. This has not been assessed.

Outcome: I am concerned that transport infrastructure needed to support PPC48, such as the Waihoehoe Road upgrade and Mill Road (between Manukau and Drury South), may not be delivered in a manner that integrates with development in PPC48. The traffic modelling used to support PPC48 assumes that Mill Road will be operational by 2028. While Mill Road is contained within ATAP 2021 -2031 (a non-statutory agreement between Council and Government), there is uncertainty over the time it may take to designate the route, acquire properties, and construct the project. Following the recent Government announcement there is no certainty as to the timeframe of Mill Road that will improve access to the PPC area (through Papakura to Waihoehoe Road).

Given the uncertain development programmes of each PPC area, I am of the view that the prescriptive nature of the transport upgrade provisions in the Precinct is not suitable in this instance. Provisions that are performance based in my view give greater flexibility in determining mitigation required following an assessment of the environment at the time of individual development. This also provides clearer ownership as to who is responsible for delivering the mitigation. Precinct provisions are required for this, as reliance on Chapter E27 Transport of the AUP(OP) is unlikely to capture key intersections about the area.

4.4 Form, timing and responsibility of supporting transport infrastructure

Since lodgement of PPC48, I understand that discussion on the funding and delivery of wider strategic transport infrastructure within the Drury area has been ongoing between central government, local government, and developers. This workstream is referred to as the DTIP, which I understand has recently been renamed DIFF. As Council's transport specialist for PPC48, PPC49, PPC50 and the Drury 2 Precinct (PPC51) I have not been directly involved with these discussions, with my involvement being limited to briefings on what the DTIP/DIFF programme covers and the process this team is working through.

Key DTIP/DIFF infrastructure about the Drury East area that sits within ATAP 2021 – 2031 and the NZ Upgrade Programme (NZUP) consists of the following

- Electrification of rail between Pukekohe and Papakura
- Delivery of a rail station about Drury Central
- SH1 improvements between Papakura to Drury South (Stage 2, being widening of SH1 to Drury South and the new Drury South interchange on SH1 is now deferred)
- Mill Road (now deferred).

Firstly, each of these projects is assumed to be complete in the traffic assessment of the PPCs. Of these, it is essential that the first two projects (those related to rail) are delivered so that sustainable travel patterns are encouraged from the outset and that the effects and reliance on private vehicle travel are consistent to that used in the modelling assessment.

For instance, the traffic modelling calculations assume a 20%¹ public transport mode share for office workers in 2028. If reliance on private vehicle travel is not reduced through the provision and use of other travel modes, the roading mitigation currently captured within the Precinct provisions may not be sufficient.

Additional projects that are relevant to the PPC are discussed in Table 3. Unlike the above ATAP 2021 – 2031 and NZUP public transport projects where funding is understood to be programmed (though not necessarily committed, as discussed in Section 3), I am unsure as to the outcome of funding and timeframes associated with Waihoehoe Road. Auckland Transport is working on documentation to support a Notice of Requirement (NOR) for Waihoehoe Road which provides confidence that widening Waihoehoe Road is achievable without countering third-party land ownership issues once designation has been obtained. It is important to note however that while Auckland Transport is progressing a NOR for Waihoehoe Road, this process secures the road designation, but does not acquire the land or deliver the improvements assumed in the transport assessment, from which effects are informed.

Waihoehoe Road is a key future public transport route, which will connect the Drury West area (via Jesmond and Norrie Road) to the Drury Central train station. As such, it is highly likely that bus lanes will feature, and in my view need to feature from the outset on Waihoehoe Road. The traffic modelling and mitigation proposed in Appendix A of the application excludes bus priority measures which raises concerns as to whether the mitigation put forward by the applicant aligns with and can fit within the desired network and designation being planned by Auckland Transport.

Until funding, timeframes and an understanding of what the designation allows for in terms of a design for DTIP projects, I am of the view that risks exist with the cost, timing and adequacy of the upgrades required to support PPC48, PPC49 and PPC50.

¹ Demand Summary Excel Worksheet Demand Summary TC TWRevision

Section 4 and Appendix B of the notified ITA provides further details on the assumed funding and timing of third-party transport infrastructure. Key infrastructure within the Drury area is summarised in Table 3, with my commentary provided where relevant.

Table 3: Transport investment assumptions

Investment required	ITA Assumption	Flow comment					
Funded and/or Programmed, required to support PPC48							
Rail Electrification from Papakura to Pukekohe	Funding confirmed through NZUP, assumed completion 2024	Development prior to increased public transport accessibility may compromise the objective of Drury becoming a TOD. As the applicant relies on these projects, I am of the view that these should be operational prior to land use activities being operational.					
Drury Central train station	Funding confirmed through NZUP, assumed completion 2024						
SH1 Papakura to Drury South, including new Drury	Funding confirmed through NZUP. Assumed completion	Not funded, as per the recent Government announcement (June 2021).					
South Interchange	2025	Releases pressure from Drury Interchange and provides additional capacity on the state highway network.					
		The key outcome from this project relates to whether a direct connection to the PPC area is feasible and supported by Waka Kotahi, and if/when the connection would occur.					
Mill Road Corridor (Southern and Papakura Section)	Funding confirmed. Assumed to be delivered in stages from 2025/2026 to 2027/2028, with consent application lodged by early 2021 for the Southern and Papakura Section.	Not funded, as per the recent Government announcement (June 2021). The key concern here is that this project is likely to be delivered in stages. As the transport assessment focusses on 2026, any delay in sections, such as the middle section (Waihoehoe Road to Alfriston Road) would place additional pressure onto the Great South Road/Waihoehoe Road intersection (including the approaches) and therefore the effects and mitigation predicted for Waihoehoe Road and Great South Road. I have significant concerns that the timeline for implementation is overly ambitious as the notice of requirement has not yet been lodged, and any land acquisition, ongoing planning, design and construction may take several years. As no assessment has been completed that excludes sections of Mill Road, the extent of the effects of the PPC are unknown.					

Investment required	ITA Assumption	Flow comment					
Unfunded, required to support PPC48							
Waihoehoe Road/Great South Road intersection. Safety upgrade.	Prior to any development, per Table IX.6.2.1/Table IX.6.2.2./Table IX.6.3.1 and/or Table IX.6.3.2.	Included in DTIP, however I am unsure as to funding, commitment and timeframes.					
Upgrade of existing local roads	Provided as required to support development.	Not secured through the Provisions, and not included in DTIP. To address potential safety effects, I consider that Fitzgerald Road along the full PPC48 frontage should be urbanised prior to any development fronting Fitzgerald Road, or any new road connection from PPC48 to Fitzgerald Road. Refer to my recommended Provisions in Section 5.					
Waihoehoe Road upgrade	Completion 2025. Assumed to be funded by DTIP.	Included in DTIP, however I am unsure as to funding, commitment and timeframes. Required to mitigate potential safety effects, and to enable FTN network between Drury, Papakura, and Manukau. I consider that urbanisation between Great South Road and Fitzgerald Road should precede any development within PPC48. Refer to my recommended Provisions in Section 5. Supporting Growth Alliance (SGA) has lodged notices of requirement for Waihoehoe Road upgrade, although no funding is allocated for construction.					
Waihoehoe Road/Great South Road intersection. Upgrade to signals	Per Table IX.6.2.1/Table IX.6.2.2./Table IX.6.3.1 and/or Table IX.6.3.2. Assumed to be between 2033 – 2038.	Included in DTIP. The timing and form of these upgrades are heavily dependent on Mill Road (south of Waihoehoe Road) and Drury South Interchange being operational.					
Waihoehoe Road/Great South Road intersection. The intersection will need to be upgraded on the western arm to provide higher exit capacity	Per Table IX.6.2.1/Table IX.6.2.2./Table IX.6.3.1 and/or Table IX.6.3.2. Assumed to be 2038.	I discuss my concern regarding the uncertainty of the timing of the Mill Road corridor in Section 4.12.					
Waihoehoe Road/Great South Road intersection. Capacity upgrade	Per Table IX.6.2.1/Table IX.6.2.2./Table IX.6.3.1 and/or Table IX.6.3.2. Assumed to be 2048.						

Investment required	ITA Assumption	Flow comment			
Walking and cycling network	Delivered in conjunction with development.	Not included in DTIP (other than potential strategic walking and cycling links). I consider that the Objectives, Policies, Matters of Discretion, and Assessment Criteria provide assurance that walking and cycling connections to the Drury Central train station will be delivered along with development.			
Train and local bus services	Assumed to be provided as development occurs.	Not included in DTIP. The Regional Public Transport Plan 2019 has committed funding for additional electric trains to run services between Pukekohe and Papakura. Other than the replacement of diesel trains for electric trains, the only new services assumed is new connector 374 bus service between Drury and Papakura. The 374 will be introduced by 2028², with 20min frequency during weekdays and 30min frequency during evenings and weekends. I recommend that, if PPC48 is approved, funding for supporting public transport services is allocated in-line with proposed development.			
		Development prior to increased public transport accessibility may compromise the objective of Drury becoming a TOD.			
Unfunded, indirectly tied to PI	PC48				
Jesmond Road upgrade and Extension	Completion 2027	Included in DTIP. Required to enable FTN network between			
Bremner Road/Norrie Road realignment and bridge upgrades	Completion 2026	Drury, Papakura, and Manukau. I expect SGA will be lodging notices of requirement, although no funding is allocated for			
New Ōpaheke North-South arterial	Completion 2042	construction.			
SH22 Safety Improvements and widening	Completed 2027	Included in DTIP. SGA has lodged notices of requirement, although no funding is allocated for construction.			
Great South Road FTN Completed 2037 Upgrade to Papakura		Included in DTIP.			

² Regional Public Transport Plan 2019, Appendix 3 Page 214, available online: https://at.govt.nz/media/1979652/rptp-full-doc-final.pdf

Investment required	ITA Assumption	Flow comment		
Pukekohe Expressway Stage 1	Completed 2038	SH1 to Burtt Road section included in DTIP.		

Outcome: Based on the current provisions, I consider that there is a sizeable risk that there will be consequential adverse outcomes for economic well-being (in terms of transport network efficiency) and social well-being (including road user safety). This may result in Auckland Transport and Waka Kotahi NZTA (as road controlling authorities) being left to address substantial off-site cumulative safety and efficiency effects on the transport network beyond what would be expected from normal development or business as usual upgrades to the network, due to uncertainty around infrastructure scale, funding and timeframes. A number of third-party infrastructure improvements, including projects within ATAP 2021 – 2031, NZUP and DTIPs, are assumed in the transport assessment albeit the extent of the projects, funding and timing for delivery of some projects is not yet committed.

Provisions that enable an assessment against the network at the time land use activities are being applied for would provide greater control on what mitigation is required given the environment at that time, which may also include greater certainty on wider infrastructure timeframes.

4.5 Waihoehoe Road/Great South Road intersection

The Waihoehoe Road/Great South Road intersection is the only upgrade the applicant identifies as being needed on the external network to the precinct. I have several concerns with the application and assessment of this intersection, being

- Consistency, feasibility and alignment of the upgrade with that anticipated by the SGA NOR
- Wider network assumptions which dampen down projected short-term demand at the Great South Road/Waihoehoe Road intersection
- ◆ The thresholds proposed in IX.6.2 and IX.6.3 that trigger the need for the intersection upgrade

4.5.1 Consistency, feasibility and alignment with SGA NOR

During my Clause 23 review I questioned whether the proposed form of the Great South Road/Waihoehoe Road intersection was consistent with the intentions/design proposed by the SGA. The applicant considered that their design was consistent with, or did not preclude potential designs from SGA, and that there would be ongoing liaison between the developer and Auckland Transport so that a mutually agreed concept design of the intersection can be achieved. I am unaware of whether these discussions have been ongoing, but note that including specific upgrades to the intersection within the Provisions is essentially locking in upgrades that may not align with the transport corridor outcomes the NOR and Auckland Transport seek.

The notified ITA recommends an upgrade of the Great South Road/Waihoehoe Road intersection by 2033 if a new access is not provided to the Metropolitan Centre, or 2038 if a new access is provided to the Metropolitan Centre³.

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³ Section 8.2 of the ITA, Page 41

While I have concerns over the timing suggested for the intersection upgrade, I am unaware whether the upgrades put forward in the application can physically fit and provide the capacity intended within the designation that is being sought by Supporting Growth at Auckland Transport. The layouts for 2028 and 2038, as proposed by the applicant, are shown below, as included in the Transport Modelling Report. I note that neither upgrade features bus priority lanes, and they assume four approach lanes on Great South Road and Waihoehoe Road approaches and no pedestrian crossings on the Norrie Road approach. I understand that this does not reflect Auckland Transport's design for the intersection, which I understand will include bus priority measures, only three approach lanes on the southern leg, and pedestrian/cyclist crossings on all arms of the intersection. While I appreciate that the design of the intersection is subject to further detail, the key concern relates to whether the current assumptions overestimate future capacity and therefore underestimate the potential effects and necessary mitigation.

2026

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Table 4: Great South Road/Waihoehoe Road Intersection Assumptions

NB. A 2028 layout has been tested which assumes four lanes for Waihoehoe Road. The layout of intersection lanes remains similar.

Outcome: It is unclear whether the layouts proposed by the applicant can physically fit within the area that Auckland Transport has issued a Notice of Requirement for, and allow for bus priority, capture pedestrian crossings on all four approaches and provide the necessary facilities to ensure the corridor operates safely and efficiently for all transport modes. Based on the above, I do not support the current upgrades included in the Precinct provisions at IX.6.2 and IX.6.3 associated with the Great South Road/Waihoehoe Road intersection.

4.5.2 Wider Network Assumptions – Dampening of short-term volumes at Great South Road/Waihoehoe Road intersection

I am mindful of the trip generation assumptions and trip assignment included in the traffic model, and the implications this has on determining the transport upgrades carried through to the provisions.

Looking at the short-term 2028 forecast traffic model used to inform the assessment, I note that the model includes the NZUP projects⁴ as an underlying assumption (as set out in Section 8.1 of the notified ITA), which includes the extent of the Mill Road project. As noted in Table 1 above, the Mill Road project has now been deferred by the Government. It is this project which dampens the traffic demand and therefore potential effects at the Great South Road/Waihoehoe Road intersection.

To my knowledge, the northern section of Mill Road (Redoubt Road to Alfriston Road) forms Stage 1 of the Mill Road corridor and has been rescaled to only include safety works. The second stage of Mill Road may well be the southern section, connecting Waihoehoe Road to Drury South. I understand that it is the middle section, north of Waihoehoe Road and passing through Papakura, which has the greatest risk in terms of delivery timeframe. It is also the section that this project relies on in terms of reducing pressure at the Great South Road/Waihoehoe Road intersection. Following the recent Government announcement, Mill Road will not be operational by 2028, with the timing of the actual delivery unknown.

I have interrogated the wider area SATURN traffic model for 2028 (which excludes the change in zoning to THAB for PPC50, as notified), to appreciate how many vehicles (from the development) are predicted to use Mill Road, to the north of the development. Table 5 shows that for 2028, 200 vehicles per hour travel northbound and 450 vehicles per hour travel southbound on the section of Mill Road immediate north of the Drury East Precincts (PPC48, PPC49 and PPC50). Those volumes reflect 20% of all volumes exiting the Precincts and 30% entering the Precincts. Adding these volumes to the Great South Road/Waihoehoe Road intersection in my view would require an upgrade to the intersection and the approaches to it much sooner that the current provisions allow for. Further, whether an upgrade of the Great South Road/Waihoehoe Road intersection can cater for these volumes is uncertain.

Table 5: Predicted Precinct traffic distribution (2028 PM Peak)

	Kiwi Precinct (Zone 5541)		Fulton Precinct (Zone 5542)		Oyster Precinct (Zone 5551)		TOTAL	
	From	То	From	То	From	То	From	То
SH1 (north)	98	108	51	135	21	32	170	275
Great South Rd (north)	106	90	40	41	11	11	157	142
Mill Road (north)	91	98	81	275	32	80	204	453
Drury South I/C (south)	64	35	25	46	9	16	98	97
SH22 (west)	45	54	26	45	11	21	82	120
TOTAL PRECINCT (all trips – includes internal)	560	495	340	760	125	315	1,025	1,570

⁴ NZUP projects are included in ATAP 2021 – 2031, which was released after the PPC48 traffic modelling assessment was undertaken

While 2028 volumes have been provided, the key standout from the above is that Mill Road attracts considerably more traffic from the development than is currently predicted to use Great South Road (north).

Outcome: Until Mill Road connects to the development and provides a secondary connection (to the north and south), reliance on the Great South Road/Waihoehoe Road intersection will be much greater than that currently predicted in the transport assessment and that from which the current provisions are framed. A number of third-party infrastructure improvements, including projects within ATAP 2021 – 2031, NZUP and DTIP/DIFF, are assumed in the transport assessment albeit funding and delivery is not clearly understood. It is for this reason that the requirement to assess the mitigation required as development progresses is a better option, noting the uncertainty as to when wider area infrastructure is in place

I am therefore of the view that the timing or triggers requiring the upgrades captured in IX.6.2 and IX.6.3 are not appropriate as currently drafted as they do not consider effects and therefore upgrades necessary prior to the full Mill Road corridor being constructed and open.

4.5.3 IX.6.2 and IX.6.3 Intersection Upgrade Thresholds

In light of the above commentary, prior to discussing upgrade options for the Great South Road/Waihoehoe Road intersection, it is important to note that the current roundabout is a single lane roundabout, with single lane approaches on Great South Road (south) and Waihoehoe Road. Great South Road (north) and Norrie Road have two lane approaches, with left turn movements provided with a dedicated lane. An aerial image of the current intersection is shown in Figure 3.

Figure 3: Existing Great South Road/Waihoehoe Road intersection



I am therefore sceptical whether the significant development enabled by the first threshold identified in Table IX6.2.1 (3,406 dwellings, or 62,430 m² Retail, or 34,800 m² Commercial) and Table IX6.3.1 (4,750 vehicles per hour in the AM peak, and 4,810 vehicles per hour in the PM peak) can even be accommodated by the existing roundabout. I note that the traffic model used to assess the performance of the network in 2028 and 2033 (of which the above thresholds relate to) relies on the underlying assumptions used by the Supporting Growth Alliance (SGA). The SGA traffic model assumes a two-lane roundabout which has been retained in the applicant's traffic assessment, however the thresholds identified in IX6.2.1 do not identify the need to upgrade to two-lanes (which has been assumed in the applicant's traffic modelling).

The upgrade of the Great South Road/Waihoehoe Road intersection will be reliant on the acquisition of third-party land, which the applicant has assumed will be undertaken by Auckland Transport. The upgrade will likely require the widening/replacement of the Waihoehoe Road rail overbridge, which is not identified in the Precinct Provisions. Further, I consider that the multiple-staged upgrades of this intersection, as identified by in Table IX6.2, does not give sufficient consideration of disruption to the transport network during works.

Outcome: The thresholds for upgrading the Great South Road/Waihoehoe Road intersection are not robust as I consider there are underlying flaws in the modelling assumptions used to set these

thresholds. Further, the upgrades of this intersection as proposed in IX6.2 and IX6.3 have the potential to cause ongoing disruption to the transport network during works and will require the acquisition of third-party land and widening/replacement of the Waihoehoe Road rail overbridge, which is not identified in the Precinct Provisions.

I am therefore of the view that the timing or triggers requiring the upgrades captured in IX.6.2 and IX.6.3 are not appropriate as currently drafted as they do not consider the need for third-party land, the widening/replacement of the Waihoehoe Road rail overbridge, or the additional construction traffic effects due to the proposed multiple upgrades to the intersection.

4.6 Safety effects of existing rural roads

I consider that PPC48 does not respond to potential safety effects that could be created on existing rural roads. While the applicant has considered the potential safety effects at the Waihoehoe Road/Great South Road intersection and incorporated provisions to address these, I consider that other safety mitigation measures are required.

I am concerned about the potential safety effects on rural roads because of additional traffic generated from PPC48. For example, I consider that the early urbanisation of Waihoehoe Road, Fitzgerald Road, and Brookfield Road (with kerb and channel, footpaths, intersection improvements, etc) is required to support the change in nearby land uses.

An example of where safety effects have not been appropriately mitigated during the staged delivery of development is in the Takanini area, where existing roads such as Walters Road and Airfield Road have been urbanised in a piecemeal fashion, leaving discontinuous footpaths, swales presenting a hazard to all road users, power poles too close to road edges, inappropriate speed limits, and poor pavement surfaces.

Similarly, I am concerned about the potential safety effects on the Flanagan Road/Waihoehoe Road intersection, should any traffic generated by PPC48 route through this intersection due to restricted sight lines to the west.

In the absence of committed funding for the upgrade of Waihoehoe Road and Fitzgerald Road to urban standard from the outset of development, or Precinct provisions requiring the same, I remain concerned that potential safety effects will go unaddressed in the short to medium term. In Section 5 I have recommended Provisions to ensure urbanisation of existing rural roads is delivered in an integrated manner with development. Upgrading Waihoehoe Road is of great importance given the need to provide priority to bus services and provide connectivity for all modes with the Drury Central train station as discussed below.

Outcome: In my view the notified Provisions fail to address likely safety effects on existing rural roads. I consider that existing rural roads, including Waihoehoe Road, Fitzgerald Road, and Brookfield Road should be upgraded to urban standard prior to each respective road experiencing an increase in traffic due to occupied development within PPC48. Further, the existing Flanagan Road/Waihoehoe Road intersection should be closed, and an alternative access provided, prior to any development which connects to Flanagan Road.

Enabling walking, cycling and public transport as viable transport options

A key aspect of my Clause 23 review focused on when and how infrastructure to support public transport, walking, and cycling trips would be delivered within the Precinct. In response to several lines of query, the applicant included several Matters of Discretion and Assessment Criteria related to the provision of a connected street network that links to the Drury Central train station.

I support these provisions, however I consider that Standards relating to the early provision of public transport, walking and cycling connectivity are required. Refer to Section 5 where I have made recommendations for Provisions related to enabling walking, cycling, and public transport as safe and attractive transport options.

Of note is, in my opinion, the need to ensure that all development has a contiguous collector road network connecting it to the Drury Central train station to enable local bus services. While the Provisions proposed by the applicant ensure that the road network will support local bus services at full buildout, I consider that it is critical that bus priority along Waihoehoe Road (particularly westbound) is provided from the outset and local bus connectivity is provided within each stage of development. This is consistent with the assumptions made in the applicant's traffic modelling, which includes the forecast public transport patronage of over 600 trips in the 2028 AM peak and over 1,400 trips in the 2038 PM peak⁵.

Following discussions with Auckland Transport, I understand that the funding for future public transport services to support PPC48 (including local bus services) has not been committed. I consider that early provision of these services, to influence land-use patterns and travel behaviour is critical for establishing a TOD.

Outcome: In my view the Precinct provisions should include Standards relating to the early provision of walking and cycling connectivity between development and the Drury Central train station, and a continuous collector road network to enable Auckland Transport to provide bus services as staged development occurs. Further, I recommend that funding is allocated to enable early provision of public transport services, noting that this sits outside of the Plan Change process and is not considered the responsibility of the applicant.

4.8 Prescriptive vs Performance transport thresholds

I am of the view that the transport upgrades set out in IX6.2 and IX6.3 are too prescriptive when considering the uncertainties I have highlighted with the transport assessment.

I consider that there are assumptions in the traffic assessment, in terms of trip generation and trip assignment, that present risks when considering the extent of the effects of PPC48 and therefore the standards included in the provisions. My concerns being

The number of vehicle trips assumed to be generated. An assessment of vehicle trips with the applicant confirms that the trips assumed to be generated by the three plan change areas are low

⁵ Memo "Response to Clause 23(2) Additional Information Request – Drury Central Private Plan Change Request - Kiwi Property No.2 Ltd", produced by Stantec, dated 23 April 2020

and this may be compounded with the proposed increase in density to THAB across PPC50. While updated traffic models have been provided to Council to review (which exclude THAB across the whole of PPC50), the applicant is of the view that this does not impact the mitigation proposed. I have a differing view

The traffic assessment assumes that all DTIP/DIFF infrastructure is in place from the outset of the development. Key concerns here relate to public transport provision, Waihoehoe Road upgrade, Great South Road/Waihoehoe Road intersection upgrade and the assumption that Mill Road is complete. The assumption that these projects will be in place result in a transport response (mode share and distribution) which in my view presents risks when considering the performance of the immediate network and any upgrades that may be required until such time as the wider external infrastructure is delivered.

It is my view that the timing of upgrades, being either connected to land use thresholds or trip generation is inappropriate given the uncertain timeframes associated with external infrastructure which the traffic assessment has relied on.

Further, I consider that provisions are overly complicated by different transport thresholds for different access options (with and without "Access A" scenarios).

I also consider that the transport improvements identified in the provisions overly focus on car access and do not give sufficient weight to safety, public transport and active mode outcomes. I note that the draft provisions include Assessment Criteria (IX.8.2(1)(d)) related to walking and cycling access, however I consider that this would be better represented as a Standard.

To address these concerns, and to support a TOD outcome, I recommend revised triggers for transport infrastructure. These triggers are outcomes focused rather than prescriptive, and therefore allow for the uncertainty in terms of funding, commitment and delivery of DTIP infrastructure, land use, staging etc.

I am mindful that including a performance-based standard may result in piecemeal development, and result in future resource consents challenging the extent of the network that requires effects to be firstly assessed and secondly mitigated. For instance, a development strategy may well result in subdivision (which will be argued does not generate traffic), with land then being reordered into smaller lots that are then either sold on (to further parties) or developed within AUP(OP) assessment thresholds.

I am of the view that there are some key pieces of infrastructure that need to be provided for upfront. Once constructed and operational, future upgrades could be assessed as development progresses.

Outcome: I consider that the main concerns that need to be addressed by the Precinct provisions

- Early delivery and operation of the Drury Central train station and bus priority measures on Waihoehoe Road, (particularly westbound)
- Early delivery of active mode infrastructure (walking and cycling) including connections to trip generators and most importantly the Drury Central train station
- Delivery of safety and capacity improvements (for all modes) to existing rural roads to manage the transition from a rural to urbanised environment

• Performance and safety of the Waihoehoe Road/Great South Road intersection and the approaches to it (including the Waihoehoe Road rail overpass) for all road users (walking, cycling, public transport, and general traffic)

I suggest that amendments are made to the Precinct Provisions, as discussed in Section 5.

4.9 Integration with Drury South Industrial Precinct

The following transport improvements have been specified in the Drury South Industrial Precinct Plan (I410), that are relevant to the Plan Change.

- upgrade of the Quarry Road/Great South Road intersection
- upgrade of the Great South Road/SH22 intersection
- upgrade of the right turn bay on Waihoehoe Road at the Waihoehoe Road/Fitzgerald Road intersection
- a new dedicated pedestrian path and cycleway between the existing Drury township and the Drury
 South Industrial Precinct

I recommend that the applicant work with landowners within the Drury South Industrial Precinct to deliver any required infrastructure that is common to both Precincts, noting that this sits outside of the Plan Change process.

4.10 Drury Central train station

The lodged PPC48 application assumed that the Drury Central train station would be located approximately 400 – 500m south of the location indicated by the SGA in Council's Drury-Ōpaheke Structure Plan. The ITA also discussed the provision of a "temporary" train station, should development proceed the construction of the Drury Central train station by local/central government agencies.

Between the lodgement and notification of PPC48, the SGAs' preferred location of the Drury Central station has shifted to a point midway between Waihoehoe Road and the location preferred by the applicant, which has reduced the difference to approximately 200m. Further, funding was committed to the station through the NZ Upgrade Programme, with an indicative lodgement date for Notice of Requirement being early 2021⁶ and construction start date of 2023⁷.

I consider that the exact location of the Drury Central train station does not need to be confirmed as part of PPC48, and that both land development and planning of the supporting transport network can be expected to inform each other as both aspects progress.

What is essential however is that

• supporting transport connections are provided between any development and the train station no matter where the station is located. The transport mitigation assessed to support the

https://www.supportinggrowth.govt.nz/assets/94b1c1d861/Summary_MayJune-public-engagement-southern-transport-proposals.pdf

https://www.nzta.govt.nz/planning-and-investment/nz-upgrade/auckland-package/auckland-rail/

development leans on a train station being located on the 'front door' of the development. Without strong connections to and from the station, the ability to encourage public transport use will be difficult which in turn impacts on the number of vehicles trips generated by PPC48 and therefore the extent of mitigation required on the surrounding roading network

- the Precinct Plan provides for the right transport outcomes for the development. That is, if the train station is located further to the east, and a direct connection from the Drury Interchange is not supported, then the ability and desire for a Park-and-Ride within this pocket of the Precinct may be undesirable. Without a road link to Drury interchange, traffic would be drawn through the Precinct, across train station links to the Precinct that should be prioritising people, safe movement and place making in line with TOD objectives.
- rather than defining sub-precinct D as accommodating the train station and associated plaza, provision for this infrastructure could be included in an extended sub-precinct A, enabling greater flexibility for its location to be determined.

It is my view that the train station should be open and operating prior to any development being occupied. I am also of the view that supporting connections are also provided for from the outset, such as

- the 'Key Retail Street' which provides an essential connection between the rail station and the wider site, namely Precinct B for active modes and those connecting with the rail station
- The collector road network, being the sections that connect to the train station and any land being developed, again ensuring connectivity with the train station is available.

Outcome: I consider that the exact location of the Drury Central train station does not need to be confirmed as part of PPC48, and that both land development and planning of the supporting transport network can be expected to inform each other as both aspects progress.

It is my view that the train station should be open and operating prior to any development being occupied. I am also of the view that supporting connections are also provided for from the outset, such as

- the 'Key Retail Street' which provides an essential connection between the rail station and the wider site, namely Precinct B for active modes and those connecting with the rail station
- The collector road network, being the sections that connect to the train station and any land being developed, again ensuring connectivity with the train station is available
- And that Sub-Precinct D and the desire for Park-and-Ride should be reviewed in light of a train station shift further to the East.

4.11 Access options

The Section 32 report, at Section 10.4.1 speaks of several access options, noting the following

- Direct access to the SH1 Drury Interchange is the desired outcome
- That an alternative access at Firth Street offers a solution should insurmountable difficulties prevent a direct access from the interchange

- A potential Pitt Road overpass
- A potential Brookfield/Quarry Road connection with SH1
- Waihoehoe Road, and
- Fitzgerald Road

I query whether the applicant or the road controlling authorities (Waka Kotahi or Auckland Transport) being able to deliver most of these connections. For example

- The alternative Firth Street access presents geometric challenges, noting the need to rise over the rail line which requires considerable height in line with electrification. I also note that the proximity to an upgraded Drury Interchange would likely present design and operational challenges. Further, the transport modelling report does not assess this option.
- Pitt Road overpass would likely require third-party land and therefore approvals, as well as presenting geometric challenges with getting over SH1 and back down again prior to the Great South Road intersection. I consider that this would be a beneficial walking and cycling link to future development to the west of SH1, and that the opportunity for this link should be retained in the Precinct Plan.
- The Brookfield/Quarry Road connection with SH1 presents challenges in relation to safe interchange separation requirements, where I understand the Drury South Interchange which connects with the future Mill Road corridor would essentially rule a further connection with SH1 out. The business case being undertaken by Waka Kotahi will determine the outcome of this option.

Based on the above, access by vehicles is essentially restricted to the Great South Road/Waihoehoe intersection in the short to medium term, with further access being via Mill Road in the long term (when constructed). Other potential access options are new road connections to Pitt Road and Quarry Road, however these are only "indicative" in terms of the Precinct provisions. Further, in its submission Waka Kotahi NZTA oppose any reference to a direct road connection from the Drury Interchange, identified in the Precinct provisions as "Access A".

In my view, access by vehicle is limited to one primary intersection (being the Great South Road/Waihoehoe Road intersection) which therefore places greater emphasis on other travel modes, specifically public transport, walking and cycling and also requires any upgrade of the Waihoehoe Road/Great South Road intersection to be done right once and once only given the reliance of the intersection providing access to three significant plan change areas, as well as the existing community where safety should be a priority as development comes online and during construction.

4.11.1 **Drury Interchange Access**

The ITA considers two potential future road networks serving PPC48, one where direct vehicle access to Drury Interchange is provided (termed "Access A" in the Provisions) and one where this connection is not provided. The with/without options are reflected in the Provisions, with Table IX.6.2.1 and Table IX.6.3.1 relating to development with Access A, and Table IX.6.2.2 and Table IX6.3.2 relating to development without Access A.

During my Clause 23 review I recommended that the applicant engage further with Waka Kotahi to establish the feasibility of Access A as, in my view, such a connection would not be feasible in the immediate future, or until such time as a considerable level of demand was removed from the Drury Interchange (for example by providing an interchange at Drury South and a secondary route to Pukekohe). The applicant advised that engagement with Waka Kotahi was ongoing, and they anticipated having more clarity on the access arrangement before the Hearing.

Prior to any further correspondence being shared before the hearing, I note the following in relation to Waka Kotahi's submission

- Waka Kotahi raises concerns with the design and directional flow of Access A
- Waka Kotahi seeks the removal of all thresholds in IX6.2 and IX6.3 relating to Access A

I support Waka Kotahi's requested relief, and consider that the provisions should be simplified to avoid the need for with/without Access A thresholds, refer to my discussion about performance vs prescriptive triggers in Section 4.8 and recommendations in Section 5.1.1.

Outcome: I recommend the removal of all thresholds in IX6.2 and IX6.3 relating to Access A.

4.11.2 Quarry Road/Great South Road/SH22

I consider that the potential effects of the indicative road connection between Brookfield Road and Quarry Road, shown on Drury Centre Precinct Plan 2, have not been assessed. While I am supportive of the connection, I consider that if this connection is made there may be safety and efficiency effects on the wider transport network that need to be mitigated, such as the safety and efficiency of nearby intersections such as Great South Road/Quarry Road and SH22/Great South Road.

I suggest that provisions be included which require an assessment and any mitigation works for the Great South Road/Quarry Road and SH22/Great South Road intersections, similar to the I410.8.2(1)(f)(ii) in the operative Drury South Industrial Precinct.

Outcome: I recommend that a Standard be included in the provisions which requires an assessment and any mitigation works for the Great South Road/Quarry Road and SH22/Great South Road intersections, upon any road connection between Brookfield Road and Quarry Road and/or Pitt Road.

4.12 Traffic modelling methodology, assumptions, results, and interpretation

4.12.1 Traffic Modelling Platform

The traffic modelling completed to support the plan change has relied on the Supporting Growth SATURN traffic model, as well as isolated intersection SIDRA models developed by Stantec. Trip generation and distributions within these models have been informed by the Auckland Regional Macro Simulation Model (MSM), formerly known as the ART3 model (Auckland Regional Transport 3).

These tools are accepted tools for assessing the predicted effects of a plan change, provided that the underlying assumptions are reasonable, and that the ability of the models are respected. I have several concerns around the modelling, in terms of

Trip generation for the Precincts

- Assumptions around background infrastructure delivery
- Network change triggers being primarily driven by traffic model outputs, rather than connectivity and safety requirements.

Each of these matters is briefly discussed below.

4.12.2 Trip generation methodology

I am concerned with the lack of vehicle trips assumed in the traffic modelling assessment, which is further compounded by the increase in THAB zoning proposed in PPC50 (as notified). Modelling Request 18 noted that the reporting provided information for residential activities but trip generation information on other activities (commercial and retail) is absent. The response provided by the applicant suggest that an assessment of trips across each of the land uses is difficult and that it is not possible to dis-aggregate the total trips per zone. With the regional Macro Simulation Model (MSM), formerly known as ART3 informing the traffic modelling assessment, it is important to check the reasonableness of the assumptions included in the MSM, as set out in the Auckland Transport ITA guidelines, which is required to be followed by the AUP(OP), under E27.9(5).

The AT ITA guidelines note⁸,

"ART3 will provide information on predicted private vehicle and public transport trips during the peak, and where these trips originate from or are destined to (trip distribution). Transport professionals are encouraged to make adjustments to this information, in consultation with the relevant transport agencies, based on localised knowledge, detailed land use characteristics, survey information or any other relevant factors not considered to be well represented within the ART3 model.

ART3 provides trip estimates for generic landuse types based on the forecast regional growth pattern and planned roading and public transport networks. Standard industry sources of vehicle trip rates will still be useful in cross checking the forecast private vehicle trips from the ART model runs (and other sources). These sources include the Trips Database Bureau (TDB), RTA and ITE guidance as well as other sources noted directly above. Differences between the ART3 trip estimates and industry data should be logically explained by either the landuse or locational context."

As set out above, trip generation assumptions relate to two key elements. The first relates to the attractiveness and reasonableness around public transport use, with the successfulness (or not) of public transport use then determining the level of private vehicle trips generated.

The ITA notes at Section 7.1.3 that the traffic modelling of the Drury East development adopts the mode share assumptions contained within the SGA ITA. A mode share of 14% has been assumed for Drury East, with a 19% mode share for Drury West. It is important to note that these mode shares are consistent with well-established town centres within the Auckland Isthmus, such as Grey Lynn, Kingsland and Newmarket, which all assume a mix of land use activities and supportive, well connected street

https://at.govt.nz/about-us/manuals-guidelines/integrated-transport-assessment-guidelines/preparing-an-ita/

networks. Achieving this level of ridership on public transport for Drury (which is located well outside the Auckland Isthmus) from the outset will require substantial effort in providing the necessary infrastructure to encourage and support the public transport ridership assumptions and more importantly, controlling the level of vehicle trips generated. Should the level of public transport ridership not eventuate, an increase in private vehicle travel will result.

An initial review of trip generation assumptions has been completed using a spreadsheet that has been shared between Flow and Stantec. From a residential perspective, I am of the view that residential rates appear reasonable for the notified versions of the Plan Changes. This excludes the proposed change in THAB zoning for PPC50 as this has not yet been assessed by the applicant. Vehicle trips associated with commercial/retail activities however appear light. For instance,

- Trips associated with office activities relies on 1 in 5 (20%) workers using public transport from the outset. I note that this percentage is above the 14% discussed above. While a 20% mode share may still be a reasonable assumption, it is essential that the public transport infrastructure (station and connections) is provided from the outset to achieve this.
- A pass-by rate of 35% is proposed for the retail component of the development, with the vehicle trips associated with pass-by being excluded from the network. It is important that these trips are not excluded from the trip generation values entering and leaving the Precinct, as these trips if passing by on Great South Road or State Highway 1 for example, will be required to turn into and out of the Precinct at the Great South Road/Waihoehoe Road intersection. Excluding these trips will in my view significantly underestimate the effects of the primary access point to the development.

Based on the above, I have some reservations on the level of trips included in the model which has then formed the basis of the Precinct effects, mitigation and Precinct provisions.

Outcome: In response to the trip generation assessment, I retain my view that the prescriptive provisions in IX.6.2 and IX.6.3 be removed in their entirety and replaced with provisions that are performance based. Refer to Section 5 of this report.

4.12.3 **Network Infrastructure Assumptions**

With regard to infrastructure, the plan changes are reliant on third parties delivering significant projects about the area which essentially help 'unlock' the area. Failure to have these significant projects delivered in accordance with the anticipated timeframes detailed in Table 1 may impact on the safe and efficient performance of the transport network.

The timing around key investments such as a train station, rail electrification between Papakura and Pukekohe and Mill Road will have a significant bearing on how well the development is serviced from a transportation perspective. Any delay in the delivery of regionally significant infrastructure or change to the current understanding on what the infrastructure is providing (such as form, function, location, connections and timing) may have a significant impact on the timing and level of development that can occur about the Precinct, as the Precinct will be completely reliant on vehicle access via the Great South Road/Waihoehoe Road intersection.

The applicant's assumption that Mill Road will connect between Drury South and Manukau by 2025/26 in my view is very optimistic, and whether the anticipated public transport mode share is achieved from the outset will require supporting measures that encourage high public transport use from day one. With the current transport upgrade timings being uncertain, the Precinct Provisions would either need to

- limit development within the Precinct until such time as the train station, connections and Mill Road is in place, and therefore ensure the network is consistent with the transport assessment and therefore Precinct provisions, or
- remove the proposed transport Precinct Provisions at IX6.2 and IX6.3 and replace them with provisions that are performance based.

I prefer the latter, as the level of mitigation can then be assessed at the time of development. While performance-based provisions present a risk associated with piecemeal development, I consider that it is best to assess the mitigation required based on the environment known at that time.

Outcome: Again, I retain my view that the prescriptive provisions in IX.6.2 and IX.6.3 be removed in their entirety and replaced with provisions that are performance based. Refer to Section 5 of this report.

4.12.4 Network Safety and Connectivity Improvements

I note that the traffic modelling provides outcomes relative to capacity. Traffic models do not provide outcomes that indicate when safety and connectivity improvements are needed for vulnerable road users.

Interventions such as safe pedestrian crossings at intersections and footpaths and cycle facilities along corridors are elements that need to be considered separately so that a safe network is provided from the outset which encourage travel on modes other than by private vehicles.

As discussed above, the mode share assumptions of 14% are similar to developed centres located about Auckland's Isthmus. Achieving mode shares similar to these areas (such as New Lynn, Newmarket) will not be delivered by providing a train station alone. They will be achieved through providing safe, connected, attractive routes between the station and land use generators commensurate with the street patterns, amenity and land use patterns found in Auckland Isthmus, if not better. The Provisions, which requires the Precinct to 'Provide for the staging of pedestrian and cycling connections to the Drury Central train station to encourage the use of public and active modes of transport' does not provide any standard that gives surety on what is being delivered that achieves the desired transport outcome.

Outcome: I am of the view that the Provisions need greater emphasis placed on delivering infrastructure that provides improved safety and connectivity, so that the desired transport outcomes, such as mode share are achieved. Refer to Section 5 of this report.

4.12.5 Rail Station Sensitivities

The response from the applicant to Clause 23 transport matters (TM6 and T21) discusses how a sensitivity test has been completed should the rail station be delayed. The response suggests no

significant differences to the network performance results between using mode share information available for 2016 (no station) and that predicted for 2026 (with a station). Both tests rely on the mode share assumptions output from the MSM. While a sensitivity test has been completed using 2016 mode share information, the sensitivity test provides little insight given the queries raised on the underlying trips captured in the model as discussed above.

The response suggests little difference in network performance is predicted which I would assume to be the case if the difference in public transport mode share between each test is only some 7%. It is also suggested that there is no change to the predicted performance of the Great South Road/Waihohoe Road intersection. Again, I remain unsure however whether the roundabout assumed in the test continues to be coded incorrectly as a two lane roundabout, rather than a single lane roundabout, as raised in Section 4.5 above.

I note that the sensitivity test undertaken by the applicant does not account for the influence that the absence of the rail station would have on surrounding land uses. For example, land development prior to the station opening would likely be lower density and more car-based in terms of transport behaviour. This would likely lock-in a car-based land use pattern, forgoing the opportunity for a TOD outcome.

Outcome: I am of the view that the Provisions need to ensure that the Drury Central train station is operating prior to or in conjunction with any development, so that the desired land use and transport outcomes are achieved. Refer to Section 5 of this report.

5 MY REVIEW OF PRECINCT PROVISIONS

5.1.1 Transport infrastructure thresholds

As highlighted in Section 4.12 I have concerns about the traffic modelling that has been relied upon for establishing development thresholds at which supporting infrastructure is required. Further, I am concerned about the practicalities of monitoring the complex thresholds specified in Tables IX.6.2.1/2 and IX6.3.1/2, which include 2 different scenarios (with and without "Access A" connection to Drury Interchange) and 2 different metrics relating to thresholds (GFA and vehicles per hour).

I consider that the complex and multiple alternative thresholds create uncertainty for Council, developers, and transport professionals, with it being likely that nobody will be quite sure when the threshold would be "triggered". Collating and monitoring the cumulative dwellings, floor area, and peak hour vehicle trip generation from PPC48, PPC49, PPC50 in a readily available way is, in my view, highly unlikely.

Instead, if alternatives like a funding agreement cannot be secured, I suggest that a performance-based standard is used, where the safety and efficiency of the immediate network, and in particular the Great South Road/Waihoehoe Road intersection during peak periods is used to determine whether upgrades are required. This allows the Provisions to be responsive to the uncertainty with Access A, and delivery timeframes for Mill Road. Further, triggers to identify enabling infrastructure for non-car based transport modes should be incorporated to support travel choice, reduce congestion effects, and align with the Precinct Objective IX.2(1).

I also consider that the potential effects of the indicative road connection to Pitt Road and Quarry Road, shown on Drury Centre Precinct Plan 2, have not been assessed. While I am supportive of the connections, I consider that if either connection is made there may be safety and efficiency effects on the transport network that need to be mitigated, such as the safety and efficiency of nearby intersections such as Quarry Road/Great South Road and SH22/Great South Road. I suggest that provisions be included which require an assessment and any mitigation, similar to the I410.8.2(1)(f)(ii) in the operative Drury South Industrial Precinct.

In summary I recommend that

- ◆ Standard IX.6.2(1) (3) and Tables IX.6.2.1 and IX.6.2.2 are replaced, in their entirety, with thresholds to support TOD outcomes (refer to IX.6.2 Staging of Development with Transport Upgrades below)
- Standard IX6.3 Trip Generation Limit and Tables IX.6.3.1 and IX.6.3.2 are replaced in their entirety with a Standard the adopts performance-based thresholds for key intersections (refer to IX.6.3 Transport network performance below)

IX.6.2 Staging of Development with Transport Upgrades

(1) <u>Development within the Drury Centre Precinct Plan 3 - Transport Staging Boundary must not exceed the thresholds in Table IX.6.2 until such time that the identified infrastructure upgrades are constructed and are operational</u>

Table IX.6.2 Threshold for development: Transit Orientated Infrastructure

<u>Threshold</u>	Transport and Land use Required to Exceed the
	<u>Thresholds</u>
Prior to any new buildings being	Drury Central train station is operational
<u>occupied</u>	
	Safe walking and cycling crossing facilities shall be
	provided on all arms of the Great South
	Road/Waihoehoe Road intersection
	Waihoehoe Road is upgraded to an urban standard
	between the Waihoehoe rail overpass and Fitzgerald
	Road, with westbound bus priority measures being
	<u>provided</u>
Prior to any buildings being occupied	Direct, safe and separated pedestrian and cycle
in Precinct A; Drury Central	connections are provided from the Key Retail Street
	(Main Street) to the Drury Central station concourse
Prior to any buildings being occupied	Direct, safe and separated pedestrian and cycle
in sub Precincts B and F; Drury Central	connections are provided to the Drury Central station
	concourse via the Key Retail Street or Drury Boulevard
Prior to any buildings being occupied	Direct, safe and separated pedestrian and cycle
in sub Precincts C and E; Drury Central	connections are provided to the Drury Central station
	concourse via the Drury Boulevard
Prior to any development fronting	<u>Urbanisation of Fitzgerald Road between Brookfield</u>
<u>Fitzgerald Road, or any new road</u>	Road and Waihoehoe Road , providing for safe
connection to Fitzgerald Road	walking and cycling facilities, kerb and channel,
	stormwater and pavement improvements.
Prior to any development fronting	<u>Urbanisation of Brookfield Road, Fitzgerald Road and</u>
Brookfield Road, or any new road	Waihoehoe Road to Great South Road, providing for
connection to Brookfield Road	safe walking and cycling facilities, kerb and channel,
	stormwater and pavement improvements.
Prior to any development accessing	Closure of the Flanagan Road / Waihoehoe Road
Flanagan Road, or at the time of	intersection to vehicles, and provision of alternative
Waihoehoe Road being urbanised	vehicle access from Flanagan Road to Waihoehoe
	<u>Road</u>

IX.6.3 Transport network performance

<u>Prior to Mill Road connecting to Waihoehoe Road and 4 Laning of Waihoehoe Road between</u> <u>Fitzgerald Road and Great South Road:</u>

- (1) <u>Any development of more than 50 dwellings or 1000 sqm of non-residential floorspace</u> must meet the following standard:
 - a. Waihoehoe Road/Great South Road intersection traffic performance:
 - *i.* <u>95th percentile queues (not average queues) for each movement at intersections do not</u>
 - a. extend to and through upstream intersections
 - b. queues shall not extend beyond dedicated storage lanes
 - ii. <u>no individual traffic movement shall have a level of service (LOS) worse than</u> <u>LOS E, or have a degree of saturation higher than 95%</u>

- iii. movements where buses operate shall have a LOS no worse than LOS D
- iv. The overall intersection LOS shall be no worse than LOS D.

Note: Degree(s) of saturation is defined to be the proportion of actual traffic movements using the intersection to the theoretical maximum capacity of the intersection.

Level of Service (LOS) is defined by Auckland Transport guidance or, in its absence, by Austroads guidance.

Note: A traffic assessment shall be prepared by a suitably qualified and experienced traffic engineer or transportation planner demonstrating compliance with the above must be submitted with any resource consent application for subdivision or development and must utilise traffic data no older than 6 months at the time that a resource consent application is lodged for the development proposal.

Note: Traffic generation from parallel, lodged or consented stages that are not yet operational are to be included in the traffic assessment.

- (2) <u>Upon any new direct road connection to Quarry Road and/or Pitt Road, a traffic assessment prepared by a suitably qualified and experienced traffic engineer or transportation planner shall be provided which includes:</u>
 - a. <u>a safety review of the Great South Road / State Highway 22 Intersection, Great South Road/Pitt Road Intersection, and Great South Road/Quarry Road Intersection at that time and assessment of the predicted safety risk resulting from development traffic</u>
 - b. <u>identification of any necessary upgrade to the Great South Road / State Highway</u>
 22 Intersection, Great South Road/Pitt Road Intersection, and Great South
 Road/Quarry Road Intersection to accommodate development traffic, and timing
 of its implementation, to address any adverse effects on the safety and efficiency
 of the intersection.

5.1.2 Exemption from E27.6.1

During my Clause 23 I queried why the Precinct Provisions included an exemption from E27.6.1 Trip Generation. The applicant responded that Standard E27.6.1(2)(b) and (d) mean that development in the precinct would not need to comply with E27.6.1(1), as an ITA has been prepared to inform the plan change and the specific transport provisions that it includes. In the applicant's view, the exemption from E27.6.1 should be viewed as a clarification rather than a substantive issue for PPC48.

I consider that E27.6.1(2) is clear and does not require clarification within the Precinct provisions. Additionally, I consider that repeating standards across different Chapters within the AUP(OP) creates the opportunity for confusion or contradiction. I recommend that IX.6(2)(b) be deleted from the Precinct provisions.

5.1.3 Road cross section details

IX.11 Appendices: Appendix 1 specifies detailed layouts for different proposed road types within the Precinct. These cross sections were developed prior to the release of Auckland Transport's *Transport Design Manual Section 2: Detailed Technical Requirements*, and therefore may not be consistent with

current standards. This highlights the risk of including detailed road cross sections within the Precinct provisions.

Further, I am concerned that having rigid cross sections in the Precinct will not allow street design to respond to differing land uses. For example, a local street is likely to have quite a different form, function, and width in a Metropolitan zone vs. a Mixed Use zone vs. a Mixed Housing Urban zone.

I consider that greater flexibility in cross sectional specifications is required to enable street form and function to appropriately respond to future land uses, and for the Precinct to maintain adaptability to future street design standards. I therefore recommend that IX.11 Appendices: Appendix 1 is removed, and IX8.2(1)(c) is updated as follows

Design of roads

c. Whether the design of collector and local roads are generally in accordance with-the road cross sections provided in IX.11 Drury Centre: Appendix 1 Auckland Transport standards and guidelines;

5.1.4 Minor amendments

I recommend the following minor amendments

 Drury Centre Precinct Plan 2: Waihoehoe Road is identified as an "Existing arterial road" however it is not identified as such in the Auckland Unitary Plan. I recommend the legend be revised to be "Arterial roads (existing & upgrades)" as proposed in Drury East Precinct Plan 1 – Road Network

6 MY REVIEW OF SUBMISSIONS

6.1 Primary submissions

Fourteen submissions related to transport matters were received

- ◆ Submitter 2 Doug Signal
- ◆ Submitter 5 Wendy Hannah
- Submitter 9 Brookfield Road Ltd
- ◆ Submitter 15 Kiwi Properties
- Submitter 19 Lomai Properties Ltd
- Submitter 22 Auckland Council
- Submitter 23 Waka Kotahi New Zealand Transport Agency
- Submitter 24 KiwiRail
- ◆ Submitter 27 Auckland Transport
- Submitter 28 Counties Power
- Submitter 29 Ministry of Education
- Submitter 30 Leith McFadden
- Submitter 32 Drury South Limited
- Submitter 33 Kāinga Ora

Details of the submissions and my comments are provided in Appendix A.

Key themes from submissions regarding transport matters include

- Proposed internal transport network structure including direct access to Drury Interchange, road alignments, intersection locations, cross section details, and provision for active transport and public transport users
- Identification, timing, and responsibility for funding and delivery of enabling/supporting transport infrastructure, and the monitoring of proposed thresholds included in the notified Provisions
- Assumed location of the Drury Central Train Station
- Revisions to Precinct Provisions. I expect that there will be iterative updates to the proposed provisions as the applicant engages with submitters leading up to the hearing. I will provide comment as updated Provisions are circulated.

I generally support submitters comments and requests. However, I do not support the following submitters' comments and requests

• Kiwi Properties submission point 15.1. I consider that the further traffic modelling by the submitter, and its opinion that development within PPC48 does not rely on DTIP upgrades until 2048, are not sufficiently robust. Risk remains that development is not coordinated with the Drury Central Train Station, Mill Road, urbanisation of existing rural roads, or Auckland Transport's

corridor upgrade of Waihoehoe Road and the Waihoehoe Road/Great South Road intersection. Refer to my discussion in Section 4

- Auckland Council submission point 21.1(c). I consider that some aspects of the relief sought (relating to infrastructure thresholds) may not be feasible.
- Waka Kotahi NZTA submission point 23.19. Waka Kotahi seeks to retain the exemption from E27.6.1, however I oppose the exemption from E27.6.1 as discussed in Section 5.1.2
- Auckland Transport submission point 27.6 seeks that development not complying with IX6.2 and/or IX6.3 is a Non-complying activity, however I consider that Discretionary status should applied
- Auckland Transport submission point 27.22 seeks a new activity for long term non-accessory parking facilities within the Precinct, however I consider that the regionwide provisions are adequate
- Auckland Transport submission point 27.40 and Counties Power submission point 28.1 seek detailed road cross sections within the Precinct provisions, however I recommend that the provisions instead reference Auckland Transport Standards and Guidelines. Refer to my discussion in Section 5.1.3
- Ministry of Education submission point 29.2 seeks to retain Standard IX.6.2 as notified, however I recommend that Standard IX6.2 and IX6.3 are replaced in their entirety, as discussed in Section 5.1.1.

I consider that the following submitters' requests are best addressed by Council's Reporting Planner

- Auckland Council submission point 22.1(c) seeks infrastructure development threshold or staging rules and I am unsure whether they are appropriate
- Auckland Transport submission point 27.18 seeks that funding of transport infrastructure be included as an assessment criterion. I am unsure whether this is appropriate
- Auckland Transport submission point 27.23 seeks that funding of public transport services be included within the provisions. I am unsure whether this is appropriate

6.2 Further submissions

Six further submissions related to transport matters were received

- Further Submitter 2 Auckland Council
- Further Submitter 3 Waka Kotahi NZTA
- Further Submitter 4 Drury South Limited
- Further Submitter 5 Auckland Transport
- ◆ Further Submitter 6 Kainga Ora
- Further Submitter 9 Counties Power

No new information related to transport matters was included within the further submissions.

Some further submissions sought changes to other submitters requests for amendments to the notified precinct provisions. I expect that there will be iterative updates to the proposed provisions as the applicant engages with submitters and further submitters leading up to the hearing. I will provide comment if updated Provisions are circulated.

I note that Auckland Council and Auckland Transport further submissions both responded to additional traffic modelling, which was provided by Kiwi Property Holdings No.2 Limited in its submission (Submission 15). This information was not coded in the "Summary of decisions requested" document complied by Auckland Council's Processing Planner, however I highlight that I did consider the additional traffic modelling provided by Kiwi Property Holdings No.2 as part of Submission 15, refer to my commentary in Table 6 in Appendix A.

7 SUMMARY AND CONCLUSION

A summary of my review of submissions, and my recommendations following my review of PPC48, is as follows.

7.1 Summary of my review of submissions

Key themes from submissions regarding transport matters include

- Proposed internal transport network structure including direct access to Drury Interchange, road alignments, intersection locations, cross section details, and provision for active transport and public transport users
- Identification, timing, and responsibility for funding and delivery of enabling/supporting transport infrastructure, and the monitoring of proposed thresholds included in the notified Provisions
- Assumed location of the Drury Central Train Station
- Revisions to Precinct Provisions. I expect that there will be iterative updates to the proposed provisions as the applicant engages with submitters leading up to the hearing. I will provide further comment as updated Provisions are circulated.

I generally support submitters comments and requests. However, there are several submission points which I oppose and/or seek further advice from Council's Planner, as discussed in Section 6.

7.2 Summary of my review of PPC48

In my view, PPC48 as notified does not adequately manage the likely and potential effects on the transport network

- While the masterplan for PPC48 is generally consistent with RPS Objectives B2.2.1(1) and B3.3.1(1), I consider that the Precinct provisions give little certainty that integrated land use and transport outcomes will be achieved. Development within PPC48 if developed in accordance with the proposed provisions is unlikely to satisfactorily address safety and efficiency effects on the surrounding transport network. The provisions lack surety that the development will put in place a transport network that is focused on access to Drury Station and local bus services. The provisions lack surety that integrated staging of land use and transport investment will enable the uptake of public transport and active transport modes as part of a safe and effective transport network.
- In my view there are some significant infrastructure assumptions made by the applicant, which affect the transport investment thresholds put forward in the notified Precinct Provisions. These assumptions include
 - Third-party transport infrastructure investment and delivery assumptions, including Mill Road being constructed in some form by 2028. The recent June 2021 announcement by the Government has since deferred the Mill Road project, confirming our views that reliance on this upgrade by 2028 places considerable risk on how the transport network is predicted to operate and how provisions are then framed around this

- Designations, which the applicant relies upon, are in place
- Land within the above designations has been acquired by the designating authority
- o Vehicle trip rates and public transport mode shares assumed in the traffic modelling.
- I am concerned that transport infrastructure needed to support PPC48, such as the Waihoehoe Road upgrade and Mill Road may not be delivered in a manner that integrates with development in PPC48. The traffic modelling used to support PPC48 assumes that Mill Road (in some form) will be operational by 2028. While Mill Road is contained within ATAP 2021 2031 (an agreement between Council and Government which is a non-statutory document), there is uncertainty over the time it may take to designate the route, acquire properties, and construct the project.
- Given the uncertain development programmes of each PPC area, I am of the view that the prescriptive nature of the transport upgrade provisions in the Precinct is not appropriate due to impracticalities of administering and monitoring the thresholds proposed by the applicant. Further, I have significant concerns about the assumptions and methodology used in the traffic modelling, which the applicant has relied upon in setting these thresholds.
- ◆ To address the uncertainty in development programmes and third-party infrastructure provision (including that contained within ATAP 2021 2031), and my concerns about the traffic modelling assumptions relied upon by the applicant, I consider that Standard IX.6.2 and IX.6.3 should be replaced in their entirety. I am of the view that provisions that are performance based in this instance give the consenting authority greater flexibility in determining mitigation required following an assessment of the environment at the time of development occurring. This also provides clearer ownership as to who is responsible for delivering the mitigation. Precinct provisions are required for this, as reliance on Chapter E27 Transport of the Auckland Unitary Plan − Operative in Part (AUP(OP)) is unlikely to capture the need to assess and upgrade key intersections about the area (including intersections and rural roads).
- Based on the current provisions, I consider that there is a sizeable risk that there will be consequential adverse outcomes for economic well-being (in terms of transport network efficiency) and social well-being (including road user safety). This may result in Auckland Transport and Waka Kotahi NZTA (as road controlling authorities) being left to address substantial off-site cumulative safety and efficiency effects on the transport network beyond what would be expected from normal development or business as usual upgrades to the network, due to uncertainty around infrastructure scale, funding and timeframes. A number of third-party infrastructure improvements, including projects within ATAP 2021 - 2031, NZUP and the Drury Transport Investment Programme (DTIP), now referred to as the Drury Infrastructure Funding Framework (DIFF) are assumed in the transport assessment albeit the extent of the projects, funding and timing for delivery of some projects is not yet committed. As an example, Mill Road has been assumed in some form throughout the transport assessment, with the June 2021 announcement deferring the entire Mill Road project. Provisions that enable an assessment against the network at the time land use activities are being applied for would provide greater control on what mitigation is required given the environment at that time, which may also include greater certainty on wider infrastructure timeframes.
- It is unclear as to whether the layouts proposed by the applicant for the Great South Road/Waihoehoe Road intersection can physically fit within the area that Auckland Transport has

issued a Notice of Requirement for and allow for bus priority (as per the Auckland Transport Supporting Growth network), capture pedestrian crossings on all four approaches and provide the necessary facilities to ensure the corridor operates safely and efficiently for all transport modes. I do not support the current upgrades included in the proposed Precinct provisions at IX.6.2 and IX.6.3 associated with the Great South Road/Waihoehoe Road intersection.

- ◆ Until Mill Road connects to the development and provides a secondary connection (to the north and south), reliance on the Great South Road/Waihoehoe Road intersection and Waihoehoe Road will be much greater than that currently predicted in the transport assessment and that from which the current provisions are framed. A number of third-party infrastructure improvements, including projects within ATAP 2021 − 2031, NZUP and DTIPs, are assumed in the transport assessment albeit the extent of the projects, funding and delivery is not clearly understood. It is for this reason that the requirement to assess the mitigation required as development progresses is a better option, noting the uncertainty as to when wider area infrastructure is in place. I am therefore of the view that the timing or triggers requiring the upgrades captured in IX.6.2 and IX.6.3 are not appropriate as currently drafted as they do not consider effects and therefore upgrades necessary prior to the full Mill Road corridor being constructed and open.
- The thresholds set out in the notified Provisions for upgrading the Great South Road/Waihoehoe Road are not robust as I consider there are underlying flaws in the modelling assumptions used to set these thresholds. Further, the upgrades of this intersection as proposed in IX6.2 and IX6.3 have the potential to cause ongoing disruption to the transport network during works and will require the acquisition of third-party land and widening/replacement of the Waihoehoe Road rail overbridge, which is not identified in the Precinct Provisions. I am therefore of the view that the timing or triggers requiring the upgrades captured in IX.6.2 and IX.6.3 are not appropriate as currently drafted as they do not consider the need for third-party land, the widening/replacement of the Waihoehoe Road rail overbridge, the additional construction traffic effects due to the proposed multiple upgrades to the intersection and the uncertainty around the extent of the Mill Road project.
- In my view the notified Provisions fail to address likely safety effects on existing rural roads. I consider that existing rural roads, including Waihoehoe Road, Fitzgerald Road, and Brookfield Road should be upgraded to urban standard prior to each respective road experiencing an increase in traffic due to occupied development within PPC48. Further, the existing Flanagan Road/Waihoehoe Road intersection should be closed, and an alternative access provided, prior to any development which connects to Flanagan Road.
- In my view the Precinct provisions should include Standards relating to the early provision of the Drury Central train station, bus priority measures westbound on Waihoehoe Road, walking and cycling connectivity between development and the Drury Central train station, and a continuous collector road network to enable Auckland Transport to provide bus services as staged development occurs. Further, I recommend that funding is allocated to enable early provision of public transport services, noting that this sits outside of the Plan Change process and is not considered the responsibility of the applicant.
- I am of the view that changes are required to the Precinct Provisions in order to better assess and respond to the environment as development progresses. The assessment in my view places a lot

of weight and reliance on government led transport network upgrades being delivered and in place prior to 2028. I consider that there are risks associated with this assumption and the provisions the Precinct currently frames around their assessment which relies on this.

- I consider that the main concerns which the Precinct provisions need to address are
 - Early delivery and operation of the Drury Central train station and bus priority measures on Waihoehoe Road, (particularly westbound)
 - Early delivery of active mode infrastructure (walking and cycling) including connections to trip generators and most importantly the Drury Central train station
 - o Delivery of safety and capacity improvements (for all modes) to existing rural roads to manage the transition from a rural to urbanised environment
 - Performance and safety of the Waihoehoe Road/Great South Road intersection and the approaches to it (including the Waihoehoe Road rail overpass) for all road users (walking, cycling, public transport, and general traffic).
- It is my view that the train station should be open and operating prior to any development being occupied. I am also of the view that supporting connections are also provided for from the outset, such as
 - o the 'Key Retail Street' which provides an essential connection between the rail station and the wider site, namely Precinct B for active modes and those connecting with the rail station
 - The collector road network, being the sections that connect to the train station and any land being developed, again ensuring connectivity with the train station is available
 - And that Sub-Precinct D and the desire for Park-and-Ride should be reviewed in light of a train station shift further to the East
- The traffic modelling contains assumptions that, in my opinion, result in an underestimation of potential traffic effects. These assumptions include
 - between the lodgement with Auckland Council and subsequent notification, there has been an increase in the extent of THAB in PPC50, with Mixed Housing Urban zone being removed
 - o under estimation of vehicle trips through the Great South Road/Waihoehoe Road intersection, in the instance that Mill Road (between Waihoehoe Road and Manukau) is not in place
 - o under estimation of the number of vehicle trips generated by PPC48, due to assumed high uptake of walking, cycling and public transport, although the surety that infrastructure to support high non-car based travel will be delivered in conjunction with development is lacking in the precinct provisions
 - under estimation of effects on the Great South Road/Waihoehoe Road intersection prior to signalisation, due to the under estimation of the number of vehicle movements through the intersection and that it is modelled as a two-lane roundabout whereas the provisions do not require the existing single lane roundabout to be upgraded.

In response to the trip generation assessment, I retain my view that the prescriptive provisions in IX.6.2 and IX.6.3 should be removed in their entirety and replaced with provisions that are performance based. Further, I consider that the Provisions need greater emphasis placed on delivering infrastructure that provides improved safety and connectivity, so that the necessary transport outcomes to achieve TOD, such as mode share, are achieved.

In response to my concerns noted above, and my concerns with the practicalities of implementing proposed Standards IX6.2 and IX6.3. I recommend that

- Standard IX.6.2 and Tables IX.6.2.1 and IX.6.2.2 are replaced, in their entirety, with thresholds to support transit orientated development outcomes (high public transport and active mode share and safety interventions)
- Standard IX6.3 Trip Generation Limit and Tables IX.6.3.1 and IX.6.3.2 are replaced in their entirety with a Standard that adopts performance-based thresholds for key intersections
- Other amendments to provisions as discussed in Section 5 and in response to submissions as discussed in Appendix A

I support the intensity and mix of land-uses proposed by the applicant, as I consider that the proposed Drury Station presents a relatively unique opportunity to enable development consistent with Transit Oriented Development (TOD) principles.

However, I consider that the thresholds linked to transport infrastructure identified in the provisions lack robustness and will be unwieldy and impracticable to monitor. Further, the provisions lack sufficient evidence as to how thresholds have been determined and acknowledgement of safety effects on existing rural roads, and enablement of active modes and public transport.

Unless amendments are made to the provisions per my recommendations and commentary on submissions, I consider that PPC48 is unlikely to result in integrated land use and transport outcomes as required by the AUP(OP), and that development within PPC48 is unlikely to satisfactorily address safety and efficiency effects on the transport network.

APPENDIX A

Submission summary

Details of the submissions directly related to transport aspects, and my comments, are provided in Table 6. For clarity I have nominated subpoints in submissions where this assists my response, unless the Submitter has specifically included relief/decision request numbering in their submission.

Table 6: Submission summary (transport matters) and commentary

Submitter and sub point	Summary of submission point/relief sought	Flow comment	Status
Doug Signal: 2.1	Requests full plans for all roads and intersections that need to be upgraded to support re-zoning.	Support in part. I consider that the PPC50 application does not robustly assess the potential effects, nor fully reflect the transport infrastructure needed to mitigate transport effects. Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, and 4.12 of this report. I consider that full plans of all roads and intersections are not required as part of the Plan Change, as this can be resolved as part of subsequent subdivision/land use consents provided appropriate mechanisms are available in the Precinct provisions.	Support in part. Refer to my discussion and recommendations in Sections 4.4, 4.5, 4.7, 4.8, and 4.12
Doug Signal: 2.2	Raises concern with traffic delay and deposition of soil on roads during construction	I consider that this is a matter that can be addressed by Council's consent monitoring team, as conditions of consent to address deposition of debris on public roads is a standard inclusion in earthworks consents.	Support concern, however, this can be addressed by other processes
Wendy Hannah: 5.1	Seeks clarification on the effects on access to 228 Flanagan Road, and that a 2 lane carriageway (one lane each direction) would be maintained to allow existing access and future redevelopment.	Support, however I consider that this can be addressed via other processes. 228 Flanagan Road currently has a sealed carriageway approximately 5.5m wide within a public road corridor approximately 12m wide, adjacent to the Southern Motorway corridor. I consider that the proposed Precinct does not preclude ongoing access to Flanagan Road, and should access be affected (e.g. through road stopping or realignment of Flanagan Road to allow for "Access A") I consider that this can be considered and addressed as part of future road stopping or resource consent processes.	Support request, however, this can be addressed by other processes
Brookfield Road Ltd: 9.1	"Indicative Collector Road" identified in Figure 1 is amended in location to ensure the site at 61 Brookfield Road has a block depth of approximately 40m to the west of the indicative road. Brookfield Road Limited is willing to work with the applicant on the final location of the proposed road. The proposed road	The request would result in the movement of the Brookfield Road/Collector Road intersection some 10m or so to the east. I neither support nor oppose as the request will not have a consequential impact on the transport network	Council to consider submitters request.

Kiwi Properties:	Provides additional traffic modelling to understand whether the DTIP upgrades are necessary to support	Oppose	Oppose.
15	development in the Plan Changes areas, and therefore manage the effects of development on the effectiveness and safety of the transport network (Objective 5). Considers that the additional modelling demonstrates that development enabled by the Drury Centre, Drury East and Waihoehoe Plan Changes does not rely on the DTIP transport upgrades until 2048. L	 Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.11, and 4.12 of this report. I consider that the follow key issues are unresolved surety that Mill Road, including the connection to Manukau, will be provided in an integrated manner with development. Mill Road is critical for relieving traffic congestion on the Waihoehoe Road/Great South Road intersection surety that the Drury Central train station, electrification and connections to the train station will be provided in an integrated manner with development, to enable the TOD outcome sought by PPC48 whether the mitigations proposed by the applicant for the Waihoehoe Road/Great 	Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.11, and 4.12
		South Road intersection align with the forthcoming Notice of Requirement from Auckland Transport whether, in the short term, the Plan Change relies on DTIPs upgrades such as the urbanisation and widening of Waihoehoe Road, including the widening/replacement of the Waihoehoe Road rail overbridge, to address safety and efficiency effects traffic modelling methodology, including trips associated with the short term modelling and the extent to which public transport influences travel behaviours I consider that the Precinct should adopt performance based measures for the Waihoehoe Road/Great South Road intersection identify upgrades to existing rural roads to ensure a safe and connected transport	
		 network for all road users identify all enabling transport infrastructure, including Mill Road and the Drury Central train station 	
Lomai Properties Ltd: 19.1	Seeks confirmation that PPC48 will provide the transport infrastructure requirements to service development without affecting the staging of land release indicated in the Drury Ōpaheke Structure Plan, in particular Drury West (which includes the submitters land).	Neither support nor oppose. I can confirm that the PPC48 application has not considered the cumulative transport effects of the wider network that may result from PPC48 plus the submitters property. Council's Planner should consider whether PPC48 should assess the effect on other Future Urban Zoned land due to "out of sequence" zoning for PPC48 relative to the Drury-Ōpāheke Structure Plan, unless DTIP addresses wider transport requirements on the basis that all FUZ land within Drury is rezoned to enable development.	Council's Planner to consider submission point
	Seeks further clarification that traffic modelling is sufficient to demonstrate that the proposed trigger rules would adequately avoid, mitigate or remedy adverse traffic effects to an appropriate level.	Support, refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.11, and 4.12 of this report	Support. Refer to my discussion and recommendations in Sections 4.4, 4.5, 4.7, 4.8, 4.11, and 4.12

Auckland Council: 22.1

PC 48 does not provide for the strategic integration of transport infrastructure with land use. The provision of such infrastructure works will not be achieved at a rate with which the council (representing the community) can physically and economically cope.

Ensure that the council's concerns about infrastructure: funding deficit, timing and location uncertainty are resolved by the following or other means:

- a) Evidence is presented at the hearing that a mechanism has been identified with the agreement of the council that unfunded infrastructure (as of October 2020) will be funded.
- b) Evidence is presented at the hearing that parts of the plan change area are not constrained by infrastructure funding, timing or location uncertainty and can proceed without significant adverse effects.
- c) Infrastructure development threshold or staging rules can be devised that are enforceable and effective, and supported by robust objective and policy provisions. This could for example include:
 - Threshold rules are not used for infrastructure works to be supplied by third-party, e.g. Auckland Transport or NZTA, if these agencies do not have funds allocated for the works.
 - Threshold rules are not used for infrastructure works which are scheduled beyond the lifetime of the plan (2026).
 - Threshold rules are not used for works to be funded privately but there is no funding agreement in place.
 - Threshold rules are not used for works which would require a funding contribution from multiple landowners or developers and there is no agreement to apportion costs and benefits in place.
 - Threshold rules do not use gross floor area as a metric (the council may not be able to track this with current data systems).
 - Threshold rules are not used in circumstances where the extent and location of works have not been determined yet.
 - Use of prohibited activity status for infringement could be considered.
- d) Notices of requirement have been lodged for the relevant infrastructure by the time of the hearing.

Support in part, oppose in part

In relation to Council's submission points (a) and (b): I consider that the PPC48 application does not robustly assess the potential effects, nor fully reflect the transport infrastructure needed to mitigate transport effects. Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.11, and 4.12 of this report of this report.

In relation Council's submission point (c)

- the key pieces of infrastructure that I consider are necessary to be constructed prior to any development being occupied include rail electrification, Drury central train station, including safe, well designed connections between any land use development and the train station. This submission point does not preclude my position. Mill Road (full corridor) could be a threshold rule noting that the traffic assessment relies on Mill Road being complete. One could allow a certain level of development to progress based on the performance of the Waihoehoe/GSR intersection, but I don't anticipate this to be much without Mill Road not being in place. my preference remains that a performance based provision is the desired mechanism for managing development effects on the adjacent road network, noting that this presents risks in relation to piecemeal developments and makes large infrastructure costs needed to unlock development unequitable. Refer to my discussion in Section 4.8 of this report.
- In my view, this submission point would require all transport infrastructure
 works to be in place prior to, or shortly after, subdivision. Much of the
 infrastructure needed to support PPC48 is unlikely to be operational prior to
 2026, if aligned to a development threshold.
- The extent to which any threshold rule would be able to abide by this submission point is unlikely, noting also that resource consents for development usually have a lapse period that would extend past 2026 but be subject to infrastructure works. I do not support this submission point and will take advice from Council's Planner
- In my view, this submission point would require all transport infrastructure
 works to be in place prior to, or shortly after, subdivision. Much of the
 infrastructure needed to support PPC48 is unlikely to be operational prior to
 2026, if aligned to a development threshold. I do not support this submission
 point and will take advice from Council's Planner
- Agree as this would be ultra vires, however I consider that the current provisions of PPC48, PPC49, and PPC50 point towards each party needing to deliver the upgrades in order to release development within each plan change area
- Agree, refer to my discussion in Section 4.8 of this report
- Agree to a certain extent. I am assessing transport effects at a plan change level. I should consider the indicative "footprints" needed to confirm feasibility of upgrades. However, I consider that the detail design is not required at Plan Change, as this will not come until future resource consents and detailed design.
- Council's Planner to consider whether prohibited activity status is warranted.

Support in part
Oppose in part
Refer to my discussion and
recommendations in Sections
4.4, 4.5, 4.7, 4.8, 4.11, and
4.12

		In relation to Council's submission point (d), I support Council's comment, in particular Waihoehoe Road and Mill Road.	
Auckland Council: 22.22	 Add a policy and standards to provide for increased density near RTN stations including: a) A policy to the effect of: Ensure a built form and walkable environment that will provide for a high density of people living, working or visiting within an extended walkable radius of a rapid transit network station. b) Building height standards enabling at least the Metropolitan Centre equivalent 22-23 storey building height in all zones within a short walkable radius of the RTN train station, and 7-8 storey building height within an extended walkable radius of the proposed RTN station; 	Support as this supports greater use of public transport and active transport modes. I note that the NPS-UD encourages this also.	Support I will provide comment on any revised provisions following the Applicant's response to submissions
Auckland Council: 22.26	It is more appropriate for the location of the railway station to be determined through the up-coming notice of requirement process. Delete the indicative railway station shown on the precinct plan and make any other consequential changes to the precinct provisions.	Neither support nor oppose. I consider that the exact location of the Drury Central train station does not need to be confirmed as part of PPC48, and that both land development and planning of the supporting transport network can be expected to inform each other as both aspects progress. Refer to my discussion in Section 4.10 of this report.	Council's Planner to consider submission point
Auckland Council: 22.28	Review the need for IX.6.5 if a notice of requirement has been lodged for the upgrade of Waihoehoe Road.	Support	Support
Waka Kotahi NZTA: 23.1	Waka Kotahi seeks to ensure that transport effects across the land transport system are appropriately managed and that sufficient infrastructure is provided to service the proposed development. At present, future local level transport networks (i.e. those provided and/or operated by Auckland Transport) for the Drury area are not identified in the Regional Land Transport Plan. The delivery of such infrastructure needs to be aligned with the release of land for development in order to manage adverse effects on the transport network. Seeks information and suitable provisions to resolve the transport infrastructure issue.	Support. I consider that the PPC50 application does not robustly assess the potential effects, nor fully reflect the transport infrastructure needed to mitigate transport effects. Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.10, 4.11, and 4.12 of this report.	Support. Refer to my discussion and recommendations in Sections 4.4, 4.5, 4.7, 4.8, 4.10, 4.11, and 4.12
Waka Kotahi NZTA: 23.2	The terms active transport and public transport are utilised within the National Policy Statement Urban Development 2020 (NPSUD). It is requested that references referring to pedestrians and cyclists is replaced with active transport to ensure consistency and clarity. For clarity, where the individual term pedestrian or cyclist is used, these should remain.	Support	Support I will provide comment on any revised provisions following the Applicant's response to submissions
Waka Kotahi NZTA: 23.3	Waka Kotahi understands that the location of the 'future train station' on Precinct Plan 2 does not align with the preferred location of the station (acknowledging that a notice of requirement for this station has yet to be lodged). Ensure the plan change reflects the final location of the train station and achieves Objective 1 by providing a transit-orientated development that supports high density residential, employment-generating and retail activities close to rapid transit and prioritises public and active modes of transport to and within the centre.	Neither support nor oppose. I consider that the exact location of the Drury Central train station does not need to be confirmed as part of PPC48, and that both land development and planning of the supporting transport network can be expected to inform each other as both aspects progress. Refer to my discussion in Section 4.10 of this report.	Council's Planner to consider submission point

5

Waka Kotahi NZTA: 23.6

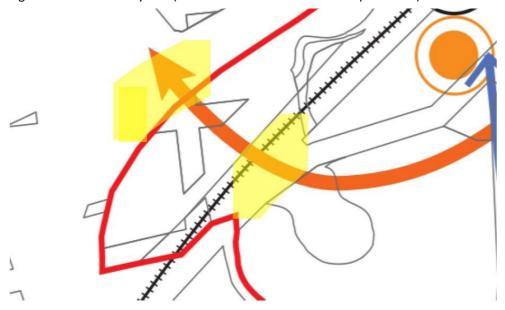
Access A and the associated east-west collector which would cut through the town centre is not supported in its current alignment.

Delete 'Access A' from Precinct Plan 3.

On Precinct Plan 2, replace 'Access A' between the two yellow lines with a dashed orange line.

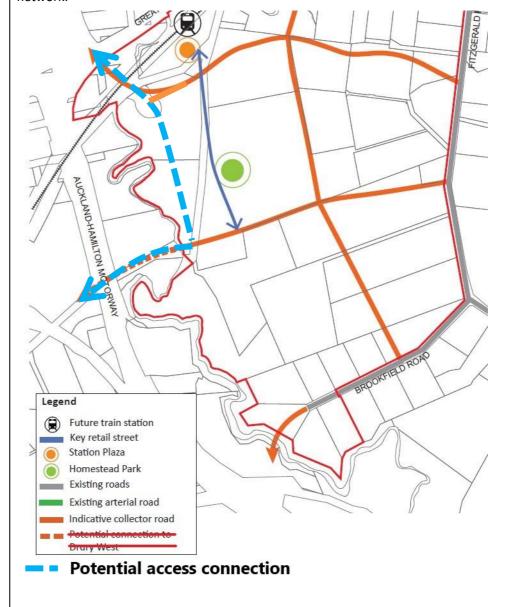
Update Precinct Plan 2 Legend to say "Potential connection to Drury West and possible Access A to State Highway 1."

Re-orientate the collector road which is currently shown to extend from Access A from an eastern alignment to a southerly one (i.e. so that it turns south to sub-precinct B).



I support Waka Kotahi's intent with this submission point. However, I consider the request to amend "Access A" on Precinct Plan 2 with a dashed orange line and be identified as a "Potential connection..." would be better marked as a different dashed colour (along with the potential connection to Drury West) and relabelled as "Potential Access Connection..", as shown in dashed blue below with a minor reorientation of the connection to the east/west collector.

The main purpose of this is to differentiate the roles of the internal roads, with the collector roads providing a focus on active transport and public transport, and the Potential Access connections focusing on connectivity with the external transport network.



Support in part

Waka Kotahi NZTA: 23.8, 23.14, 23.19 Seeks amendments to Objectives and Policies to align with Transit Oriented Development principles

Support requested amendments to IX.2 Objective 1, Policy (4), Policy (17)

Support

I will provide comment on any revised provisions following the Applicant's response to submissions

Waka Kotahi NZTA: 23.21	 Opposes (A5), (A6), (A8), (A9) a) Monitoring the thresholds would be extremely difficult and it would be onerous to keep up to date and convey when and what threshold had been reached. b) The thresholds are standard across PPC 48, 49 and 50, which adds further confusion determining when these thresholds are reached (or close to being reached). c) The thresholds centre on general vehicle performance, and deficient of public transport or active mode performance criteria. Alternative mode uptake is considered necessary to achieve the overarching trip generation as identified in the ITA d) The threshold criteria assume, the safety upgrades to be undertaken before any new dwellings, retail or commercial development, at the Waihoehoe/Great South Road intersection, will be adequate until to cater for significant development (for example, 62,430m2 of retail GFA). 	Support. I consider that the PPC50 application does not robustly assess the potential effects. I consider that the transport upgrades set out in IX6.2 and IX6.3 are too prescriptive when considering the uncertainties highlighted with the transport assessment. Refer to Sections 4.4, 4.5, 4.7, 4.8, 4.10, 4.11, and 4.12 of this report.	Support. Refer to Sections 4.2, 4.3, 4.4, 4.5, 4.7, 4.8, and 4.9
Waka Kotahi NZTA: 23.24	The provision recognises E27.6.1(2)(d) which provides an 'exemption' from further assessment where there are requirements to consider transport, traffic or trip-generation effects within zone or precinct rules. The provision is supported on basis that transport, traffic or trip-generation provisions are retained in the precinct and that no permitted activities are enabled. Retain as notified on basis that transport, traffic or trip-generation provisions are retained in the precinct and that no permitted activities are enabled.	Oppose the retention of IX.6(2)(b). Refer to my discussion in Section 5.1.2 of this report. Further, I oppose it on the basis that I consider that the PPC49 application does not robustly assess the potential effects, on which the current provisions are based. Further, as currently notified, I consider that development that complies with IX6.2 and IX6.3 would be a Permitted activity. In noting the above, I do not agree to the notified transport provisions. I expect, once the transport provisions are agreed, degree of Permitted Activities will be enabled.	Oppose
Waka Kotahi NZTA: 23.27	The design and directional flow of Access A is currently uncertain therefore it is difficult to make assumptions as to its effects as identified in Table IX6.2.2. Delete provision and consequential deletion of Table IX6.2.2.	Support deletion of Table IX6.2.2. Noting my recommendation to replace Standards IX6.2 and IX6.3. Refer to Section 4.5, 4.8, 4.11, and 4.12 of this report.	Support in part. I recommend Council's Planner adopt my proposed
Waka Kotahi NZTA: 23.28	IX.6.2.1 Table for Development with 'Access A' not constructed The transport upgrades described in the right-hand column (Transport Upgrades Required to Exceed the Dwelling, Retail/Commercial GFA Thresholds) of the Table require more specificity to ensure that the proposed outcomes are clear for future plan uses and able to be delivered. Retain with amendment: Provide more specificity as to the details of works required in the right hand column by including upgrade details listed in Table 8.1*, column headed Revised (2020) Modelling — Infrastructure Upgrades Required. * Integrated Transport Assessment Drury Metropolitan Centre Prepared For Kiwi Property Group, March 2020, Stantec	Support in part. In my view the transport effects should be considered at a plan change level, including the indicative "footprints" needed to confirm feasibility of upgrades. However, I consider that the detail design (such as that requested by NZTA) is not required at Plan Change, as this will not come until future resource consents and detailed design. I consider that the level of detail requested by the submitter is not warranted within a plan change of this scale. I consider that the transport upgrades set out in IX6.2 and IX6.3 are too prescriptive when considering the uncertainties highlighted with the transport assessment. While I	replacement of Standards IX6.2 and IX6.3 or a hybrid to address Auckland Transport and Waka Kotahi submissions
Waka Kotahi NZTA: 23.29	IX.6.2.2 Table for Development with 'Access A' constructed The transport upgrades described in the right hand column (Transport Upgrades Required to Exceed the Dwelling, Retail/Commercial GFA Thresholds) of the Table require more specificity to ensure that the proposed outcomes are clear for future plan uses and able to be delivered. Retain with amendment: Provide more specificity as to the details of works required by including upgrade details listed in Table 8.1, column headed Revised (2020) Modelling – Infrastructure Upgrades Required.	support Waka Kotahi's request for greater clarity for Table IX6.2.1 and IX6.2.2, I recommend revised triggers for transport infrastructure rather than amendments to IX6.2 and IX6.3. Refer to Sections 4.8 and 5.1.1 this report.	

Waka Kotahi	Doloto IV 6.2 Trin Congration Limit including Tables IV 6.2.1 and IV 6.2.2	Support in part.	Support in part
NZTA: 23.30	Delete IX.6.3 Trip Generation Limit including Tables IX.6.3.1 and IX.6.3.2.		Support in part.
NZTA. 23.30	Replace with provisions which provide for operational requirements and more specific transport network responses. Potential wording could include a new permitted activity standard with non-compliance being	I support Waka Kotahi's request to include performance based triggers. My proposed Standard IX.6.x Transport network performance (refer to Sections 4.8 and 5.1.1 this	I recommend Council's Planner adopt my proposed
	a restricted discretionary activity (consequential changes to Activity Table IX.4 would be required).	report) is consistent with the first bullet of Waka Kotahi's proposed provision. my	replacement of Standards
	Restricted discretionary activity assessment criteria/matters of discretion could include transport	provision also incorporates aspects of active and public transport. However, my	IX6.2 and IX6.3 or a hybrid to
	network improvements.	provisions do not reflect a situation where the intersection is already operating at LOS F,	address Auckland Transport
	An alternative compliance pathway would be for an applicant to propose and undertake transport	which I consider has merit.	and Waka Kotahi submissions
	network improvements to maintain LOS E i.e. comply (noting that all development requires consent so	I consider that I can work with Waka Kotahi to better align the two proposed provisions.	
	compliance could be considered as part of this process).		
	IX.6.3 Transport Infrastructure		
	<u>Development and subdivision to comply with the following:</u>		
	a) Great South Road/ Waihoehoe Road Intersection Operation:		
	Where the baseline intersection operation is at Level of Service E (LOS E) or better at the		
	time of application, no subdivision or development shall generate traffic movements		
	which result in:		
	i. a Level of Service of less than LOS E; or		
	ii. have a degree of saturation higher than 95%.		
	Where the baseline intersection operation is at Level of Service F (LOS F) at the time of		
	application, no subdivision or development shall generate traffic movements which		
	results in:		
	i. degrees of saturation of more than the base line scenario, or		
	ii. delays of more than 10% greater than the baseline scenario.		
	Other relief would include additional provisions which outline transport upgrades to be considered (as		
	listed in Table 8.1). Waka Kotahi would like to work with the applicant on this proposal.		
Waka Kotahi	IX.6.3.1 Table for Development with 'Access A' not constructed and IX.6.3.2 Table for Development with	Support in part.	Support in part.
NZTA: 23.31	'Access A' is constructed	In my view the transport effects should be considered at a plan change level, including	I recommend Council's
	If the relief in point 25 is not accepted; for both Tables, the transport upgrades described in the right-	the indicative "footprints" needed to confirm feasibility of upgrades. However, I	Planner adopt my proposed
	hand column (Transport Upgrades Required to Exceed the Trip Generation Thresholds) require more	consider that the detail design (such as that requested by NZTA) is not required at Plan	replacement of Standards
	specificity to ensure that the proposed outcomes are clear for future plan uses and able to be delivered.	Change, as this will not come until future resource consents and detailed design. I	IX6.2 and IX6.3 or a hybrid to
	Retain with amendment if submission point 25 not accepted:	consider that the level of detail requested by the submitter is not warranted within a	address Auckland Transport and Waka Kotahi submissions
	Provide more specificity as to the details of works required in the right hand columns of both Tables by	plan change of this scale.	and waka kolam submissions
	including upgrade details listed in Table 8.1, column headed Revised (2020) Modelling – Infrastructure	I consider that the transport upgrades set out in IX6.2 and IX6.3 are too prescriptive	
	Upgrades Required.	when considering the uncertainties highlighted with the transport assessment. While I support Waka Kotahi's request for greater clarity for Table IX6.2.1 and IX6.2.2, I	
		recommend revised triggers for transport infrastructure rather than amendments to	
		IX6.2 and IX6.3. Refer to Sections 4.8 and 5.1.1 this report.	
			1

Waka Kotahi NZTA: 23.33, 34, 35, 36	Seeks amendments to provisions to recognise engagement with the road controlling authority	Support, however Council's Planner to consider whether this is within scope	Support, however Council's Planner to consider whether this is within scope
KiwiRail: 24.11 and 12	The location and/or design of the train station should be determined by the designation process to be undertaken by KiwiRail. The 'train station' and 'Station Plaza' locations do not recognise that the preferred location of the station is further to the north. In addition, the land proposed by the applicant to be included within Sub-Precinct D is third-party land (outside the ownership of the applicants). Accordingly, it is not certain what could be developed within this area and it may be that this land does not form part of the Plan Change area. Move the 'future train station' and 'Station Plaza' symbols to the preferred location further north. In addition, annotate Precinct Plan 2 to make it clear that the 'future train station' and 'Station Plaza' are shown as indicative only. For ease of readership it would be preferable to have two legends, one for indicative features and one for confirmed features on Precinct Plan 2. Remove the land within Sub-Precinct D from the Plan Change area.	Neither support nor oppose. I consider that the exact location of the Drury Central train station does not need to be confirmed as part of PPC48, and that both land development and planning of the supporting transport network can be expected to inform each other as both aspects progress. Rather than defining sub-precinct D as accommodating the railway station and associated plaza, provision for this infrastructure could be included in an extended sub-precinct A, enabling greater flexibility for its location to be determined. Refer to my discussion in Section 4.10 of this report.	Neither support nor oppose. Council's Planner to consider submission point
Auckland Transport: 27.1	Concerns with the lack of infrastructure funding to support 'out of sequence' development	Support in part. I consider that the PPC50 application does not robustly assess the potential effects, nor	Support in part. I recommend Council's
Auckland Transport: 27.2	Development triggers/provision of transport upgrades and mitigation. Auckland Transport believes that pure reliance on development triggers to stage transport infrastructure provision in the absence of a development staging plan will result in piecemeal and uncoordinated development and will not achieve the transit-oriented development outcome this plan change seeks to achieve. Auckland Transport's primary position at this time is that PPC 48 should be declined unless the transport infrastructure funding and provision concerns identified in the main body of this submission and in this table, including its concerns about reliance on development triggers to stage transport infrastructure provision, are appropriately addressed and resolved. In the alternative: (a) Amend the plan change to include alternative mechanisms/provisions (including alternative objectives, policies, rules, methods or maps) to address Auckland Transport's concerns; and/or (b) Include amendments to relevant plan change provisions as required by Auckland Transport and outlined in its submission.	fully reflect the transport infrastructure needed to mitigate transport effects. Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.10, 4.11, and 4.12 of this report. However, I consider that revised provisions can enable development to occur in an integrated manner. Refer to my discussion in Section 5 of this report. I consider that my proposed Standard IX.6.2 Staging of Development with Transport Upgrades and IX.6.x Transport network performance (refer to Section 4.5 and 5.1.1 of my report) provides the security that transport infrastructure to support staged development is not "piecemeal" as well as providing flexibility for the land owner to undertake development in an efficient manner.	Planner adopt my proposed replacement of Standards IX6.2 and IX6.3 or a hybrid to address Auckland Transport and Waka Kotahi submissions
Auckland Transport: 27.3	IX.1 Precinct Description. Amend the Precinct Description as follows: The transport network in the wider Drury East area as defined on Precinct Plan 3 will be progressively upgraded over time to support development in the wider area. The precinct includes provisions to ensure that any subdivision and the development of land for business and housing is coordinated with the funding and construction of the transport network upgrades in order to avoid, remedy and mitigate adverse effects on the local and wider transport network necessary to support it.	Support in part. I query whether the funding needs to be incorporated within the description, as the description speaks to the construction of the transport network upgrades. I suggest funding is removed, being replaced by commitment. I will provide comment on any revised provisions following the Applicant's response to submissions.	Support in part. I will provide comment on any revised provisions following the Applicant's response to submissions

Auckland Transport: 27.4 and 27.5	IX.2 Objectives (5) and (6). Amend Objectives IX.2 (5) and (6) as follows: (5) Access to the precinct occurs in an effective, efficient and safe manner that manages effects on State Highway 1 and the effectiveness and safety of the surrounding road network. A transport network that facilitates the safe and efficient movement of people, goods and services and manages effects on the safe and efficient operation of the surrounding and wider transport network. (6) Development is supported by appropriate infrastructure. Subdivision and development are supported by the timely and coordinated provision of robust and sustainable transport, stormwater, water, wastewater, energy and communications infrastructure networks.	Support. I support the revised wording. It places greater emphasis on the transport network as a whole, including sustainable transport, rather than focussing on the state highway network. I will provide comment on any revised provisions following the Applicant's response to submissions.	Support. I will provide comment on any revised provisions following the Applicant's response to submissions
Auckland Transport: 27.6 and 27.7	IX.3 Policy (15) Amend Policy IX.3 (15) and add a new policy as follows: (15) Ensure that the timing of <u>subdivision and</u> development in <u>the wider</u> Drury Centre Precinct <u>area as defined on Precinct Plan 3</u> is coordinated with the <u>funding and delivery of</u> transport infrastructure upgrades necessary to <u>avoid, remedy and</u> mitigate the adverse effects of <u>urbanisation</u> <u>development</u> on the <u>safe and efficient operation</u> <u>effectiveness and safety</u> of the <u>immediately</u> surrounding and wider transport network. (x) Avoid any subdivision and development in the wider Drury area as defined on Precinct Plan 3 until the required transport infrastructure is in place.	Support in part. Similar to my response to Auckland Transport 27.3 above, I recommend the use of 'commitment' instead of "funded". In the RLTP, a project may be funded, but until it is committed, the timing of the project is not certain. I will provide comment on any revised provisions following the Applicant's response to submissions.	Support in part. I will provide comment on any revised provisions following the Applicant's response to submissions
Auckland Transport: 27.8	IX.4.1 Activity table All Sub-Precincts Amend Rules IX.4.1 (A5), (A6), (A8) and (A9) to introduce more onerous activity status for any development and/or subdivision not complying with Standards IX6.2 Staging of Development and IX6.3 Trip Generation Limit (such as non-complying activity status). In the alternative, amend Rules IX.4.1 (A5) and (A6) as follows: (A5) Development and/or subdivision that does not comply with Standard IX6.2 Staging of Development with Transport Upgrades but complies with Standard IX6.3 Trip Generation Limit as confirmed in the Transport Assessment submitted with application for consent. (A6) Development and/or subdivision that does not comply with Standard IX6.2 Staging of Development with Transport Upgrades and or Standard IX6.3 Trip Generation Limit as confirmed in the Transport Assessment submitted with application for consent. As a consequential amendment, delete Rules IX.4.1 (A8) and (A9).	Oppose I am of the view that a Non-Complying activity status for not meeting Standard IX6.2 or IX6.3 is a high order. I am of the view that some discretion is required to establish the extent to which the application breaches the standards, as the breach may be very minor in scale. However, note that my recommendation is to replace IX6.2 and IX6.3 in their entirety, as discussed in Section 5.1.1 of this report. There has been some challenge on the provisions as notified, as discussed in my report, as well as by submitters. As such, I will provide comment on any revised provisions following the Applicant's response to submissions.	Oppose I will provide comment on any revised provisions following the Applicant's response to submissions
Auckland Transport: 27.9	IX.5 Notification Amend the IX.5 Notification rules (1) to (3) which require non-notification to require the normal tests for notification under the relevant sections of the RMA.	Submission does not relate to transport matters, Council's Planner to consider this submission point.	Council's Planner to consider this submission point
Auckland Transport: 27.10	Delete Standard IX.6 (2)(b) as follows: (2) The following zone standards do not apply to activities listed in Activity Table IX.4.1 above: (a) H9.6.1 Building Height (b) E27.6.1 Trip generation	Support. Refer to Section 5.1.2 of this report.	Support. Refer to my discussion and recommendations in Section 5.1.2

Auckland Transport: 27.11

IX.6.2 Standard

Amend Standards IX.6.2 (1) and (2) and delete Standard IX.6.2 (3) and the note as follows:

IX.6.2 Staging of Development with Transport Upgrades

- (1) Development <u>and subdivision</u> within the area shown on IX.10.3 Precinct Plan 3 must not exceed the thresholds in Table IX.6.2.1 and Table IX6.2.2 until such time that the identified infrastructure upgrades are constructed and are operational.
- (2) For the purpose of this rule 'dwelling' and 'retail/commercial floorspace' means buildings for those activities that have are subject to a valid land use and/or building consent or subdivision that is subject to a subdivision consent that has a 224c certificate for vacant lots less than 1200m².
- (3) Table IX.6.2.1 sets out the development thresholds if 'Access A' is not constructed to provide direct access to the Drury Centre from State Highway 1, as shown on IX.10.3 Drury Centre: Precinct Plan 3. Table IX.6.2.2 sets out the development thresholds if 'Access A' is constructed to provide direct access to the Drury Centre from State Highway 1 as shown on IX.10.3 Drury Centre: Precinct Plan 3.

Note: Transport infrastructure projects for Drury included in the New Zealand Upgrade Programme 2020 – Transport prepared by the New Zealand Transport

Support.

I have no immediate concern with the suggested changes. I will provide comment on any revised provisions following the Applicant's response to submissions.

Support.

I will provide comment on any revised provisions following the Applicant's response to submissions

Auckland Transport: 27.12

Amend Table IX.6.2.1, including to specify additional transport infrastructure upgrades and network improvements required to be completed (NB: the upgrades/network improvements required for PPC 48 is a matter of ongoing discussion and review – the upgrades/network improvements specified below are those which Auckland Transport has identified to date as needing to be completed, as a minimum, noting also that triggers may change as a result of negotiations with developers and/or additional assessment).

Table IX.6.2.1 sets out the transport upgrades required to enable specified development thresholds to be exceeded (i.e. the number of dwellings and gross floor areas of retail and commercial development), each applying to successively higher development yields. It appears that Table IX.6.2.1 was formulated based on the applicant's modelling outcomes, and Table 8-2 of the applicant's Integrated Transport Assessment and Attachment 3 of the Request for Information Response: Transport. It is concluded in the applicant's Integrated Transport Assessment that the developments are unlikely to have a significant adverse effect on the traffic network, provided that the transport infrastructure required to support the developments is implemented.

However, Table IX.6.2.1 as currently drafted is of concern to Auckland Transport for the following reasons:

- It is unclear as to how the proposed development thresholds (by way of number of dwellings and gross floor areas) will be able to capture subdivision. As discussed above, it is Auckland Transport's view that all subdivision (including vacant lots) and any development of land which precedes a subdivision (e.g. earthworks) will generate construction traffic which can in turn affect both the network capacity and road conditions (e.g. provision of a safe pavement condition). Therefore, the transport upgrade requirements should apply to subdivision
- As proposed by the applicant under Table IX.6.2.1, no transport upgrade except for interim
 safety upgrades (i.e. safe crossing facilities for pedestrians and cyclists) to the Waihoehoe/Great
 South Road intersection is required until 3,406 dwellings, 62,430m2 of retail GFA or 34,800m2 of
 commercial GFA are developed. This is different to Table 8-2 of the applicant's Integrated
 Transport Assessment and Attachment 3 of the Request for Information Response: Transport
 which includes additional transport upgrade requirements at lower development threshold
 levels.
- There is lack of mitigation proposed to address construction traffic effects on both the capacity and condition of roads. The pavement condition of both Fitzgerald Road and Waihoehoe Road will require pavement rehabilitation upgrade from the outset in order to safely and effectively accommodate the increased construction related traffic from the development to be enabled through this plan change. Any pavement upgrade should take into account the future requirements of the road and other underground/above ground service renewals. The existing roundabouts at the Waihoehoe Road/Great South Road and Waihoehoe Road/Fitzgerald Road intersections will also require upgrades to support increased traffic volumes and construction related movements. The requirements in relation to Drury Boulevard and closure of Flanagan Road are discussed in detail below.
- The wider network improvements required to enable each threshold level were not included in Table IX.6.2.1. While the funding and/or programme of a number of these wider works have already been planned, the plan change proposals including the Drury Centre, Drury East, Waihoehoe and Drury 2 Precincts are effectively bringing forward the need for a proportion of the proposed works. To give certainty as to when and what transport upgrades are required to mitigate the associated traffic effects, NZUP projects and other wider network improvements should be included in Table IX6.2.1. This aligns with Table 8-2 of the applicant's Integrated Transport Assessment.

Support in part.

With regard to bullets 1 and 3, the subject of construction traffic impacts on the network in my view is best dealt with through subsequent resource consent applications, whether this applies to subdivision or land use activity resource consents. I do not see these points being relevant in the context of a plan change.

I support bullet 2 regarding the timing of transport upgrades to the Great South Road/Waihoehoe Road intersection. I consider that the PPC48 application does not robustly assess the potential effects, nor fully reflect the transport infrastructure needed to mitigate transport effects. Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.10, 4.11, and 4.12 of this report.

Bullet 4 speaks to including NZUP projects and other wider network improvements within the provisions. I appreciate the risk associated with the transport assessment, in that it relies on NZUP infrastructure to manage and mitigate effects, yet there is no certainty as to when this infrastructure will be operational.

To avoid ultra vires infrastructure triggers, I consider that the provisions need to be redrafted such that the performance of the network and therefore mitigation required is assessed and addressed at each development stage. Refer to my discussion in Sections 4.8 and 5.1.1 of this report.

Support in part.

I recommend Council's
Planner adopt my proposed
replacement of Standards
IX6.2 and IX6.3 or a hybrid to
address Auckland Transport
and Waka Kotahi submissions.
I am of the view that
construction matters are best
dealt with at Resource
Consent.

	Auckland Transport therefore considers that the proposal (i.e. the amended provisions and the resulting anticipated development enabled by these amendments) will have the potential to result in significant adverse effects on the local and wider transport network, unless the above issues are appropriately addressed		
Auckland Transport: 27.13	Delete Table IX.6.2.2 as a consequential amendment from AT's submission point on Access A.	Support deletion of Table IX6.2.2. Noting my recommendation to replace Standards IX6.2 and IX6.3. This point is consistent with Waka Kotahi 23.22. Refer to Sections 4.8 and 5.1.1 of this report.	Support in part. I recommend Council's Planner adopt my proposed
Auckland Transport: 27.14	Amend Standards IX.6.3 (1), delete Standard IX.6.3 (2) and the note, and add a new clause as follows: IX.6.3 Trip Generation Limit (1) Development and subdivision within the Drury area shown on IX.10.3 Precinct Plan 3 must not exceed the thresholds in Table IX.6.3.1 and Table IX.6.3.2 until such time that the identified infrastructure upgrades are constructed and are operational. (2) Table IX.6.3.1 sets out the development thresholds if 'Access A' is not constructed to provide direct access to the Drury Centre from State Highway 1, as shown on IX.10.3 Drury Centre: Precinct Plan 3. Table IX.6.3.2 sets out the development thresholds if 'Access A' is constructed to provide direct access to the Drury Centre from State Highway 1 as shown on IX.10.3 Drury Centre: Precinct Plan 3. Note: Transport infrastructure projects for Drury included in the New Zealand Upgrade Programme 2020—Transport prepared by the New Zealand Transport Agency are not included in the development thresholds below (x) A Transport Assessment corresponding to the scale and significance of the proposed activity prepared by a suitably qualified expert must be provided in order to confirm compliance with this standard.	Consequential changes are required to Standards IX.6.3(1) and Standard IX.6.3(2) to address matters raised in submissions, in particular those of Waka Kotahi, as well as my views. I consider that the transport upgrades set out in IX6.2 and IX6.3 are too prescriptive when considering the uncertainties highlighted with the transport assessment. Refer to Sections 4.8 and 5.1.1 of this report. I will provide comment on any revised provisions following the Applicant's response to submissions.	replacement of Standards IX6.2 and IX6.3 or a hybrid to address Auckland Transport and Waka Kotahi submissions

Auckland Transport: 27.15

Amend Table IX.6.3.1, including to specify additional transport infrastructure upgrades and network improvements required to be completed (NB: the upgrades/network improvements required for PPC 48 is a matter of ongoing discussion and review – the upgrades/network improvements specified below are those which Auckland Transport has identified to date as needing to be completed, as a minimum, noting also that triggers may change as a result of negotiations with developers and/or additional assessment Table IX.6.2.1 sets out the transport upgrades required to enable specified development thresholds to be exceeded (i.e. the number of dwellings and gross floor areas of retail and commercial development), each applying to successively higher development yields. It appears that Table IX.6.2.1 was formulated based on the applicant's modelling outcomes, and Table 8-2 of the applicant's Integrated Transport Assessment and Attachment 3 of the Request for Information Response: Transport. It is concluded in the applicant's Integrated Transport Assessment that the developments are unlikely to have a significant adverse effect on the traffic network, provided that the transport infrastructure required to support the developments is implemented.

However, Table IX.6.2.1 as currently drafted is of concern to Auckland Transport for the following reasons:

- It is unclear as to how the proposed development thresholds (by way of number of dwellings and gross floor areas) will be able to capture subdivision. As discussed above, it is Auckland Transport's view that all subdivision (including vacant lots) and any development of land which precedes a subdivision (e.g. earthworks) will generate construction traffic which can in turn affect both the network capacity and road conditions (e.g. provision of a safe pavement condition). Therefore, the transport upgrade requirements should apply to subdivision
- As proposed by the applicant under Table IX.6.2.1, no transport upgrade except for interim
 safety upgrades (i.e. safe crossing facilities for pedestrians and cyclists) to the Waihoehoe/Great
 South Road intersection is required until 3,406 dwellings, 62,430m2 of retail GFA or 34,800m2 of
 commercial GFA are developed. This is different to Table 8-2 of the applicant's Integrated
 Transport Assessment and Attachment 3 of the Request for Information Response: Transport
 which includes additional transport upgrade requirements at lower development threshold
 levels.
- There is lack of mitigation proposed to address construction traffic effects on both the capacity and condition of roads. The pavement condition of both Fitzgerald Road and Waihoehoe Road will require pavement rehabilitation upgrade from the outset in order to safely and effectively accommodate the increased construction related traffic from the development to be enabled through this plan change. Any pavement upgrade should take into account the future requirements of the road and other underground/above ground service renewals. The existing roundabouts at the Waihoehoe Road/Great South Road and Waihoehoe Road/Fitzgerald Road intersections will also require upgrades to support increased traffic volumes and construction related movements. The requirements in relation to Drury Boulevard and closure of Flanagan Road are discussed in detail below.
- The wider network improvements required to enable each threshold level were not included in Table IX.6.2.1. While the funding and/or programme of a number of these wider works have already been planned, the plan change proposals including the Drury Centre, Drury East, Waihoehoe and Drury 2 Precincts are effectively bringing forward the need for a proportion of the proposed works. To give certainty as to when and what transport upgrades are required to mitigate the associated traffic effects, NZUP projects and other wider network improvements should be included in Table IX6.2.1. This aligns with Table 8-2 of the applicant's Integrated Transport Assessment.

Refer to my response to Auckland Transport: 27.12 above. The same response applies. Refer to my response to Auckland Transport: 27.12

Auckland	Auckland Transport therefore considers that the proposal (i.e. the amended provisions and the resulting anticipated development enabled by these amendments) will have the potential to result in significant adverse effects on the local and wider transport network, unless the above issues are appropriately addressed Delete Table IX.6.3.2 as a consequential amendment from AT's submission point on Access A.	Support.	Support in part.
Transport: 27.16	Defecte Table 17.0.3.2 as a consequential amenament from A1 3 submission point on Access A.	I note that the outcome sought is similar to Waka Kotahi's submission outcomes, as detailed in Waka Kotahi: 23.27, noting my recommendation to replace Standards IX6.2 and IX6.3.	I recommend Council's Planner adopt my proposed replacement of Standard IX6.3 or a hybrid of the two provisions.
Auckland Transport: 27.17	Amend IX.8.1 (5) as follows: (5) Development and/or subdivision that does not comply with Standard IX.6.2 Staging of Development with Transport Upgrades but complies with Standard IX.6.3 Trip Generation Limit: (a) Effects on the transport network consistent with the trips generated by development specified in Table IX.6.3.1 or Table IX.6.3.2; (b) The rate of public transport uptake and travel management measures; and (c) The coordination of retail, commercial and residential development in within the wider Drury area shown on IX.10.3 Precinct Plan 3; Drury East. (x) The degree of certainty around the provision of required infrastructure upgrades including confirmation of infrastructure funding or other such measures agreed; and (x) Any mitigation measures or review conditions required to address the effects from development occurring ahead of the required infrastructure upgrades.	Support in part. Similar to above, in my view 'infrastructure funding" should be replaced with 'committed infrastructure'. I will provide comment on any revised provisions following the Applicant's response to submissions.	Support in part. I recommend Council's Planner adopt the suggested changes to the Matters of Discretion, however note that the text may be updated in response to submissions.
Auckland Transport: 27.18	Amend IX.8.2 (5) as follows: (5) Development and/or subdivision that does not comply with IX.6.42 Staging of Development with Transport Upgrades but complies with IX.6.23 Trip Generation Limit: (a) Whether the effects of the proposal on the transport network are consistent with the trips generated by development specified in Table IX.6.3.1 or Table IX.6.3.2; (b) Whether increased use of public transport provides additional capacity within the local transport network included within the Drury area shown on IX.10.3 Precinct Plan 3; including by implementing travel demand management measures. (c) Whether residential development is coordinated with retail and commercial development within the wider Drury East area identified on Precinct shown on IX.10.3 Precinct Plan 3 to minimise trips outside of the precinct providing additional capacity within the transport network; The effect of the timing and development of any transport upgrades; (x) Where new, upgrades and/or extensions to transport infrastructure are required, whether infrastructure funding agreements or other agreements exist to ensure that the new, upgraded or extended infrastructure required to service the subdivision and/or development can be funded and delivered; and (x) Whether the effects of development proceeding ahead of the required transport upgrades are mitigated by any conditions of consent including those relating to the scale, staging or operation of an activity, review conditions or interim network improvements proposed by the applicant	Consequential changes to Assessment Criteria will be required depending on the changes applied to the Precinct standards and Matters of Discretion. Responding to this submission point, I support 1. the suggested changes to IX.8.2(5)(b) 2. the addition of second (x) I am unsure whether it is appropriate to require funding agreements or other agreements to be tabled as such through assessment criteria and seek advice on this from the Council Planner.	Support in part. I recommend Council's Planner adopt the suggested changes to IX.8.2(5)(b) and the addition of second (x) I seek advice from Council's Planner regarding funding mechanisms as a matter of discretion.
Auckland Transport: 27.19	Delete all reference to 'Access A' under Standards IX.6.2 and IX.6.3. Remove 'Access A' from Precinct Plan 2 and Precinct Plan 3.	Refer to my response to Waka Kotahi: 23.6.	Refer to Waka Kotahi: 23.6

Auckland	The precinct provisions should be amended to better address the following related matters:	Support.	Support.
Transport: 27.20	Define the key transit-oriented development principles, characteristics and outcomes as they apply to the plan change area.	I have no immediate concern with the suggested changes. I will provide comment on any revised provisions following the Applicant's response to submissions.	I will provide comment on any revised provisions following the Applicant's response to
	 Ensure there is consistency through the suite of precinct provisions in regard to giving effect to the transit- oriented development related outcomes. 		submissions
	 Applying appropriate mechanisms in the precinct provisions to support transit-oriented development related outcomes e.g. managing the provision of parking as part of the wider suite of travel demand management measures that are applied to transit- oriented development scenarios. 		
	In addition:		
	 Provide further assessment of the impacts of the proposal on accessibility to and from the Drury Central rail station for all modes including public transport and pedestrian access, focusing on safety, permeability and connectivity to and from the station. 		
	Extend the Business – Metropolitan Centre Zoning west along Flanagan Road.		
	 Include provisions in the plan change to ensure that funding for public transport services (i.e. bus services) is available to support and provide public transport connections between the developments and the Drury Central rail station upon its completion. 		
	 Possible amendments to the plan change provisions in order to achieve transit-oriented development related outcomes are outlined below 		
Auckland Transport: 27.21	Provide further assessment of the impacts of the proposal on accessibility to and from the Drury Central rail station for all modes including public transport and pedestrian access, focusing on safety, permeability and connectivity to and from the station.	Support in part, I consider that revised provisions can allow these assessments to be undertaken as part of future development. Refer to Section 5.1.1 of this report	Support in part
Auckland	Include provisions in the plan change to ensure that funding for public transport services (i.e. bus	Support in part.	Support in part
Transport: 27.23	services) is available to support and provide public transport connections between the developments and the Drury Central rail station upon its completion.	Oppose in part I consider that revised provisions are required to enable public transport connections between development and the train station. Refer to Section 5.1.1 of this report.	Oppose in part, I seek Council Planner's advice
		I do not support Auckland Transport's request that the previsions ensure that funding is available for public transport services, as this should be determined as part of the Regional Public Transport Plan. I seek Council Planner's advice on this matter	

Auckland	Amend the Precinct Description as follows:	Support.	Support.
Transport: 27.24	There are five Sub-precincts in the Drury Centre Precinct:	I have no immediate concern with the suggested changes. I will provide comment on any	I will provide comment on any
	Sub-precinct A is zoned Business - Metropolitan Centre Zone and contains the primary retail	revised provisions following the Applicant's response to submissions.	revised provisions following
	area, Key Retail Main Street and civic and green open spaces. The sub-precinct is the focal point		the Applicant's response to
	for intensive retail, commercial and civic development, with safe and convenient active		submissions
	transport access to and from the Drury Central rail station being enabled and prioritised and		
	pedestrian activity;		
	Sub-precinct B is zoned Business – Metropolitan Centre Zone and is intended to be the primary		
	location for large format retail, while also providing for other commercial and residential		
	activities allowed in the zone. Development in this sub-precinct should ensure that a quality street environment is achieved with the provision of safe and convenient active transport		
	access to and from the Drury Central rail station being enabled and prioritised;		
	decess to and from the Brary central ran station being enabled and prioritised,		
	 Sub-precinct E is zoned Business – Mixed Use Zone and provides for high density residential and 		
	a range of commercial activities that will complement the core centre and maximise the efficient		
	use of land close to the rapid transport network. Eight to ten storey buildings are enabled, and		
	flexible ground floor designs are encouraged in the sub-precinct with the provision of safe and		
	convenient active transport access to and from the rail station being enable and prioritised,		
	reflecting its close proximity to the Drury Central train rail station;		
Auckland	Amend Objectives IX.2 (1) and (4) and add a new objective as follows:	Support.	Support.
Transport: 27.25,	(1) Drury Centre is a transit-orientated development which consists of that supports high density	I have no immediate concern with the suggested changes. I will provide comment on any	I will provide comment on any
27.26 and 27.27	residential, employment-generating and retail activities close to rapid transit and prioritises public and	revised provisions following the Applicant's response to submissions.	revised provisions following
	active modes of transport to and within the centre.		the Applicant's response to
	(4) Drury Centre is <u>a walkable centre, with</u> a street-based environment that provides a high <u>standard of</u>		submissions
	<u>pedestrian amenity, safety and convenience</u> quality pedestrian experience , with a particular emphasis		
	on the Key Retail Street.		
	(x) The Drury Centre precinct develops and functions in a way which promotes:		
	travel mode shifts to public and active modes of transport; and		
	a well-connected and legible network of pedestrian and cycling linkages throughout and		
	connecting the precinct to the Drury Central rail station		
Auckland	Amend Policies IX.3 (4), (7) and (17) as follows:	Support.	Support.
Transport: 27.28,	(4) Provide for attractively designed, safe and direct access to <u>and from</u> the Drury Central train rail	I have no immediate concern with the suggested changes. I will provide comment on any	I will provide comment on any
27.29 and 27.30	station, with the provision of active transport access being prioritised a particular focus on pedestrians	revised provisions following the Applicant's response to submissions.	revised provisions following
	and cyclists.		the Applicant's response to
	(7) Require streets to be attractively designed to appropriately provide for all modes of transport by:		submissions
	a) providing a high standard of <u>pedestrian</u> amenity, <u>safety and convenience</u> for pedestrians in areas		
	where high volumes of pedestrians are expected; and		
	b) providing for safe separated access for cyclists on arterial and collector roads that link key destinations; and		
	c) providing a level of landscaping that is appropriate for the function of the street; and		
	d) providing for the safe and efficient movement of public transport and private vehicles.		
	(17) Provide for bus, pedestrian and cycling the staging of pedestrian and cycling connections to the		
	Drury Central train rail station upon its completion to encourage the immediate use of public and active		
	modes of transport as soon as practically possible		

Auckland Transport: 27.31	Add a new rule as follows:				Oppose.	Oppose
	(X)	Long-term non-accessory parking facilities	NC		I consider that Chapter E27 of the Auckland Unitary Plan adequately addresses non-accessory parking. Further, I consider that the Activity sought by Auckland Transport may have unintended consequences. For example, the requested Activity would make rationalisation of parking resources, which could be shared by multiple premises, difficult.	
Auckland	IX.3 Policies				Support.	Support.
Transport: 27.32 and 27.33	Add two new policies as follows: (x) Recognise and provide for Drury Boulevard as the primary multi-modal access between the Precinct and the Drury Central train station.				I have no immediate concern with the suggested changes. I will provide comment on any revised provisions following the Applicant's response to submissions.	I will provide comment on any revised provisions following the Applicant's response to submissions
	(x) Require the closure of the northern end of Flanagan Road to provide for the Waihoehoe Road rail bridge replacement, while ensuring safe and efficient access to the Precinct.					3451113310113
Auckland Transport: 27.34	Tables IX.6.2.1		-bl IV 6 2 4			
and 27.35	Add the following transport upgrade requirements into Tables IX.6.2.1 and IX.6.3.1 as a prerequisite for any development and/or subdivision:					
		uction of the northern end of Drury Boulev	•	•		
	And the following requirement to provide for the Waihoehoe Road rail bridge replacement:					
Auckland	IX.8.1 (1) Matte	e of the northern end of Flanagan Road			Support.	Support.
Transport: 27.36		L)(c) and add a new clause as follows:			I have no immediate concern with the suggested changes. I will provide comment on any	I will provide comment on any
	(c) Location and design, and sequencing of connections to the Drury Central train rail station, in particular the provision of the northern end of Drury Boulevard;				revised provisions following the Applicant's response to submissions.	revised provisions following the Applicant's response to
	(x) Closure of th	ne northern end of Flanagan Road.				submissions
Auckland	IX.8.2 (1) Assessment criteria					
Transport: 27.37	Add two new assessment criteria under IX.8.2(1) as follows: (x) Whether the northern end of Drury Boulevard is proposed as the primary multi-modal station access concurrently with the Drury Central rail station; and					
	(x) Whether the closure of the northern end of Flanagan Road is provided for the Waihoehoe Road rail bridge replacement, while ensuring safe and efficient access to the Precinct.					
Auckland	IX.10.2 Precinct	Plan 2				
Transport: 27.38	Amend IX.10.2 Precinct Plan 2 as follows: • Include a notation for the northern end of Drury Boulevard as "primary multi-modal station access road"; and					
	 Include a notation to close the northern end of Flanagan Road to provide for the Waihoehoe Road rail bridge replacement 					
Auckland	IX.3 Policies					
Transport: 27.39	Add two new po	olicies as follows:				
and 27.40	east-west move	nd protect the route for Waihoehoe Road ements between Great South Road and Dr	ury Hills Road	intersection.		
		ct vehicle access onto Waihoehoe Road to ork for walking, cycling and public transpo		safe and efficient operation of the		

Auckland	IX.6.5 Standard		
Transport: 27.41	Amend the building line restrictions to reflect the final alignment and width required and ensure any yard requirements that apply are considered in addition to the building setbacks. The need for IX.6.5 should be reviewed if a notice of requirement is lodged for the upgrade of Waihoehoe Road.		
Auckland	IX.11 Appendix 1: Road Cross Section Details		
Transport: 27.42	Retain the vehicle access restriction on Waihoehoe Road as per Rule E27.6.4.1 (3)(c) of the AUPOP.		
Auckland Transport: 27.43	IX.10.2 Precinct Plan 2 Amend IX.10.2 Precinct Plan 2 as follows: Delete the notation of the future rail station; and Delete the notation of Station Plaza	Neither support nor oppose. I consider that the exact location of the Drury Central train station does not need to be confirmed as part of PPC48, and that both land development and planning of the supporting transport network can be expected to inform each other as both aspects progress. Refer to my discussion in Section 4.10 of	Neither support nor oppose. Council's Planner to consider submission point
Auckland	IX.1 Precinct Description	this report.	
Transport: 27.44	Remove Sub-Precinct D from the plan change area and delete provisions relating to Sub-Precinct D.		
Auckland Transport: 27.45	IX.8.2 (2) Assessment Criteria Amend Assessment Criteria IX.8.2 (2)(a) and delete IX.8.2 (2)(d) and (e) as follows: Whether Homestead Park and Station Plaza are is provided in a locations generally consistent with their indicative locations shown on IX.10.2 Drury Centre Precinct Plan 2 and hasve adequate street frontage to ensure the open spaces are visually prominent and safe;	Neither support nor oppose. I consider that the exact location of the Drury Central train station does not need to be confirmed as part of PPC48, and that both land development and planning of the supporting transport network can be expected to inform each other as both aspects progress. Refer to my discussion in Section 4.10 of this report.	Neither support nor oppose. Council's Planner to consider submission point
	 (d) Whether Station Plaza is designed as an open space which will act as a major entrance way to Drury Centre, integrating the train station with the Drury Centre; (e) Whether any buildings or kiosks which locate in the Station Plaza are designed to ensure they do not compromise or dominate the use of the space for public recreational use. 		
Auckland Transport: 27.46	IX.8.2 (3)(j) to (m) Assessment Criteria Delete Assessment Criteria IX.8.2 (3)(j) to (m).		
Auckland Transport: 27.47 and 27.48	IX.3 Policies (5) and (6) Retain Policy IX.3 (5) and retain Policy IX.3 (6) with the amendment noted below: (5) Require collector roads to be generally in the locations shown in IX.10.1 Drury Centre: Precinct Plan 2, while allowing for variation, where it would achieve a highly connected street layout that integrates with the surrounding transport network. (6) Ensure that development and subdivision provides a local road network that achieves a highly connected street layout and integrates with the collector road network within the precinct, and the surrounding transport network, and supports the safety and amenity of the open space and stream network.	Support. I have no immediate concern with the suggested changes. I will provide comment on any revised provisions following the Applicant's response to submissions.	Support. I will provide comment on any revised provisions following the Applicant's response to submissions
Auckland Transport: 27.49	IX.4.1 Activity table All Sub-Precincts Amend Rule IX.4.1 (A1) as follows		
	(A1) Development of new public or private road (this rule does not apply to Auckland Transport) As a consequential amendment, the same changes are sought to the heading of IX.8.1 (1) matters of discretion and IX.8.2 (1) assessment criteria		

Auckland	IX.6 Standards and IX.4.1 Activity table All Sub-Precincts				Neither support nor oppose.	Neither support nor oppose.
Transport: 27.50	Add a new standard to require the vesting of proposed public roads in all sub-precincts as follows:				In my view consideration of road vesting is a regionwide matter, and I am not aware of	Council's Planner to consider
	IX.6.X Road Vesting Proposed public roads (including separated pedestrian and bicycle routes) must be constructed and				any reasons why Drury Central would require a specific Activity for this.	submission point
	vested in Council upon subdivision or development of the relevant area at no cost to the Council.					
	As a consequential amendment, add a new rule as follows					
	(X)	Development and/or subdivision that does not comply with	NC			
		IX.6.X Road Vesting				
Auckland	IX.8.1 (1) Matters of discretion				Support.	Support.
Transport: 27.51	Amend IX.8.1 (1) as follows:				I have no immediate concern with the suggested changes. I will provide comment on any revised provisions following the Applicant's response to submissions.	I will provide comment on any
	(1) Development of <u>new</u> public and private roads:					revised provisions following
	(a) Location and design of the collector roads streets, local roads streets and connections with					the Applicant's response to submissions
	neighbouring sites and to achieve an integrated street network;					SUDITIISSIOTIS
	(b) Provision of safe and efficient public transport, cycling and pedestrian networks;					
	(c) Location and design, <u>and sequencing</u> of connections to the Drury Central train rail station, <u>in</u>					
	particular the provision of the northern end of Drury Boulevard; and					
	(d) Matters of discretion IX8.1 (1)(a) - (c) apply in addition to the matters of discretion in E38.12.1;.					
	(x) Location and design of intersections with existing roads; and					
	(x) Closure of the northern end of Flanagan Road.					

Auckland Transport: 27.52, 27.53, 27.54, 27.55, 27.56, 27.57 IX.8.2 (1) Assessment criteria

Amend IX.8.2 (1) as follows:

(1) Development of $\underline{\text{new}}$ public and private roads:

Location of roads

- (a) The extent to which the collector road network and the Key Retail Street are provided generally in the locations shown on IX.10.X Drury Centre: Precinct Plan 2 to achieve a highly connected street layout that integrates with the surrounding transport network and responds to landform. An alternative alignment that provides an equal or better degree of connectivity and amenity within and beyond the precinct may be appropriate, having regard to the following functional matters:
- (i) The presence of natural features, natural hazards or contours and how this impacts the placement of roads;
- (ii) The need to achieve <u>a permeable</u> an efficient block structure and layout within the precinct suitable to the proposed activities.; and
- (iii) The constructability of roads and the ability for it to be delivered by a single landowner.
- (b) Whether a high quality and integrated network of local roads is provided within the precinct that provides a good degree of accessibility <u>and connectivity</u>, and supports <u>public and active modes of transport</u> a walkable street network. Whether subdivision and development provide for collector roads and local roads to the site boundaries to coordinate with neighbouring sites and support the integrated completion of the network within the precinct over time;

Design of roads

- (c) Whether the design of collector and local roads are generally in accordance with the minimum road reserve widths and key design elements road cross sections provided in IX.11 Drury Centre: Appendix 1;
- (d) Whether the layout of the street network provides a good degree of accessibility <u>and connectivity</u>, and supports <u>the development of Drury Centre Precinct as</u> a walkable <u>centre and community</u> street network. As a general principle, the length of a block should be no greater than 180m, and the perimeter of the block should be no greater than 500m;
- (e)Whether the street network provides safe and legible pedestrian and cycle connections to the operational Drury Central train rail station as development occurs over time. In particular, whether the following is provided, or an alternative is provided that achieves an equal or better degree of connectivity:
- (i) Development in Sub-Precincts B and F provides for a direct, legible and safe pedestrian and cycle connection to the Drury Central train rail station via Drury Boulevard or the Key Retail Street shown on Precinct Plan 42;
- (ii) Development in Sub-Precinct A provides for a direct, legible and safe pedestrian and cycle connection to the Drury Central

train <u>rail</u> station via the Key Retail Street and/or any connecting local or collector roads and/or open spaces;

(iii) Development in Sub-Precincts C and E provides for a direct and legible connection to the Drury Central

train rail station via Drury Boulevard and any connecting local or collector roads and/or open spaces.

- (x) Whether the layout of the street network supports the provision of a safe and efficient bus network;
- (x) Whether the design of collector and local roads includes safe and efficient intersection treatments with existing roads;

Support in part.

I have no immediate concern with the suggested changes. However, regarding IX8.2(1)(c) I consider that the cross sections contained in Appendix 1 should be removed. I consider that greater flexibility in cross sectional specifications is required to enable street form and function to appropriately respond to future land uses, and for the Precinct to maintain adaptability to future street design standards, as discussed in Section 5.1.3 of this report.

I will provide comment on any revised provisions following the Applicant's response to submissions.

Support in part.

I will provide comment on any revised provisions following the Applicant's response to submissions

	(x) Whether the northern end of Drury Boulevard is proposed as the primary multo and from the station;	lti-modal station acce	ss	
	(x) Whether the closure of the northern end of Flanagan Road is provided for the bridge replacement, while ensuring safe and efficient access to the Precinct; and			
	(x) Where development is adjacent to a rural road, whether the road is to be upg standard	graded to an urban		
Auckland	IX.11 Appendix 1: Road Cross Section Details		Oppose in part.	Oppose in part
Transport: 27.58	Delete IX.11 Appendix 1: Road Cross Section Details.		I consider that the Precinct Plan already sets out the key functional routes (for example	
	Introduce provisions relating to the minimum road reserve widths and key design functional requirements of new roads and roads which need to be upgraded to up including but not limited to:		collector roads). I consider that amendments to the Precinct Plan and/or Provisions are required to support active transport and public transport, refer to my discussion in Section 4.7 and 5.1.1.	
	Carriageway		However, details such as those requested by Auckland Transport are more appropriately	
	• Footpaths		determined as part of future resource consent and engineering plan approval	
	Cycleways		applications, noting that these will be subject to Auckland Transport Standards and	
	Public Transport		Guidelines. Refer to my recommended changes to Provisions relating to road cross sections, and IX.11 Appendix, in Section 5.1.3 of this report.	
	Ancillary Zone (parking, street trees etc.)		sections, and in. 11 Appendix, in Section 5.1.5 of this report.	
	Berm			
	Frontage			
	Building Setback			
	Design Speed			
	As part of new provisions, retain vehicle access restriction provisions, as address	ed above		
Auckland	Seek provisions to add layers to the AUPOP for:		Support.	Support.
Transport: 27.59,	Arterial roads within the Precinct area, including Waihoehoe Road;		I have no immediate concern with the suggested changes. I will provide comment on any	I will provide comment on any
27.60 and 27.61	 The purpose of all roads to be shown on the precinct plans. As notified, so not have their future role annotated. The AUPOP maps need to specify to classification of these roads; and 	_	revised provisions following the Applicant's response to submissions.	revised provisions following the Applicant's response to submissions
	Key retail frontage provisions to AUPOP map notations and allow them t indicative roads which may be located differently on development	to float with the		
Auckland Transport: 27.62	It is Auckland Transport's view that all large format retail activities have the potential to generate adverse effects on the transport network and therefore the same effect management approach should apply Amend Rule IX.4.1 (A10) as follows: Sub-Precinct C and E – Mixed Use		Neither support nor oppose. I consider that my proposed Standard IX.6.2 Staging of Development with Transport Upgrades and IX.6.x Transport network performance (refer to Section 4.5 and 5.1.1 of my report) provides the security that transport effects on the wider transport network will be captured.	Neither support nor oppose. Council's Planner to consider submission point
	Sub-Freemet e und E Winked OSC		In terms of localised transport effects, I consider that these will be addressed by Chapter	
	(A10) Large Format Retail Department Stores	NC	E27 of the Auckland Unitary Plan.	
Auckland Transport: 27.63	Make any necessary amendments to PPC 48 as required to achieve a consistency in relation to objectives, policies, rules, methods and maps, across the private plant Drury growth area	• •		Support. I will provide comment on any revised provisions following the Applicant's response to submissions

Counties Power: 28.3 and 28.14	Counties Power seeks a typical road cross-section for each roading type (including arterial roads) to identify the proposed location of the street trees and landscaping and to ensure that the berm is an acceptable width for installation of underground electrical reticulation.	I support Counties Power's intent with this requested amendment, however I consider that the region-wide rules of the Auckland Unitary Plan, plus Auckland Transport's standards and guidelines, should be sufficient to ensure the appropriate design of future roads as part of resource consent processes. Further, including detailed cross sections within the Precinct can create rigidity that results in conflict with Auckland Transport Standards and Guidance, as these do tend to change from time to time.	Oppose
Ministry of Education: 29.1, 29.3, 29.5, 29.6	Seeks amendments to Provisions to acknowledge education infrastructure and allow discretion for the development of the road network relative to schools	Neither support nor oppose. Council's Planner should consider whether matters of discretion for the location of roads should include integration with schools	Council's Planner to consider submission point
Ministry of Education: 29.8	Retain Standard IX.6.2 Staging of Development with Transport Upgrades	I consider that the transport upgrades set out in Standards IX6.2 and IX6.3 are too prescriptive when considering the uncertainties highlighted with the transport assessment. While I support the Ministry's request for ensure infrastructure provision is linked to development, I recommend revised triggers for transport infrastructure. Refer to Sections 4.8 and 5 of this report	Oppose I recommend Council's Planner adopt my proposed replacement of Standards IX6.2 and IX6.3 or a hybrid to address Auckland Transport and Waka Kotahi submissions
Leith McFadden: 30.2	Raises concern with transport effects, seeks confirmation that infrastructure upgrades are tied to staging through Precinct provisions.	Support. I consider that the PPC50 application does not robustly assess the potential effects, nor fully reflect the transport infrastructure needed to mitigate transport effects. Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.11, and 4.12 of this report.	Support.
Drury South Limited: 32.2	Raises concern with ability to monitor Activity Table IX.4.1 (A5), (A6), (A8) and (A9) together with Standard IX.6.3. Consideration should be given to whether a simplified approach using GFA triggers alone is a more effective approach, given the potential challenges in monitoring trip generation levels for a development of this scale	Support in part. I consider that the transport upgrades set out in IX6.2 and IX6.3 are too prescriptive when considering the uncertainties highlighted with the transport assessment. While I support the submitters request for greater clarity for Activity Table IX.4.1 and Standard IX.6.3, I recommend revised triggers for transport infrastructure rather than amendments to IX6.2 and IX6.3. Refer to Sections 4.8 and 5 of this report.	Support in part. I recommend Council's Planner adopt my proposed replacement of Standards IX6.2 and IX6.3 or a hybrid to address Auckland Transport and Waka Kotahi submissions
Drury South Limited: 32.6	IX.6(2)(b) exempts activities within the PPC48 area from complying with Trip Generation Rule E27.6.1. This might be acceptable if adequate provision was made for transportation infrastructure within the other PPC48 rules, but it is not. Amend so that any exemption is clear as to the activities that it applies to, and that the effects of those activities have been assessed through an ITA.	Support in part. I recommend that IX.6(2)(b) be deleted from the Precinct provisions. Refer to my discussion in Section 5.1.2 of this report. Alternatively, the relief sought by the submitter could be considered.	Support in part Council's Planner to consider submission point

Drury South Limited: 32.7	The transportation upgrades proposed in both Tables IX.6.2.1 and IX.6.2.2 are inadequate in scope and nature to ensure that there are not adverse effects on the Drury South Industrial Precinct and the surrounding transport network. The transport assessment which supports PPC48 places undue reliance on currently unfunded transportation upgrades being provided by other parties or through as yet unspecified developer funding agreements. Amend PPC48 to ensure that: (a) adequate upgrading of the surrounding road network (for example Waihoehoe Road, Great South Road, Fitzgerald Road and the proposed connections between the PPC48 area and Quarry Road and Pitt Road/Great South Road shown on Precinct Plan 2) is undertaken; and (b) any non-compliance with this standard is a discretionary activity.	Support in part. I consider that the PPC50 application does not robustly assess the potential effects, nor fully reflect the transport infrastructure needed to mitigate transport effects. Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.11, and 4.12 of this report.	
Drury South Limited: 32.8	The Precinct Plan includes indicative and proposed connector roads but the transport assessment has not considered the effects of those connections. There are also no mechanisms specified in PPC48 by which to assess the effects on these roads under subsequent consent processes. Seeks that the effects of the connections identified in the Precinct Plan are assessed in the ITA and/or though the PPC48 provisions, and appropriate upgrades to mitigate any effects arising are included within PPC48.	Support in part. I consider that the PPC50 application does not robustly assess the potential effects, nor fully reflect the transport infrastructure needed to mitigate transport effects. Refer to my discussion in Sections 4.4, 4.5, 4.7, 4.8, 4.11, and 4.12 of this report. In particular I consider that Provisions are required to address potential effects on existing roads, including Pitt Road, Quarry Road, Great South Road, and SH22. Refer to my discussion in Sections 4.11 and 5.1.1 of this report.	Support in part Refer to my discussion in Section 5.1.1.
Kāinga Ora: 33.4	Amend Objective (4) as follows: "Drury Centre is a street-based environment that provides a high-quality pedestrian experience throughout the street network, with a particular emphasis on the Key Retail Street."	Support. I have no immediate concern with the suggested changes. I will provide comment on any revised provisions following the Applicant's response to submissions.	Support. I will provide comment on any revised provisions following
Kāinga Ora: 33.7	Amend Policy (5) as follows: "Require collector roads to be generally in the locations shown in IX.10.1 Drury Centre: Precinct Plan 2, while allowing for variation, where it would achieve a highly connected street layout that integrates with the surrounding transport network and is generally aligned with transitions in zoning"		the Applicant's response to submissions
Kāinga Ora: 33.8, 33.10, 33.11	Policy (15) and IX.6.2 Staging of Development with Transport Upgrades and IX.6.3 Trip Generation Limit. Kāinga Ora questions the extent to which the various publicly-funded infrastructure works (noted under IX.6.2 (3) and IX.6.3 (2) as "not included in the development thresholds") have influenced the setting of the development thresholds proposed, and whether the thresholds have assumed those upgrades have taken place. If those public works not taking place have a material influence on the threshold proposed, Kāinga Ora submit they should be included in the precinct. Seeks to clarify and/or amend policies and associated provisions and thresholds to account for public infrastructure upgrades	Support. Refer to my discussion in Section 5.1.1 of this report.	Support Refer to my discussion in Section 5.1.1.
Kāinga Ora: 33.9	Kāinga Ora opposes the exclusion of the E27.6.1 Trip generation standard from within the Drury Centre Precinct.	Support, refer to my discussion in Section 5.1.2 of this report.	Support Refer to my discussion in Section 5.1.2 of this report

Kāinga Ora:	Retain Criteria IX.8.2 (1)(a) subject to the following amendment:
33.12	i. The presence of natural features, natural hazards or contours and how this impacts the placement of roads;
	ii. The need to achieve an efficient block structure and layout within the precinct suitable to the proposed activities; and
	iii. The constructability of roads and the ability for it to be delivered by a single landowner; and
	iv. The need to ensure that any alternative Collector Road location is generally aligned with transitions in
	zoning

technical note



PROJECT ACXX395: DRURY PRIVATE PLAN CHANGE – KIWI PROPERTY

SUBJECT PRIVATE PLAN CHANGE - CLAUSE 23 INFORMATION REQUESTS

TO MICHAEL LUONG (AC), DAVID MEAD (HYC)

FROM MAT COLLINS
REVIEWED BY TERRY CHURCH
DATE 3 MARCH 2020

1 INTRODUCTION

Auckland Council (Council) has requested Flow Transportation Specialists (Flow) to review the transportation matters associated with three Private Plan Changes (PPC), which have been lodged by Kiwi Property No.2 Limited (Kiwi Property), Fulton Hogan Land Development (FHLD), and Oyster Capital (Oyster). The three PPCs seek to rezone approximately 328 hectares of Future Urban Zoned land in Drury to a mix of Business and Residential zones.

This technical note contains Clause 23 information requests relating to the Kiwi Property PPC. It should be read in conjunction with our Clause 23 information requests relating to the Drury East Modelling Report (Modelling Report). The Modelling Report provides a single traffic modelling report that each of the PPCs to refer to in each of their respective Integrated Transport Assessments. We have attached our Clause 23 information requests relating to the Modelling Report as Appendix A.

The Clause 23 requests are associated with the following documents

- Section 32 Assessment Report, prepared by B&A, dated December 2019, including
 - Appendix 1 Drury Centre Plan Change
 - Appendix 7 Urban Design Assessment
 - Appendix 10 Integrated Transport Assessment
- Drury East Modelling Report, prepared by Stantec, dated November 2019

We note that we have not engaged with Auckland Transport (AT) and the New Zealand Transport Agency (NZTA) as part of our review.

2 SITE SUMMARY

Kiwi Property is applying for a Plan Change to rezone 95 hectares of Future Urban zoned land to a mix of Business - Metropolitan Centre, Business - Mixed Use and Open Space-Informal Recreation zones. The three PPC areas and the proposed zonings are shown in Figure 1, with further detail on the Kiwi Property PPC shown in Figure 2.

Kiwi Property's aspirational full development includes a general retail area of approximately 107,650 m², a commercial area of approximately 60,000 m², residential development of approximately 3,000+ households, and community facilities of 16,000 m².

The Precinct includes the following five areas

- Sub-precinct A is zoned Business Metropolitan Centre Zone is intended to be the focal point for intensive retail, commercial and civic development and pedestrian activity
- Sub-precinct B is zoned Business Metropolitan Centre Zone and is intended to be the primary location for large format retail, although other activities provided for in the Metropolitan Centre zone are not precluded
- Sub-precinct C is zoned Business Mixed Use Zone and provides for high density residential and a range of commercial activities
- Sub-precinct D is zoned Business Metropolitan Centre Zone and provides for the establishment of the Drury East train station
- The area immediately to the south and east of sub-precinct B, bounded by Fitzgerald Road and Brookfield Road, is within the Mixed Use zone and the standard zone and Auckland-wide provisions would apply in that area

To KARAKA To PAPAKURA PROPOSED ZONING LIGHT INDUSTRY METROPOLITAN CENTRE LOCAL CENTRE Oyster MIXED USE EXISTING MIXED HOUSING SUBURBAN CENTRE AURANGA MIXED HOUSING URBAN TERRACE HOUSING AND APARTMENT BUILDINGS INFORMAL RECREATIONAL Kiwi **FHLD DRURY SOUTH** To RAMARAMA

Figure 1: Drury East Private Plan Change areas and proposed zoning

Great South Road On Ramp B Couth Road Southern Motorway

Figure 2: Kiwi Property Private Plan Change sub-precincts and proposed zoning

3 ADDITIONAL INFORMATION REQUESTS

Having reviewed the relevant documents provided, we consider that additional information is required to better understand the transport effects and their management. Information requests are summarised below, with further discussion of these requests provided in Section 1.1.

These requests should be read in conjunction with our Clause 23 information requests relating to the Modelling Report (attached as Appendix A).

The New Zealand Government recently announced the New Zealand Upgrade Programme¹. This includes funding for

- Mill Road between Manukau and Drury, including the Drury South interchange
- Rail electrification from Papakura to Pukekohe
- Drury West and Drury East train stations
- State Highway 1 widening from Papakura to Drury South interchange (3 lanes each way)

This announcement clearly has the potential to have a major impact on potential transport effects and mitigation measures for the PPCs. We understand from Council staff that there are still complexities around the funding of these projects. The Clause 23 requests in our report should be read in the context of a "snapshot in time", based on the application material that has been provided.

3.1 Section 32 report and proposed Precinct

Request 1 Explanation: The PPC has been lodged parallel to two other Private Plan Changes for land adjoining the PPC, one from FHLD and one from Oyster. These three PPCs rely on the Drury East Modelling Report, which provides a single traffic modelling report for each of the PPCs to refer to in each of their respective Integrated Transport Assessments. However, as the three PPCs are separately lodged, they must, in our view also be considered in isolation so that if, for any reason, the PPCs become separated and require processing separately as stand-alone proposals, the potential transport effects of each PPC and the proposed planning provisions can be individually assessed.

Request 1. The transport modelling assessment and planning provisions currently speak to all three PPCs being accepted as a package and progressing in parallel. In the event that the PPCs are disaggregated, or deviate from each other in terms of timing as a result of the public notification process/resolution of critical elements, please provide further information as to how the transport effects of each individual PPC can be understood and mitigated and how the provisions may need to be amended as a result. Please confirm to what extent the PPC relies on the PPCs submitted by FHDL and Oyster Capital, and how the delay or rejection of one or both of these PPCs might affect the Kiwi Property PPC.

Request 2 Explanation: The Section 32 report states

¹ https://www.nzta.govt.nz/planning-and-investment/nz-upgrade/auckland-package/

"Rezoning land in Drury East, and the Drury Centre in particular, enables a transport orientated development to be delivered and integrated with a new Drury Central rail station. This will ensure that public transport is delivered early to support travel behaviour change. Enabling intensive development around the Drury Central rail station will support an early increase in patronage....

The ITA identifies the Drury Central train station and public transport hub as a critical component to ensuring that Drury Centre is a Transit Orientated Development (TOD). The train station and public transport hub integrates multiple modes of transport that link the local network and the wider, regional network.... The bus network will primarily service the local network, providing critical connections between routes. The combination of these public transport facilities alleviates traffic congestion and allows for a more sustainable outcome."

Objective IX.2(1) states

"Drury Centre is a transport-orientated development that supports high density residential, employment-generating and retail activities close to rapid transport and prioritises public and active modes of transport to and within the centre"

However, it is not clear how the proposed Precinct provisions will ensure that public transport infrastructure and services will be delivered early to support immediate travel behaviour change, with minimal means to encourage mode shift away from private vehicles identified in Tables iX.6.2.1/2 and IX.6.3.1/2. It is also unclear how the staged development within the three PPCs will avoid occurring in a "siloed" fashion, with limited or no connectivity for public transport, walking and cycling until most of the rezoned land is developed.

Request 2. Please confirm the "what", "how", "when" and "by whom" for the funding and delivery of all transport infrastructure and transport services required to support the PPC. This should include discussion about the staging, fit for purpose rail station facilitates, connections to the rail station for all modes, required bus services (including private services), and walking and cycling connections between each PPC area as development progresses. If there is no mechanism to deliver infrastructure that requires third party land, third party agreement or third-party funding, then the reasonableness of including the upgrade within the Precinct provisions should be discussed.

Request 3 Explanation: The Precinct includes rules requiring the delivery of transport infrastructure based on a GFA/dwelling assessment and an external trip generation assessment. It is not clear how these rules will be monitored or how equitable outcomes between beneficiaries (i.e. landowners within the three PPC areas) will be ensured.

Request 3. Please comment on potential risks/challenges associated with monitoring the complex thresholds specified in Tables IX.6.2.1/2 and I/X6.3.1/2, and how these might be addressed.

Request 4 Explanation: It is not clear whether Standard IX.6.2(1) is interpreted requiring the upgrades identified in Tables IX.6.2.1 and IX.6.2.2 when **any** or **all** development thresholds are exceeded. This also applies to Standard IX.6.3(1).

Request 4. Please clarify whether Standard IX.6.2(1) requires the upgrades identified in Tables IX.6.2.1 and IX.6.2.2 when "any" or "all" development thresholds are exceeded. Similarly, clarify this for Standard IX.6.2(1.).

Request 5 Explanation: Taking into consideration the feedback provided above, please comment on how the proposed precinct provisions identify progressive/staged upgrades that results in traffic effects consistent with the transport assessment, pointing to travel choice.

Request 5. Please comment on the feasibility of the proposed multiple upgrades to the Waihoehoe Road/Great South Road intersection, compared with implementing one or two upgrades to achieve the same end result. Consideration should be given to the disruption to the transport network and provision for all modes of transport.

Request 6 Explanation: Standard IX.6(2)(b) states that E27.6.1 Trip Generation does not apply to activities in Activity Table IX.4.1, however the Section 32 report does not comment on the rationale for this waiver. It is unclear why this waiver is necessary.

Request 6. Please clarify why an exemption from E27.6.1 Trip Generation is proposed in the Precinct plan.

Request 7 Explanation: Precinct Plan 2 shows Waihoehoe Road as an "Existing arterial road", which is not correct.

Request 7. Please confirm whether Precinct Plan 1 correctly refers to Waihoehoe Road as an existing arterial road.

Request 8 Explanation: Precinct Tables IX.6.2.1 and IX6.2.2 require multiple upgrades to the Waihoehoe Road/Great South Road intersection. By 2048 Waihoehoe Road is proposed to be 6 lanes wide, and Norrie Road is proposed to be 5 lanes wide. The SGA ITA identifies these roads as key public transport corridors, where bus priority measures (such as bus lanes) are likely. The form of this intersection proposed by the Precinct may not be compatible with provision for frequent bus services.

Request 8. Please confirm whether the proposed form of the Waihoehoe Road/Great South Road intersection is consistent with the design proposed by the SGA, particularly regarding bus priority, noting that the SGA may be lodging a notice of requirement for this intersection.

Request 9 Explanation: IX.11 Drury Centre: Appendix 1 specifies road cross section details. In providing this level of detail, it is unclear what consideration has been given to ensuring future roads will be contextual to surrounding land uses (for example, whether a 16m local road will provide sufficient width to enable the level of public realm amenity expected in high density land use). Further, future changes to Auckland Transport standards and guidelines, such as the Roads and Streets Framework, may mean Appendix 1 is not compatible with future best practice.

Request 9. Please confirm what consideration has been given to Auckland Transport standards and guidelines when developing the road cross sections in IX.11 Drury Centre: Appendix 1, and explain how the Precinct will provide flexibility in design to ensure future roads are

contextual to surrounding land uses and consistent with potential changes in Auckland Transport standards and guidelines.

3.2 Integrated Transport Assessment and Master Plan

3.2.1 Infrastructure feasibility, timing, responsibility and funding

Request 10 and 11 Explanation: The ITA refers to "committed" and "planned" infrastructure projects in the area. Please update Tables 8-1, 8-2, 8-3 and 8-4 to specify which projects in these tables are funded within the RLTP/NLTP ("Funded"), unfunded with the RLTP/NLTP ("Committed") and not in the RLTP/NLTP ("Uncommitted").

Please confirm that these tables include all transport infrastructure assumed in the various modelling scenarios included in the Drury East Modelling Report, and whether these improvements can be implemented within the road corridor without third party land acquisition.

- Request 10. Please confirm which transport infrastructure projects referenced in the ITA are funded within the RLTP/NLTP ("Funded"), unfunded with the RLTP/NLTP ("Committed") or not in the RLTP/NLTP ("Uncommitted"). Please confirm that the ITA includes all infrastructure assumed in the various modelling scenarios included in the Drury East Modelling Report.
- Request 11. Please confirm whether the recommended transport improvements can be achieved within the existing legal road or by vesting private property owned by Kiwi Property, FHLD, or Oyster. If there is no mechanism to deliver infrastructure that requires third party land, third party agreement or third-party funding, then the reasonableness of including the upgrade should be discussed within the report.

Request 12 Explanation: The ITA has considered the Supporting Growth future transport network and states that the 2038 and 2048 modelling is "satisfactory" as all key infrastructure required to support the growth are anticipated to have been implemented.

The ITA should consider the risks associated with Supporting Growth infrastructure implementation, noting that the Supporting Growth preferred network is yet to be consulted on, approved and secured. While some enabling projects may be "committed", they are not funded and as such the certainty or risk of these being on the ground by the intended date (particularly those in the short term) requires further discussion in the report.

The "what", "how", "when" and "by whom" regarding the provision of this infrastructure and the connections should be clearly identified. Commentary on the feasibility and/or risks associated with these projects should also be included, for example the proposed improvements to the Great South Road/Waihoehoe Road intersection may require the acquisition of third-party land.

Request 12. Please refer to 1.1, as this also applies to the ITA.

Request 13 Explanation: Section 7.1.2 of the ITA states that the public transport network within the PPC will be very well connected. The timing to which this comment relates is not clear. While the network

may be well connected in approximately 30 years' time when the PPC areas are approaching full development, in the intermediate years the PPC may not be well served by public transport unless there is a commitment to early delivery of infrastructure and services. The ITA should discuss how the public transport mode share assumptions within the Drury East Modelling Report align with the early delivery of a connected street network to enable train and bus services, and increased walking and cycling catchment. The discussion should include consideration of the level of train and bus services needed to achieve the assumed public transport mode share, with a maximum walking catchment of 800m for the rail station.

Request 13. Please explain how the staged delivery of train and bus infrastructure and services, and walking and cycling infrastructure, aligns with the public transport mode share assumptions made in the Drury East Modelling Report. Please clearly identify any third-party funding for infrastructure or services needed to support these assumptions.

Request 14 Explanation: The ITA identifies the need to upgrade Waihoehoe Road and its intersection with Great South Road. This may require the upgrade of the Waihoehoe Road bridge over the rail line, which may need to be lifted in the process to meet Kiwi Rail vertical clearance requirements and require third party land on the western side.

Request 14. Please confirm whether the Waihoehoe rail overbridge will require replacement/upgrade to implement the transport infrastructure recommend in the ITA. If replacement/upgrade is required, please comment on whether potential alterations to the vertical alignment of the carriageway would affect safety outcomes (i.e. safe stopping distances for drivers) and how the upgrade of the bridge impacts on the level of development allowed for prior to its upgrade.

Request 15 Explanation: Figure 2-1 of the ITA shows that a sizable portion of the PPC area is owned by third parties, including a large amount of road frontage with Waihoehoe Road and Fitzgerald Road.

Request 15. Please confirm whether the urbanisation of Fitzgerald Road and Waihoehoe Roads will be undertaken by Kiwi Property, or whether this is assumed to be undertaken by the landowner along each site frontage.

Request 16 and 17 Explanation: Drury Centre Precinct Plan 2 indicates that Brookfield Road will be extended to connect with Quarry Road, however access to the PPC via Quarry Road is only briefly discussed in Sections 7.3 and 8.2 of the ITA.

- Request 16. Please comment on the timing of the connection between Brookfield Road and Quarry Road and discuss how this may affect the safety and efficiency of nearby intersections such as Quarry Road/Great South Road and SH22/Great South Road. Please also confirm whether this link was included within the PPC Saturn model.
- Request 17. Where connections to the south are proposed, further information is sought on what upgrades may be required to the southern network over and above those needed to support the Drury South development.

Request 18 Explanation: Figure 7-1 of the ITA shows the proposed transport network for the three PPCs. It would be helpful if this was shown as a land use and transport staging plan, coordinated between the three PPCs, and included the staging of roads, walking and cycling infrastructure.

Request 18. Please show the proposed staging for land use and how the proposed transport network, including walking and cycling infrastructure and streets suitable for buses, will be delivered in stages in an integrated way.

3.2.2 Provision for public transport, walking and cycling

Request 19 Explanation: The ITA states that the PPC is highly supportive of mode shifts, primarily through its proximity to public transport. It is unclear how this public transport mode share will be achievable without the accelerated provision of public transport and active modes infrastructure, including connectivity to and from the rail station as the PPCs areas progressively develop.

The ITA has provided recommended local road upgrades on a general traffic capacity basis. In our view the report should consider upgrades that may be needed on a safety and/or accessibility basis. Given that much of the network about the development area reflects a rural environment, many of the upgrades would focus on transitioning the environment to an urban context, where safety, active models and connectivity to PT provision is paramount.

Request 19. Please provide further information on transport mitigation measures and appropriate thresholds for infrastructure improvements based on outcomes relevant to safety, public transport, and active modes. This should draw on the findings of the modelling report, but importantly consider the upgrades and improvements needed to achieve safety outcomes, and active mode and public transport uptake.

Request 20 Explanation: The ITA states that local road improvements that will be delivered by the developers before 2028. We are of the view that the report lacks clarity about how to ensure that a strong, well laid out, connected and safe network is provided from the outset. This is needed to ensure the mode share targets assumed are promoted and encouraged, rather than development occurring in silos, with no connectivity other than for private vehicles on rural roads.

Request 20. Please confirm whether local road upgrades include provision for public transport and active modes infrastructure, and if so, explain how staged development within the three PPC areas will be interconnected to encourage a transit oriented development and achieve the mode share assumptions used in the Drury East Modelling Report.

Request 21 Explanation: The ITA and Master Plan do not discuss the assumed forms and functions of the Drury East rail station, whereas the Precinct provisions specify that temporary stations can be provided as part of rail electrification. Please confirm what assumptions were included in the transport model regarding enabling rail as a transport option before delivery of a fully functional rail station and provide commentary on whether these mode share assumptions are likely to align with the user perception of a "temporary" rail station.

Request 21. Please clarify what assumptions were included in the transport model regarding enabling rail as a transport option before the delivery of a fully functional rail station. Please, provide commentary on whether these mode share assumptions are likely to align with the user perception of a "temporary" rail station.

Request 22 Explanation: The Master Plan indicates that the frequent transit network (FTN) bus network will include an interchange with the train station, located to the south of Great South Road. This is contrary to the routing assumed in the SGA ITA, which anticipates the FTN using Bremner Road and Waihoehoe Road.

Request 22. Please provide further analysis of the frequent transit network service pattern regarding access to the bus interchange with the train station. This should include a comparison of expected total bus service hours between the proposed train station location vs. the preferred location identified in the SGA ITA.

Request 23 Explanation: There is potential for additional catchment for the train station from the Auranga development. High quality walking and cycling facilities have been constructed on Bremner Road, these could be extended onto Firth Street and over Great South Road to provide a ready connection to the train station. This may support earlier delivery of the train station and/or train services.

Request 23. Please confirm whether the potential catchment for the train station from the nearby Auranga development been considered, and if so, whether provision of a quality walking and cycling connection would increase overall public transport mode share and reduce congestion at key constraint points on the network.

3.2.3 Other requests

Request 24 Explanation: The PPC area is adjacent to the Drury South Industrial Precinct. This Precinct includes requirements for improvements to the transport network surrounding the PPC area. The Precinct Plan includes the provision of walking and cycling facilitates, which may enable a connection between the Drury South Industrial Precinct and the PPC.

Request 24. Please comment on how the transport improvements to support the Drury South Industrial Precinct may interact with the improvements needed to support the PPC.

Request 25 Explanation: The train station location differs from the preferred location identified in the SGA ITA. Further comparison of the two locations should be provided.

- Request 25. Please provide further information on the proposed train station location by comparing this with the location preferred by the Supporting Growth Alliance. to the report should consider the following
 - developable land area with walking catchment (noting that Council's Structure Plan land-uses are not fixed and can be assumed to be responsive to the location of the station)

- operational considerations including accessibility for FTN and local buses, walking, cycling, kiss and ride, and park and ride
- o potential park and ride size
- future proofing for four rail tracks
- station spacing (relative to the proposed rail station at Drury West)
- o technical rail and engineering specifications (if these differ between the two locations)
- commentary on whether the objectives used to assess the train station location in the Master Plan align with the objectives used by Council and SGA for the Drury Structure Plan

Request 26 Explanation: The ITA leverages off the assessment and conclusions of the SGA ITA. Table 8-1 of the SGA ITA identifies the "next steps" that need to be undertaken for any Plan Change (either initiated by Council or by private landowners). Please comment on how the ITA addresses each of the following topics.

Request 26. Please comment on how the ITA responds to the recommended "next steps" identified in Table 8-1 of the SGA ITA. The report should consider the following

- Land-use changes
- o Further consideration of local employment to manage travel demand
- o Future Plan Change guidance
- Collection road funding and implementation risks
- Further assessment and design development of network "hot spots"
- Integration with operative Precincts
- o Further development of staging strategies
- o General design detail
- Further development of the secondary active mode network and greenways
- Further development of rail station access and park and ride strategy

Request 27 Explanation: Section 6.1 of the ITA provides indicative staging for the development. The report should include information on the assumed land uses within each stage and indicative development years. For example, the number of dwellings, commercial and retail GFA, and anticipated job numbers.

Request 27. Please update the ITA to include information on the assumed land uses within each stage and indicative development years.

Request 28 Explanation: Sections 6.2.1 and 7.4 of the ITA discuss the provision of parking at "an appropriate rate", and that a "shared parking strategy" will be provided in the Metropolitan Centre. Section 7.2 states that "abundant" parking will be provided in the early stages of development. The Master Plan estimates that 12,800 parking spaces are required for the PPC and provides some discussion

of the approach to a "shared parking strategy". However, the proposed Precinct provisions remain silent on the matter of parking.

Request 28. Please confirm the amount of car parking that is intended to be provided within the Metropolitan Centre, clarify how this intention will be carried through to implementation (e.g. Precinct provisions), and comment on how this will affect the intention of the Metropolitan Centre to become a transit oriented development.

Request 29 Explanation: For clarity it would be helpful if Tables 8-3 and 8-4 were incorporated into Tables 8-1 and 8-2, to allow easy comparison of development and vehicle trip generation thresholds. Please also include the number of public transport trips assumed at each threshold.

Request 29. Please provide a consolidated table showing development thresholds for infrastructure upgrades, which includes vehicle trip generation and assumed number of public transport trips.

Request 30 Explanation: Section 2.2 of the ITA includes the following sentence

"The FULSS investigates future transport infrastructure improvements required to enable the land use development envisaged in the FULSS"

We suggest that the first reference to the FULSS should be amended to "SGA".

Request 30. Please check references to the FULSS in Section 2.2 of the ITA and update as required.

Reference: P:\ACXX\395 Drury East Private Plan Change - Kiwi Property\Reporting\T2C200303 - Kiwi PPC Clause 23 requests.docx - Mat Collins

APPENDIX A

Drury East Modelling Report: Clause 23 requests

technical note



PROJECT ACXX395: DRURY EAST PRIVATE PLAN CHANGE – KIWI PROPERTY

SUBJECT DRURY EAST MODELLING REPORT - CLAUSE 23 INFORMATION REQUESTS

TO MICHAEL LUONG (AC), DAVID MEAD (HYC)

FROM MAT COLLINS

REVIEWED BY TERRY CHURCH

DATE 03 MARCH 2020

1 INTRODUCTION

Auckland Council (Council) has requested Flow Transportation Specialists (Flow) to review the transportation matters associated with three Private Plan Changes (PPC), which have been lodged by Kiwi Property No.2 Limited, Fulton Hogan Land Development, and Oyster Capital (the developers). The three PPCs seek to rezone approximately 328 hectares of Future Urban Zoned land to a mix of Business and Residential zones. Stantec (the author) has prepared the Drury East Modelling Report (the modelling report) which provides a single traffic modelling report for each of the PPCs to refer to in each of their respective Integrated Transport Assessments.

This technical note contains Clause 23 information requests and Flow recommendations relating to the modelling report only. It is applicable to all three PPCs and should be read in conjunction with the respective Clause 23 technical notes that Flow has produced for each PPC. Separate Clause 23 requests will be provided for each of the PPCs.

The Clause 23 requests are associated with the following document

 Drury East Modelling Report, prepared by Stantec, dated 18 November 2019, including Appendices A to E

We note that we have not engaged with Auckland Transport (AT) and the New Zealand Transport Agency (NZTA) as part of our review.

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The area covered by the three PPCs and the proposed zoning are shown in Figure 1.

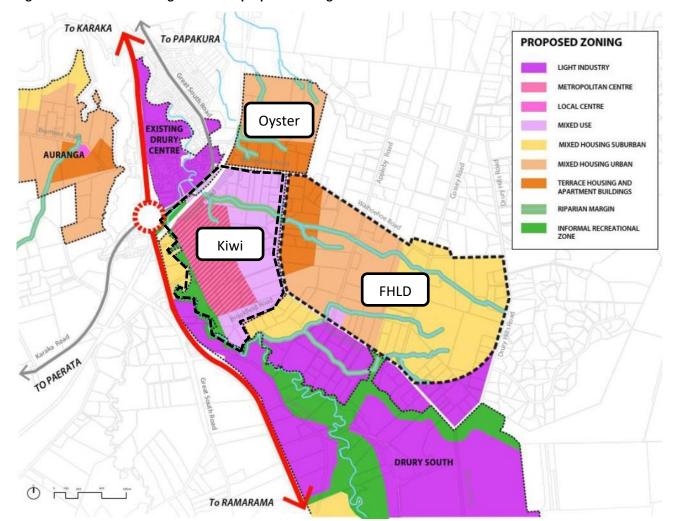


Figure 1: Private Plan Change areas and proposed zoning

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Having reviewed the relevant documents provided, we consider that additional information is required to better understand the transport effects and their management. Additional information requests are summarised below, with further discussion of these requests provided in Section 1.1.

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Request 6 Explanation: Section 2.7 of the modelling report does not discuss upgrades to the Drury East rail station, whereas the Precinct provisions specify that temporary stations can be provided as part of rail electrification. Please summarise what assumptions were included in the model regarding enabling rail as a transport option prior to delivery of fully functional rail stations and provide commentary on whether these mode share assumptions are likely to align with the user perception of a "temporary" rail station.

Request 6. Please confirm what assumptions were included in the model regarding enabling rail as a transport option prior to a fully functional rail station being delivered. Provide commentary on whether these mode share assumptions are likely to align with the user perception of a "temporary" rail station or a development strategy which may start from the south, rather than around the station itself.

3.1.2 Third party infrastructure

Request 7 Explanation: The report has considered the Supporting Growth future transport network and states that the 2038 and 2048 modelling is "satisfactory" as all key infrastructure required to support the growth are anticipated to have been implemented.

The modelling should consider the risks associated with Supporting Growth infrastructure implementation. While some enabling projects may be "committed", they are not funded and as such the certainty of these being on the ground by the intended date/or around the time of the land use anticipated is occupied (particularly those in the short term) should have further discussion in the report.

Request 7. Please comment on the "what", "how", "when" and "by whom" for the third party delivered infrastructure required to support the PPC. This should include discussion about the staging of infrastructure to provide for a safe network which enables walking, cycling, and public transport trips in line with the mode share assumptions made in the modelling report.

Request 8 Explanation: The author concludes that the PPC is unlikely to have a significant adverse effect on the traffic network if the infrastructure required to support the PPC is implemented. However, commitment to the required infrastructure is yet to be confirmed. At this point the only safe assumption is that funded projects in the RLTP will be delivered.

Request 8. While the government has provided support around major infrastructure projects, the applicant will need to confirm the "what", "how", "when" and "by whom" for the infrastructure required to support the PPC. Confirmation should include how funding is assured, rather than suggesting there is a commitment.

3.1.3 Road Controlling Authority Liaison

Request 9 Explanation: The report states that three potential accesses to the Metropolitan Centre were considered:

- Direct access to the Drury Interchange
- Firth Street access
- Quarry Road access

Section 2.7.1 of the modelling report identifies that further liaison with the NZ Transport Agency is required to confirm the access strategy.

There is uncertainty regarding each of these options:

- Direct Access. The Structure Plan and SGA ITA show this link, however, this is based on a 2048 year (when pressure on the Drury Interchange will be relieved by the Drury South Interchange). It is unclear whether the NZ Transport Agency will support direct access to the Drury Interchange before the Drury South interchange and Pukekohe Expressway are in place. It is also unclear whether this link complies with safety and geometric standards due to the need to get sufficient vertical clearance over the rail line.
 - As such, greater weight should be placed on the no-connection scenario, which also places greater focus on other modes, particularly public transport.
- Firth Street Access. It is unclear whether the NZ Transport agency would support this option, given the proximity of the access at Firth Street to the Drury Interchange, particularly once the interchange footprint is widened to cater for widening of the State Highway 1 carriageway in the future.
- Quarry Road. It is unclear whether placing additional ramps at Quarry Road will fit within NZ Transport Agency specifications for interchange spacing, as it is located between Drury and the future Mill Road/Drury South interchanges.

Each of the above risks should be captured within the report, with feedback being requested from Auckland Transport and the NZ Transport Agency.

Request 9. We recommend that feedback is sought from Auckland Transport and the NZ Transport Agency regarding the access strategy for the Metropolitan Centre. This feedback should be included and discussed within the modelling report.

Request 10 Explanation: Section 3.1.2 states that the Drury Interchange upgrade is planned to be completed in 2024 but the report does identify the source of this information. We understand that the widening of SH1 between Papakura and Drury may be completed by 2024, where this may include some

tie in improvements at the Drury Interchange (i.e. northbound ramp configurations). The extent to which the Interchange will be upgraded however needs to be confirmed.

Request 10. We recommend that feedback is sought from the NZ Transport Agency regarding the completion of the Papakura to Drury project, and scope of upgrades to the Drury Interchange. This feedback should be reflected in the Saturn model.

3.1.4 Precinct provisions

Request 11 Explanation: Section 2.7 of the modelling report refers to potential staging/progressive upgrades for some infrastructure. Taking into consideration the feedback provided above, please comment on how the proposed precinct provisions identify progressive/staged upgrades that results in traffic effects consistent with the transport assessment, pointing to travel choice.

Request 11. Please comment on the feasibility of the proposed multiple upgrades to the Waihoehoe Road/Great South Road intersection, compared with implementing one or two upgrades to achieve the same result. Consideration should be given to the disruption to the transport network and provision for all modes of transport.

3.2 Modelling methodology and results

3.2.1 Additional Reports

Request 12 Explanation: The modelling report references the Drury East Modelling Report Rev B dated 18 June 2019.

Request 12. Please include a summary of the findings from the Drury East Modelling Report Rev B, dated 18 June 2019, within the modelling report or otherwise provide this report for review.

3.2.2 State Highway 1 and Drury Interchange

Request 13 and 14 Explanation: Section 1 of the modelling report assumes that the completion of SH1 roadworks north of Drury Interchange will alleviate pressure on the transport network, including the Great South Road/Waihoehoe Road intersection.

Please explain the basis of this assumption. The extension of the Southern Motorway Improvements from Papakura to Drury had a modal shift philosophy, where additional lane capacity focusses on moving people rather than cars. As such, any assumptions in the model may be overly optimistic in terms of capacity gained by the improvements, which therefore may not alleviate pressure (to a great extent) at the Great South Road/Waihoehoe Road intersection. While three general traffic lanes may be the outcome, guidance should be sought from the Transport Agency on what may be delivered for SH1 (between Papakura and Drury) to ensure the transport modelling reflects anticipated network improvements.

Request 13. Please clarify the basis for the assumption that the completion of State Highway 1 works north of Drury Interchange will alleviate pressure on the transport network, including the Great South Road/Waihoehoe Road intersection?

Request 14. Please comment on the assumed allocation of lanes on State Highway 1 north of Drury Interchange (e.g. general traffic, high occupancy priority, bus lane, etc)?

Request 15 and 16 Explanation: Section 3.2 of the report states that network capacity upgrades at the Drury Interchange will be required before 2038 by doubling the northbound on-ramps at Drury Interchange. There is insufficient detail regarding the feasibility and practicality of the proposed onramp capacity increase.

The SATURN traffic model controls on-ramp capacity through a two-lane ramp meter, with the capacity reflecting 1,440 vehicles per hour. This is based on the calculation of 1800 vehicles per lane x 2 (two lanes) with 2 seconds green time over a 5 second cycle. Assuming the doubling of the northbound onramps needs to be clarified, as capacity is metered by the two-lane ramp meter signal.

With the traffic model already assuming a two-lane ramp meter at the stop line, the feasibility of doubling the on-ramp lanes at the stop line is not clear. Providing two additional lanes on the on-ramp joining the motorway would require an additional northbound lane on State Highway 1 (widening to four lanes).

There may be an opportunity for a high occupancy vehicle/transit lane/truck bypass lane at the meter signal which could deliver some improvement in capacity.

The appetite for a high occupancy vehicle/transit lane/truck bypass lane should be discussed with the NZ Transport Agency, and/or whether the timing of the bypass lane has been incorporated into the analysis. The text which refers to the "doubling" of lanes should be clarified.

Request 15. Section 3.2 of the report states that the northbound on-ramp capacity at Drury Interchange will be "doubled". Please clarify how this will be achieved, and discuss any downstream effects on State Highway 1? We note that the on ramp in the model already includes a two-lane ramp meter and bypass lane.

Request 16. Please comment on the potential benefit of a high occupancy vehicle/transit lane/truck bypass lane that the northbound on-ramp capacity at Drury Interchange?

3.2.3 Land-use assumptions

Request 17 Explanation: Section 2.2.1 of the modelling report should clearly state whether the PPC landuses were updated in the macro simulation model (MSM) to obtain updated trip demands.

Request 17. Please confirm whether the MSM outputs include the PPC land-use scenario?

Section 2.3 and 3.1 of the modelling memo reference a 27/06/19 land-use memo from B&A, whereas Section 2.1 references a 01/07/19 land-use memo.

Request 18 Explanation: Please clarify which version of the land-use assumptions have been used in the modelling, including outside of the PPC area. It may be helpful to provide a summary of the land-use used in the modelling, and a comparison to the current land-use assumptions if these are different from those used in the modelling.

Request 18. Please confirm the land-use assumptions used in the traffic modelling, including outside the PPC area, and whether these assumptions match the current land-use assumptions from B&A? We suggest that these assumptions be tabulated in the modelling report.

Request 19 Explanation: It would be useful for Table 2-1 to also include MSM scenario 11.4 land-use assumptions.

Request 19. Please include MSM scenario 11.4 land-use assumptions within Table 2-1?

Request 20 Explanation: The report states that "The employment assumptions for Drury East have been adjusted using an estimated target build-out of 5,090 jobs", however Table 2-1 states an estimated 15,420 jobs.

Request 20. Please clarify the number of jobs estimated within the PPC area?

Request 21 Explanation: The report states that the SGA ITA does not clearly outline the land-use assumptions for each year. Instead, the report has used a growth rate per year based on Table 7-3 of the Supporting Growth Alliance ITA. Based on the methodology applied by Stantec, it suggests that an arithmetic growth outcome is assumed, rather than a stepped outcome. We note that Section 7.2.2 of the Supporting Growth Alliance ITA provides a description and analysis of how intermediate years (2028 and 2038) have been provided.

Please reconsider whether the SGA ITA provides enough material from which to appreciate the intermediate years (2028 and 2038) from which comparisons can be assessed.

Request 21. Please confirm if information from Section 7.2.2 of the Supporting Growth Alliance Drury ITA has been incorporated within the modelling report.

Request 22 Explanation: Table 2-2 provides land-use assumptions for Pukekohe and Paerata. Further on in the text, it is explained that these assumptions are based on MSM without further modification. The table header should clarify that these assumptions are based on MSM.

Request 22. For clarity please revise the header of Table 2-2 to "MSM Land-use Assumptions".

3.2.4 Public transport mode share

Request 23 Explanation: Section 2.4 notes that trip generation data from the MSM model was validated in 2016. Section 3.1 uses MSM 2016 outputs to determine whether infrastructure beyond that assumed in the Supporting Growth Alliance ITA is required before 2028.

How does the MSM model perform for Drury? Assumed car trip generation rates assumed a level of PT usage. Table 2-4 indicates that MSM assumes 7% of trips by PT for trips originating in Drury during the

AM peak. However, the only PT service in Drury is the 376 Service to Papakura, which is a local service at low frequency.

We request that the underlying assumptions in MSM be considered and cross checked, before accepting the MSM prediction and using this as a basis for forecast modelling of Drury East.

Request 23. Please provide evidence that the MSM model reflects existing traffic conditions and mode share splits to an acceptable degree of accuracy for the Drury area?

Request 24 Explanation: Section 3.1.2 indicates that, in absence of a direct vehicle connection to the Metropolitan Centre, the public transport mode share needs to be 10% in 2026 and 12% in 2028 for the Great South Road / Waihoehoe Rd roundabout to perform acceptably. The author states that this mode share is very likely to be achieved. Further explanation is required of how the 10% and 12% public transport mode share will be achieved, noting that the modelled baseline requires validation.

Request 24. Please provide further discussion on how the target public transport mode share for 2026 and 2028 is achieved and what the impacts are on the operation of the Great South Road/Waihoehoe Road intersection if not achieved?

Request 25 Explanation: Table 2-3 shows a reduction in the car trip rate from 2016 to 2028, on the assumption that more trips are made by PT. Please confirm if the reduction in the car trip rate assumptions align with the provision of improved PT services. The report should comment on how many trips are expected to use PT, through a mode share assessment.

Request 25. Please provide a public transport mode share assessment that forecasts the number of public transport trips in 2028. Please also comment on any improvements or investment needed to support and enable these trips?

Request 26 Explanation: The modelling report states that the difference in public transport usage between Drury West and Drury East is a "quirk" of the MSM model. To what extent does this quirk impact on the PPC assessment? Similar to the above query, the assessment should not by accepting the MSM outputs as the default. If "quirks" exist, these should be corrected in the SATURN model and discussed with the Auckland Forecasting Centre to see whether any factors applied to each side of Drury can be corrected or made consistent. Consistent with our recommendation above, the MSM public transport mode share outputs should be validated against existing public transport use for Drury East.

Request 26. Please explain how the difference in public transport usage between Drury West and Drury East, as modelled in MSM, affects the PPC assessment? Please confirm the public transport mode share (2016) for Drury East which has been assumed in the Report, as Section 2.5 in ambiguous. We recommend that this difference is discussed with the Auckland Forecasting Centre to confirm whether adjustments to the MSM model are required.

Request 27 Explanation: There is potential for additional catchment for the train station from the Auranga development. High quality walking and cycling facilities have been constructed on Bremner Road, these could be extended onto Firth Street and over Great South Road to provide a ready

connection to the train station. This may support earlier delivery of the train station and/or train services.

Request 27. Please confirm whether the potential catchment for the train station from the nearby Auranga development been considered, and if so, would provision of a quality walking and cycling connection increase overall public transport mode share and reduce congestion at key constraint points on the network.

3.2.5 Select link analysis and Saturn outputs

Request 28 Explanation: Section 3 of the modelling report states that the modelling has considered the traffic effects on the wider network. Please clarify the extent to which the wider network has been considered, and what the effects are forecast to be. The select link analysis shows a large number of vehicles using Great South Road to travel to/from the north, yet there is no reporting on the wider network and the effects associated with the travel patterns currently reflected in the transport model.

Request 28. Please clarify the extent to which the wider network has been considered in the modelling, and what the effects are forecast to be should development occur at a faster rate than anticipated by the FULSS?

Request 29 Explanation: Section 2.4.1.1 discusses the select link analysis has been undertaken on inbound and outbound trips in peak periods following 2028. Please confirm whether the select link analysis used the Supporting Growth Alliance or PPC Saturn model. Also, confirm what level of development was assumed within the PPC and surrounding areas for each select link analysis assessment.

Request 29. Please confirm whether the select link analysis used the Supporting Growth Alliance or PPC Saturn model, and clarify what level of development was assumed for each analysis?

Request 30 and 31 Explanation: The select link analysis shown in Figures 2-6 and 2-7 of the modelling report shows a much greater use of Great South Road compared to State Highway for northbound trips. This shows a disproportionate level of demand concentrated to Great South Road, rather than using the Drury Interchange. This may be due to delays near Papakura not being represented in the model. The outcome of the select analysis highlights the need to be careful when using the predicted travel patterns when determining infrastructure upgrades. If the directional split at the Great South Road / Waihoehoe Road intersection places too much weight on Great South Road (north), this will cause intersection upgrades to focus on providing too much capacity to the wrong movements or provide more capacity than what is needed.

- Request 30. Please provide a wider scope for the select link analysis for northbound trips. This should include consideration of forecast delays at relevant key intersections in Papakura, and a sense check of trip allocation between State Highway 1 and Great South Road (north).
- Request 31. Please provide origin/destination select link analysis for each of the three PPC areas, so traffic volumes, routing, and potential constraint points on the network can be clearly identified.

Request 32 Explanation: In Section 3.1.1. the author notes that State Highway 1 Papakura to Drury project will have three lanes northbound and southbound, however, the author states that the upgrade is not required to support Drury East development before 2028. However other sections of the modelling report rely on this upgrade to reduce or remove the current level of congestion experienced through Drury (e.g. Section 3.1.2.), yet in this section of the report suggests that the widening is not required.

Request 32. Please confirm the configuration of State Highway 1, between Papakura and Drury, assumed in the PPC Saturn model, and comment on how this effects development within the PPC area?

Request 33 Explanation: Table 3-5 shows a significant increase in vehicles per day on Waihoehoe Road between 2027 and 2028 (17,500 vs 27,700). Please clarify why when other years have much smaller increases.

Request 33. Please explain why the Saturn model shows a significant increase in vehicles per day on Waihoehoe Road between 2027 and 2028?

Reference: P:\ACXX\395 Drury East Private Plan Change - Kiwi Property\Reporting\T3C200303 - Modelling report Clause 23 requests.docx - Mat Collins

APPENDIX C Clause 23 request summary (Drury **East Modelling Report)**

technical note



PROJECT ACXX395: DRURY EAST PRIVATE PLAN CHANGE – KIWI PROPERTY

SUBJECT DRURY EAST MODELLING REPORT - CLAUSE 23 INFORMATION REQUESTS

TO MICHAEL LUONG (AC), DAVID MEAD (HYC)

FROM MAT COLLINS

REVIEWED BY TERRY CHURCH

DATE 03 MARCH 2020

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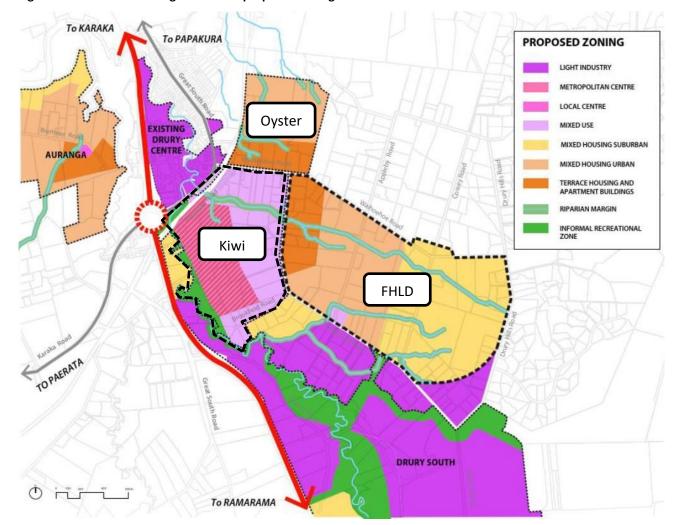


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While this reference to the Highway Capacity Manual provides an assessment of capacity, it is unclear whether consideration has been given to other outcomes, such as Place. The report should also reference Auckland Transport's Roads and Streets Framework, which includes consideration of place value.

Request 5. Please provide a discussion on how the proposed local road upgrades align with Auckland Transport's Roads and Streets Framework and that being investigated and pursued by the Supporting Growth Alliance, and in particular, how the proposed mitigation for Waihoehoe Road is consistent with that which AT will be seeking designation for.

Request 6 Explanation: Section 2.7 of the modelling report does not discuss upgrades to the Drury East rail station, whereas the Precinct provisions specify that temporary stations can be provided as part of rail electrification. Please summarise what assumptions were included in the model regarding enabling rail as a transport option prior to delivery of fully functional rail stations and provide commentary on whether these mode share assumptions are likely to align with the user perception of a "temporary" rail station.

Request 6. Please confirm what assumptions were included in the model regarding enabling rail as a transport option prior to a fully functional rail station being delivered. Provide commentary on whether these mode share assumptions are likely to align with the user perception of a "temporary" rail station or a development strategy which may start from the south, rather than around the station itself.

3.1.2 Third party infrastructure

Request 7 Explanation: The report has considered the Supporting Growth future transport network and states that the 2038 and 2048 modelling is "satisfactory" as all key infrastructure required to support the growth are anticipated to have been implemented.

The modelling should consider the risks associated with Supporting Growth infrastructure implementation. While some enabling projects may be "committed", they are not funded and as such the certainty of these being on the ground by the intended date/or around the time of the land use anticipated is occupied (particularly those in the short term) should have further discussion in the report.

Request 7. Please comment on the "what", "how", "when" and "by whom" for the third party delivered infrastructure required to support the PPC. This should include discussion about the staging of infrastructure to provide for a safe network which enables walking, cycling, and public transport trips in line with the mode share assumptions made in the modelling report.

Request 8 Explanation: The author concludes that the PPC is unlikely to have a significant adverse effect on the traffic network if the infrastructure required to support the PPC is implemented. However, commitment to the required infrastructure is yet to be confirmed. At this point the only safe assumption is that funded projects in the RLTP will be delivered.

Request 8. While the government has provided support around major infrastructure projects, the applicant will need to confirm the "what", "how", "when" and "by whom" for the infrastructure required to support the PPC. Confirmation should include how funding is assured, rather than suggesting there is a commitment.

3.1.3 Road Controlling Authority Liaison

Request 9 Explanation: The report states that three potential accesses to the Metropolitan Centre were considered:

- Direct access to the Drury Interchange
- Firth Street access
- Quarry Road access

Section 2.7.1 of the modelling report identifies that further liaison with the NZ Transport Agency is required to confirm the access strategy.

There is uncertainty regarding each of these options:

- Direct Access. The Structure Plan and SGA ITA show this link, however, this is based on a 2048 year (when pressure on the Drury Interchange will be relieved by the Drury South Interchange). It is unclear whether the NZ Transport Agency will support direct access to the Drury Interchange before the Drury South interchange and Pukekohe Expressway are in place. It is also unclear whether this link complies with safety and geometric standards due to the need to get sufficient vertical clearance over the rail line.
 - As such, greater weight should be placed on the no-connection scenario, which also places greater focus on other modes, particularly public transport.
- Firth Street Access. It is unclear whether the NZ Transport agency would support this option, given the proximity of the access at Firth Street to the Drury Interchange, particularly once the interchange footprint is widened to cater for widening of the State Highway 1 carriageway in the future.
- Quarry Road. It is unclear whether placing additional ramps at Quarry Road will fit within NZ Transport Agency specifications for interchange spacing, as it is located between Drury and the future Mill Road/Drury South interchanges.

Each of the above risks should be captured within the report, with feedback being requested from Auckland Transport and the NZ Transport Agency.

Request 9. We recommend that feedback is sought from Auckland Transport and the NZ Transport Agency regarding the access strategy for the Metropolitan Centre. This feedback should be included and discussed within the modelling report.

Request 10 Explanation: Section 3.1.2 states that the Drury Interchange upgrade is planned to be completed in 2024 but the report does identify the source of this information. We understand that the widening of SH1 between Papakura and Drury may be completed by 2024, where this may include some

tie in improvements at the Drury Interchange (i.e. northbound ramp configurations). The extent to which the Interchange will be upgraded however needs to be confirmed.

Request 10. We recommend that feedback is sought from the NZ Transport Agency regarding the completion of the Papakura to Drury project, and scope of upgrades to the Drury Interchange. This feedback should be reflected in the Saturn model.

3.1.4 Precinct provisions

Request 11 Explanation: Section 2.7 of the modelling report refers to potential staging/progressive upgrades for some infrastructure. Taking into consideration the feedback provided above, please comment on how the proposed precinct provisions identify progressive/staged upgrades that results in traffic effects consistent with the transport assessment, pointing to travel choice.

Request 11. Please comment on the feasibility of the proposed multiple upgrades to the Waihoehoe Road/Great South Road intersection, compared with implementing one or two upgrades to achieve the same result. Consideration should be given to the disruption to the transport network and provision for all modes of transport.

3.2 Modelling methodology and results

3.2.1 Additional Reports

Request 12 Explanation: The modelling report references the Drury East Modelling Report Rev B dated 18 June 2019.

Request 12. Please include a summary of the findings from the Drury East Modelling Report Rev B, dated 18 June 2019, within the modelling report or otherwise provide this report for review.

3.2.2 State Highway 1 and Drury Interchange

Request 13 and 14 Explanation: Section 1 of the modelling report assumes that the completion of SH1 roadworks north of Drury Interchange will alleviate pressure on the transport network, including the Great South Road/Waihoehoe Road intersection.

Please explain the basis of this assumption. The extension of the Southern Motorway Improvements from Papakura to Drury had a modal shift philosophy, where additional lane capacity focusses on moving people rather than cars. As such, any assumptions in the model may be overly optimistic in terms of capacity gained by the improvements, which therefore may not alleviate pressure (to a great extent) at the Great South Road/Waihoehoe Road intersection. While three general traffic lanes may be the outcome, guidance should be sought from the Transport Agency on what may be delivered for SH1 (between Papakura and Drury) to ensure the transport modelling reflects anticipated network improvements.

- Request 13. Please clarify the basis for the assumption that the completion of State Highway 1 works north of Drury Interchange will alleviate pressure on the transport network, including the Great South Road/Waihoehoe Road intersection?
- Request 14. Please comment on the assumed allocation of lanes on State Highway 1 north of Drury Interchange (e.g. general traffic, high occupancy priority, bus lane, etc)?

Request 15 and 16 Explanation: Section 3.2 of the report states that network capacity upgrades at the Drury Interchange will be required before 2038 by doubling the northbound on-ramps at Drury Interchange. There is insufficient detail regarding the feasibility and practicality of the proposed onramp capacity increase.

The SATURN traffic model controls on-ramp capacity through a two-lane ramp meter, with the capacity reflecting 1,440 vehicles per hour. This is based on the calculation of 1800 vehicles per lane x 2 (two lanes) with 2 seconds green time over a 5 second cycle. Assuming the doubling of the northbound onramps needs to be clarified, as capacity is metered by the two-lane ramp meter signal.

With the traffic model already assuming a two-lane ramp meter at the stop line, the feasibility of doubling the on-ramp lanes at the stop line is not clear. Providing two additional lanes on the on-ramp joining the motorway would require an additional northbound lane on State Highway 1 (widening to four lanes).

There may be an opportunity for a high occupancy vehicle/transit lane/truck bypass lane at the meter signal which could deliver some improvement in capacity.

The appetite for a high occupancy vehicle/transit lane/truck bypass lane should be discussed with the NZ Transport Agency, and/or whether the timing of the bypass lane has been incorporated into the analysis. The text which refers to the "doubling" of lanes should be clarified.

- Request 15. Section 3.2 of the report states that the northbound on-ramp capacity at Drury Interchange will be "doubled". Please clarify how this will be achieved, and discuss any downstream effects on State Highway 1? We note that the on ramp in the model already includes a two-lane ramp meter and bypass lane.
- Request 16. Please comment on the potential benefit of a high occupancy vehicle/transit lane/truck bypass lane that the northbound on-ramp capacity at Drury Interchange?

3.2.3 Land-use assumptions

Request 17 Explanation: Section 2.2.1 of the modelling report should clearly state whether the PPC landuses were updated in the macro simulation model (MSM) to obtain updated trip demands.

Request 17. Please confirm whether the MSM outputs include the PPC land-use scenario?

Section 2.3 and 3.1 of the modelling memo reference a 27/06/19 land-use memo from B&A, whereas Section 2.1 references a 01/07/19 land-use memo.

Request 18 Explanation: Please clarify which version of the land-use assumptions have been used in the modelling, including outside of the PPC area. It may be helpful to provide a summary of the land-use used in the modelling, and a comparison to the current land-use assumptions if these are different from those used in the modelling.

Request 18. Please confirm the land-use assumptions used in the traffic modelling, including outside the PPC area, and whether these assumptions match the current land-use assumptions from B&A? We suggest that these assumptions be tabulated in the modelling report.

Request 19 Explanation: It would be useful for Table 2-1 to also include MSM scenario 11.4 land-use assumptions.

Request 19. Please include MSM scenario 11.4 land-use assumptions within Table 2-1?

Request 20 Explanation: The report states that "The employment assumptions for Drury East have been adjusted using an estimated target build-out of 5,090 jobs", however Table 2-1 states an estimated 15,420 jobs.

Request 20. Please clarify the number of jobs estimated within the PPC area?

Request 21 Explanation: The report states that the SGA ITA does not clearly outline the land-use assumptions for each year. Instead, the report has used a growth rate per year based on Table 7-3 of the Supporting Growth Alliance ITA. Based on the methodology applied by Stantec, it suggests that an arithmetic growth outcome is assumed, rather than a stepped outcome. We note that Section 7.2.2 of the Supporting Growth Alliance ITA provides a description and analysis of how intermediate years (2028 and 2038) have been provided.

Please reconsider whether the SGA ITA provides enough material from which to appreciate the intermediate years (2028 and 2038) from which comparisons can be assessed.

Request 21. Please confirm if information from Section 7.2.2 of the Supporting Growth Alliance Drury ITA has been incorporated within the modelling report.

Request 22 Explanation: Table 2-2 provides land-use assumptions for Pukekohe and Paerata. Further on in the text, it is explained that these assumptions are based on MSM without further modification. The table header should clarify that these assumptions are based on MSM.

Request 22. For clarity please revise the header of Table 2-2 to "MSM Land-use Assumptions".

3.2.4 Public transport mode share

Request 23 Explanation: Section 2.4 notes that trip generation data from the MSM model was validated in 2016. Section 3.1 uses MSM 2016 outputs to determine whether infrastructure beyond that assumed in the Supporting Growth Alliance ITA is required before 2028.

How does the MSM model perform for Drury? Assumed car trip generation rates assumed a level of PT usage. Table 2-4 indicates that MSM assumes 7% of trips by PT for trips originating in Drury during the

AM peak. However, the only PT service in Drury is the 376 Service to Papakura, which is a local service at low frequency.

We request that the underlying assumptions in MSM be considered and cross checked, before accepting the MSM prediction and using this as a basis for forecast modelling of Drury East.

Request 23. Please provide evidence that the MSM model reflects existing traffic conditions and mode share splits to an acceptable degree of accuracy for the Drury area?

Request 24 Explanation: Section 3.1.2 indicates that, in absence of a direct vehicle connection to the Metropolitan Centre, the public transport mode share needs to be 10% in 2026 and 12% in 2028 for the Great South Road / Waihoehoe Rd roundabout to perform acceptably. The author states that this mode share is very likely to be achieved. Further explanation is required of how the 10% and 12% public transport mode share will be achieved, noting that the modelled baseline requires validation.

Request 24. Please provide further discussion on how the target public transport mode share for 2026 and 2028 is achieved and what the impacts are on the operation of the Great South Road/Waihoehoe Road intersection if not achieved?

Request 25 Explanation: Table 2-3 shows a reduction in the car trip rate from 2016 to 2028, on the assumption that more trips are made by PT. Please confirm if the reduction in the car trip rate assumptions align with the provision of improved PT services. The report should comment on how many trips are expected to use PT, through a mode share assessment.

Request 25. Please provide a public transport mode share assessment that forecasts the number of public transport trips in 2028. Please also comment on any improvements or investment needed to support and enable these trips?

Request 26 Explanation: The modelling report states that the difference in public transport usage between Drury West and Drury East is a "quirk" of the MSM model. To what extent does this quirk impact on the PPC assessment? Similar to the above query, the assessment should not by accepting the MSM outputs as the default. If "quirks" exist, these should be corrected in the SATURN model and discussed with the Auckland Forecasting Centre to see whether any factors applied to each side of Drury can be corrected or made consistent. Consistent with our recommendation above, the MSM public transport mode share outputs should be validated against existing public transport use for Drury East.

Request 26. Please explain how the difference in public transport usage between Drury West and Drury East, as modelled in MSM, affects the PPC assessment? Please confirm the public transport mode share (2016) for Drury East which has been assumed in the Report, as Section 2.5 in ambiguous. We recommend that this difference is discussed with the Auckland Forecasting Centre to confirm whether adjustments to the MSM model are required.

Request 27 Explanation: There is potential for additional catchment for the train station from the Auranga development. High quality walking and cycling facilities have been constructed on Bremner Road, these could be extended onto Firth Street and over Great South Road to provide a ready

connection to the train station. This may support earlier delivery of the train station and/or train services.

Request 27. Please confirm whether the potential catchment for the train station from the nearby Auranga development been considered, and if so, would provision of a quality walking and cycling connection increase overall public transport mode share and reduce congestion at key constraint points on the network.

3.2.5 Select link analysis and Saturn outputs

Request 28 Explanation: Section 3 of the modelling report states that the modelling has considered the traffic effects on the wider network. Please clarify the extent to which the wider network has been considered, and what the effects are forecast to be. The select link analysis shows a large number of vehicles using Great South Road to travel to/from the north, yet there is no reporting on the wider network and the effects associated with the travel patterns currently reflected in the transport model.

Request 28. Please clarify the extent to which the wider network has been considered in the modelling, and what the effects are forecast to be should development occur at a faster rate than anticipated by the FULSS?

Request 29 Explanation: Section 2.4.1.1 discusses the select link analysis has been undertaken on inbound and outbound trips in peak periods following 2028. Please confirm whether the select link analysis used the Supporting Growth Alliance or PPC Saturn model. Also, confirm what level of development was assumed within the PPC and surrounding areas for each select link analysis assessment.

Request 29. Please confirm whether the select link analysis used the Supporting Growth Alliance or PPC Saturn model, and clarify what level of development was assumed for each analysis?

Request 30 and 31 Explanation: The select link analysis shown in Figures 2-6 and 2-7 of the modelling report shows a much greater use of Great South Road compared to State Highway for northbound trips. This shows a disproportionate level of demand concentrated to Great South Road, rather than using the Drury Interchange. This may be due to delays near Papakura not being represented in the model. The outcome of the select analysis highlights the need to be careful when using the predicted travel patterns when determining infrastructure upgrades. If the directional split at the Great South Road / Waihoehoe Road intersection places too much weight on Great South Road (north), this will cause intersection upgrades to focus on providing too much capacity to the wrong movements or provide more capacity than what is needed.

- Request 30. Please provide a wider scope for the select link analysis for northbound trips. This should include consideration of forecast delays at relevant key intersections in Papakura, and a sense check of trip allocation between State Highway 1 and Great South Road (north).
- Request 31. Please provide origin/destination select link analysis for each of the three PPC areas, so traffic volumes, routing, and potential constraint points on the network can be clearly identified.

Request 32 Explanation: In Section 3.1.1. the author notes that State Highway 1 Papakura to Drury project will have three lanes northbound and southbound, however, the author states that the upgrade is not required to support Drury East development before 2028. However other sections of the modelling report rely on this upgrade to reduce or remove the current level of congestion experienced through Drury (e.g. Section 3.1.2.), yet in this section of the report suggests that the widening is not required.

Request 32. Please confirm the configuration of State Highway 1, between Papakura and Drury, assumed in the PPC Saturn model, and comment on how this effects development within the PPC area?

Request 33 Explanation: Table 3-5 shows a significant increase in vehicles per day on Waihoehoe Road between 2027 and 2028 (17,500 vs 27,700). Please clarify why when other years have much smaller increases.

Request 33. Please explain why the Saturn model shows a significant increase in vehicles per day on Waihoehoe Road between 2027 and 2028?

Reference: P:\ACXX\395 Drury East Private Plan Change - Kiwi Property\Reporting\T3C200303 - Modelling report Clause 23 requests.docx - Mat Collins



Memo (technical specialist report to contribute towards Council's section 42A hearing report)

19th May 2021

To: David Mead, Hill Young Cooper Ltd., consultant to Auckland Council

From: Rebecca Skidmore, RA Skidmore Urban Design Ltd.

Subject: Private Plan Change – PPC48 Drury Centre Precinct, Drury – Urban Design, Landscape and Visual Effects Assessment Review

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, landscape and visual effects.
- 1.2 I am an Urban Designer and Landscape Architect. I am a director of the consultancy RA Skidmore Urban Design Limited and have held this position for approximately seventeen years.
- 1.3 I hold a Bachelor of Science degree from Canterbury University (1987), a Bachelor of Landscape Architecture (Hons) degree from Lincoln University (1990), and a Master of Built Environment (Urban Design) degree from Queensland University of Technology in Brisbane (1995).
- 1.4 I have approximately 25 years professional experience, practising in both local government and the private sector. In these positions I have assisted with district plan preparation and I have assessed and reviewed a wide range of resource consent applications throughout the country. These assessments relate to a range of rural, residential and commercial proposals.
- 1.5 I regularly assist councils with policy and district plan development in relation to growth management, urban design, landscape, character and amenity matters.
- 1.6 I am an accredited independent hearing commissioner. I also regularly provide expert evidence in the Environment Court and I have appeared as the Court's witness in the past.
- 1.7 In writing this memo, I have reviewed the following documents:
 - The lodged plan change request Section 32 Assessment report and, specifically, the Plan Change provisions contained in Appendix 1, the Urban Design Assessment report by B&A (dated 12th December 2019, contained in Appendix 7) and the Landscape and Visual Effects Assessment report by Boffa Miskell Ltd. (dated 5th February 2020);
 - The planning RFI response from B&A dated 25th March 2020, including the updated Urban Design Assessment (dated 20/03/2020) contained in Attachment 3 and the landscape and visual effects assessment response (dated 4/03/2020) contained in Attachment 4;
 - The summary of submissions and further submissions and complete submissions where relevant.

- 1.8 My review is carried out in the context of:
 - (a) The Resource Management Act;
 - (b) The National Policy Statement: Urban Development;
 - (c) The Auckland Unitary Plan: Regional Policy Statement;
 - (d) The Auckland Plan: 2050;
 - (e) The Drury-Opāheke Structure Plan; and
 - (f) The Southern Structure Plan Area Neighbourhood Design Statement

2.0 Key Urban Design, Landscape and Visual Effects Issues

Urban Design

- 2.1 The following sections address a number of urban design topics, having considered the assessment reports, submissions received and statutory frameworks. These can be summarised as:
 - Creation of a transit-oriented centre integration of land-use with transit infrastructure;
 - Extent of PPC area and zoning of land;
 - Consistency with the NPS:UD;
 - Provision of open space as a key structuring element;
 - · Creating a distinct sense of place;
 - Consideration of Mana Whenua values and design.

Landscape and Visual Effects

- 2.2 The following sections address a number of landscape and visual effects considerations. Having considered the assessment reports, submissions received and statutory framework, these can be summarised as:
 - Key structuring elements identified on Precinct Plan 2;
 - Role of views to Hunua Ranges in contributing to distinctive sense of place.
- 2.3 There is a relationship between and some overlap between topics related to urban design considerations and those that relate to landscape and visual effects.

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3.0 Applicant's assessment

Urban Design Assessment (the "UDA")

- 3.1 The UDA summarises the masterplan prepared by Civitas that preceded and has informed the preparation of the plan change. While the masterplan focussed primarily on the Kiwi property landholdings, it also gave consideration to the wider area (including land subject to PPC49 andPPC50). The masterplan identified a number of urban design principles to guide the design response. The principles identified are consistent with best practice urban design and I consider are suitable for this location.
- 3.2 The UDA report qualifies reliance on the masterplan document as it is, by its nature, a 'living document' that will be reviewed and updated during its 30-year timeframe. The report notes that the PPC does not seek to lock in all aspects of the masterplan as currently envisioned. Instead, the provisions seek to support the principles identified along with the key structuring elements. In my opinion, a key question is whether the provisions are suitable to address these key principles and structuring elements.
- 3.3 I note that in Auckland the delivery of metropolitan centres at the edge of the urban area (for example Albany and Westgate) extends over a considerable timeframe, with land often changing ownership and potentially becoming fragmented. The initial development pattern can be quite disperses and car oriented. This can present challenges to delivering the vision that is set out and depicted in the imagery contained in the masterplan documents, with a more intensive and integrated development pattern envisaged. Therefore, it is particularly important that the plan change provisions provide strong guidance to ensure the outcomes sought are achieved.
- 3.4 Section 3 of the UDA sets out a Site (PPC area) and context description and analysis. I note that the masterplan report also includes a more detailed analysis of the Site and its context and is helpfully supported by a series of graphic diagrams.
- 3.5 As noted in the UDA the area is in transition/transformation from rural to urban. The report references both the current zoning of the land as Future Urban and identifies the other private plan changes in the area that are currently under consideration (specifically PPC49 and PPC50).
- 3.6 I note that the indicative location of the future Drury railway station depicted in Figure 4 has not yet been determined and will be delivered by others.
- 3.7 Section 3.5 of the UDA report identifies a number of opportunities and constraints for urban development of the land. I agree with these but also note that the location of the SH, watercourses (including the Hingaia and Fitzgerald Streams) and established Drury village, limit the catchment capacity within an easy walking distance to the train station.
- 3.8 I agree with the identification of relevant documents that provide the planning context for considering the PPC. These are set out in Section 4 of the UDA report. I note that since the report was prepared, the draft NPS UD identified has replaced the NPS-UDC and this has now come into effect.
- 3.9 Section 5 of the UDA report sets out a summary of the PPC. While utilising existing AUP zones, a precinct is proposed that amends the underlying zoning to achieve specific outcomes for this location. A number of sub-precincts (A F) are spatially defined. I

- note that the Precinct provisions include a number of Precinct plans including Precinct Plan 1: Building Height and Precinct Plan 2: Spatial Features.
- 3.10 The Urban Design Assessment is set out in Section 6 of the report. It uses the current Future Urban Zone and the strategic intent of the Drury-Opāheke Structure Plan (the "SP") as a starting point for the assessment and I agree with that approach.
- 3.11 The assessment is organised in relation five overarching themes that are set out in the Neighbourhood Design Statement for the Southern Structure Area of the SP. These are:
 - (a) Neighbourhoods that vary in density and mix of uses according to their locational attributes:
 - (b) Neighbourhoods with many safe choices of movement with good access to services and amenity;
 - (c) Neighbourhoods with many choices of use and activity that reflect the needs of the community and the sub-region;
 - (d) Neighbourhoods that celebrate their unique identity and are attractive, safe and easily understood; and
 - (e) Neighbourhoods that protect and enhance the natural environment while enabling urbanisation.
- 3.12 I agree that these themes provide an appropriate framework for considering urban design matters.
- 3.13 I agree with the report conclusion in Section 7 that the site offers the opportunity for development of a new centre at an intensity and scale that capitalises on its proximity to planned public transport infrastructure. However, I consider there are a number of key factors that require further consideration with amendments to the Precinct provisions to ensure the outcomes sought are achieved. These are discussed further in Section 4 below.

Landscape and Visual Effects Assessment

- 3.14 In my opinion the Landscape and Visual Effects Assessment (the "LVEA") report uses an appropriate and practical methodology to assess the effects of the PPC. Relying on descriptions provided in various other detailed analysis documents, the report identifies the key landscape features and patterns of the area.
- 3.15 The assessment of landscape and visual effects is made in the context of the change anticipated through previous strategic planning work. In this respect the report references the Landscape and Visual Assessment prepared by Opus (dated 4th August 2017) for Auckland Council to inform the development of the SP.
- 3.16 Section 2.4 of the LVEA report explains how the Civitas masterplan draws on the structuring landscape elements to derive an urban form.
- 3.17 The assessment of landscape and visual effects is set out in Section 6. Importantly, the report notes that the PPC enables considerably greater height than that depicted in the Civitas masterplan.

- 3.18 The assessment of landscape effects identifies: provisions relating to the retention, restoration and enhancement of the Site's main watercourses, the effect of earthworks in reducing the more intimate, rolling nature of topography while retaining the broad ridge and gully structure; and the value of indigenous trees within the garden of the Flanagan Villa.
- 3.19 The assessment concludes that, while substantial change will be introduced over time, the future form will retain a suitable response to the Site's natural landscape. The report notes that "the proposed urban form will signal the nature of the centre, creating a legible urban heart associated with the public transport rail network and proportionate in scale with the hill backdrop of the distant Hunua Ranges". I agree with that opinion.
- 3.20 In relation to visual effects, the report notes that the specific nature of visual effects will depend considerably on the future masterplanning and design of specific developments. The report notes the wide visual catchment and the changing nature of the wider landscape. I agree with the assessment that the establishment of 'tall' development has the potential to be initially incongruous. However, over time, as the centre establishes and consolidates, the urban node will establish height variability relative to the surrounding neighbourhoods.
- 3.21 I note that additional assessment of visual effects experienced from the existing Drury settlement was provided in the further information response (dated 18/03/2020). I agree with that assessment.

4.0 Auckland Unitary Plan Framework

- 4.1 The section 42a report sets out a detailed description and analysis of the relevant regional policy statement provisions for considering the plan change. In terms of a consideration of urban design, landscape and visual effects matters following is a summary of the key provisions that have guided my review.
- 4.2 A key overarching objective for urban growth and form (Section B2.2) is to create a 'quality compact urban environment' (Obj. B2.2.1(1)). The objective for creating a quality built environment (B2.3.1(1)) seeks to ensure subdivision, use and development does all of the following:
 - Respond to the intrinsic qualities and physical characteristics of the site and area, including its setting;
 - · Reinforce the hierarchy of centres and corridors;
 - Contribute to a diverse mix of choice and opportunity for people and communities;
 - Maximise resource and infrastructure efficiency;
 - Are capable of adapting to changing needs; and
 - Respond and adapt to the effects of climate change.

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¹ P.21, Landscape and Visual Effects Assessment, Boffa Miskell Ltd., 5/02/2020

- 4.3 Supporting Policy 2.3.2(1) seeks to achieve this by managing the form and design of subdivision, use and development to do all the following:
 - Supports the planned future environment, including its shape, landform, outlook, location and relationship to its surroundings, including landscape and heritage;
 - Contribute to the safety of the site, streets and neighbourhood;
 - Develop street networks and block patterns that provide good access and enable a range of travel options;
 - Achieves a high amenity and safety for pedestrians and cyclists;
 - Meets the functional, and operational needs of the intended use; and
 - Allows for change and enables innovative design and adaptive re-use.
- 4.4 Other relevant policies relate to provision of access for all people using a variety of modes, providing a range of building forms to support choice to meet the needs of Auckland's diverse population, and balancing the main function of streets as places for people and as routes for the movement of vehicles.
- 4.5 A number of objectives for residential growth (B2.4.1) address the way intensification supports a quality compact urban form (B2.4.1(1)), are attractive, healthy and safe (B2.4.1(2), are located in relation to centres, public transport, social facilities or employment opportunities (B2.4.1(3) and increase the housing capacity and choice Auckland's diverse and growing population (B2.4.1(4).

5.0 Assessment of urban design, landscape and visual effects and management methods

Urban Design

- 5.1 In terms of urban design considerations, I generally agree with the analysis provided regarding the suitability of the proposed zone structure. In particular, the use of the Business: Metropolitan Centre zone with a Business: Mixed Use zone at its periphery is appropriate. I come to this view having considered the broad strategic direction determined by the SP. While the Land Use map contained in the SP identified a considerable area as 'Centre' in the general location of the PPC Site, it did not determine the suitable zoning to be applied. In my opinion the mix of Business: Metropolitan Centre ("BMC") surrounded by a Business: Mixed Use ("BMU") (with an emphasis on residential activity) is appropriate in this location.
- 5.2 In my opinion, the suite of provisions proposed raise a number of urban design issues that require further resolution. These relate to:
 - Ensuring integration of transit infrastructure and land-use;
 - Provision of open space as an urban structuring element; and
 - Creating a distinct sense of place.
- 5.3 Following is a discussion of each of these issues.



Integration of transit infrastructure land land-use

- 5.4 Both the UDA report and the accompanying Masterplan report place considerable emphasis on the critical role of the provision of rail transport and the train station as a rationale for the establishment of a transit-oriented centre and their role in providing structuring elements in the new centre, facilitating a quality, compact approach to growth and development. I agree that the passenger rail service and the location of the Drury train station is critical as the foundation for the creation of a transit-oriented centre.
- 5.5 The location for the Drury train station and associated plaza space is spatially defined by the PPC as being located within sub-precinct D of the proposed Precinct. Precinct Plan 2 identifies the future train station and its relationship to Station Plaza and Homestead Park beyond, linked by the key retail street running along the ridgeline, as being important structuring elements. These have been derived from the masterplan work.
- 5.6 However, there remains uncertainty about the final location of the Drury train station. The llatest plans I have seen for the station from the Supporting Growth Alliance ("SGA") (2021) show the train station further to the north towards the Waihoehoe Road intersection. The final location and design of the station platforms will be determined by Kiwi Rail and Auckland Transport. What is important to the success of the urban centre as a transit oriented development, will be the land-side component of the station, including main access points, bus access, the location and configuration of public open space and the way it is activated by surrounding activity and the way streets and their adjacent land use connect to these. The plans that have been prepared by Supporting Growth show vehicle accessways, a large park and ride area and wetland that would severely limit the potential for the station to integrate with a metropolitan urban centre and the creation of a transit oriented urban environment. The configuration shown is the antithesis of an urban transit node and is not compatible with a metropolitan centre environment.
- 5.7 Rather than defining sub-precinct D as accommodating the railway station and associated plaza, provision for this infrastructure could be included in an extended sub-precinct A, enabling greater flexibility for its location to be determined. This precinct could include provisions that focus on elements to take into account the way the station entrances relate to the adjacent plaza space, the configuration and design of the Plaza and the way streets and development interfaces with these. In my opinion, further consideration should be given to the extent of sub-precinct A, given the likely location of the train station further north towards Waihoehoe Road. However, as noted above there is currently considerable uncertainty about how the station could be successfully integrated with the urban environment.
- 5.8 The masterplanning that underpins the proposed Precinct includes three critical structuring elements that need to be seamlessly connected and integrated: the train station and particularly its entrances; the adjacent plaza; and the key retail street. This relationship is diagrammatically depicted in Precinct Plan 2. It is important that the detailed precinct provisions support the delivery of these three components in an integrated manner.
- 5.9 The proposal for a direct connection from SH1 into the Centre, as depicted in Precinct Plan 2, would intersect with the key retail street, in close proximity to the plaza. Given the traffic volumes that are likely associated with this connection, the scale and form of the street could sever this important linkage. Therefore, this link directly off SH1 is not supported.

5.10 Given the criticality of the provision of passenger rail services and the establishment of a Drury railway station being key to creating a transit-oriented metropolitan centre, it will be important that development in the immediately surrounding context is of a scale, design and intensity that both benefits from and supports the transport infrastructure. It is important that surrounding development does not precede and compromise design options for this critical infrastructure. However, it is also important that up-front delivery of some services and amenities are delivered to support the use of the rail connection. In my opinion, the Precinct provisions should be amended / expanded to ensure staging of development is aligned to co-ordinate the delivery of the rail infrastructure with surrounding development.

Provision of Open Space and relationship to surrounding development

- 5.11 The masterplan that underpins the PPC includes a number of key open spaces with differing functions and characters. These provide important structuring elements in the masterplan and, together with the street network, underpin the creation of strong public realm.
- 5.12 Approximately 8.5ha along the east bank of the Hingaia Stream is proposed to be zoned Open Space Informal Recreation. Provision of an open space corridor along the Stream will create a positive amenity that will link to the corridor created at Drury South. As noted in the UDA report, the land identified for the open space corridor has a number of characteristics that present challenges for urban development. However, the location of the large overhead transmission lines also reduces the corridor's attractiveness as an amenity space. The report describes the proposed zone as providing a buffer between development and the Hingaia Stream. I do not think such a wide corridor is necessary to ensure a suitable amenity is created along the stream corridor. However, I acknowledge the limitation created by the transmission lines. The design challenges achieving a high amenity environment that are created by the topography, powerlines and relationship to the motorway will need to be addressed at the development stage and the Precinct provisions should include suitable guidance to ensure this occurs.
- 5.13 The masterplan also locates 'Valley Park' along the Fitzgerald Stream alignment. In my opinion, it would be helpful to identify this stream alignment on Precinct Plan 2 as an important public realm structuring element. Valley Park is not identified on the Precinct Plan and this is appropriate. Whether the park offers any open space benefits can be tested through development consents. However it is important that any development appropriately treats the interface with the stream corridor. Achieving some building height and intensity of activity adjacent to the riparian corridor (20m on both sides of the stream sought by the Council's ecologist) will positivity reinforce the stream as a public realm structuring element and contribute to the amenity of adjacent properties. It is important that the Precinct includes provisions to ensure a positive interface is achieved.
- 5.14 The masterplan also includes a number of urban spaces including Station Plaza, Homestead Park and Town Square. In my opinion, such spaces will perform different functions and will be important to ensure a high amenity public realm commensurate with the metropolitan centre status is created. The design of neighbourhood parks is addressed at Section 6.4.6 of the UDA report. The report notes that the PPC identifies two important areas of open space, being Homestead Park and Station Plaza. I also think the Town Square will be an important part of the public realm and focus within the Centre.

- 5.15 In my opinion, the policy framework, rules and criteria should be more explicit about the outcomes sought for the key open spaces and should require their early establishment along with surrounding development, rather than relying on the Auckland-wide provisions to ensure their delivery.
- 5.16 It is also important that the street network and adjacent land-uses integrate with and activate these spaces. Creating good street edges to public open spaces with buildings oriented to front onto and activate spaces will be important to ensure safety, activation and amenity for the public realm.

Creating a distinct sense of place

- 5.17 Section 6.5 of the UDA report addresses the theme "neighbourhoods that celebrate their unique identity and are attractive, safe and easily understood". The report notes that the primary means of creating a strong local identity and appropriate visual character will be through the height limit enabled in the Business- Metropolitan Centre (72.5m). While this will identify the centre at a broad urban pattern level, it will be important that development reflects its place at a more fine-grained level. In my opinion, the requirement for the consideration of detailed design of both buildings and open spaces in all sub-precincts to consider and reflect distinctive features of this location should be explicitly required in both the policy framework and assessment matters/criteria.
- 5.18 The PPC request includes a number of cultural impact assessments that make various recommendations about urban design and cultural input. In particular, the use of Te Aranga Maori Design Principles is encouraged. The use of these design principles is referred to in the assessment criteria for new buildings. However, it is the public realm, including parks, plazas and streets that the most meaningful integration of these principles could be achieved. In my opinion, the Precinct provisions should be expanded to address this.

Landscape and Visual Effects

5.19 In terms of landscape and visual effects, I generally agree with the LVEA report analysis and the conclusions drawn.

Open Space Structure

- 5.20 In response to a further information query about the role of Fitzgerald Stream as an important landscape feature and urban structuring element (aligned with Valley Park in the masterplan) and whether it should be included in Precinct Plan 2, it was noted that AUP provisions for permanent and intermittent streams will provide for the creation of an open space along the stream and these are relied on².
- 5.21 As set out above, I consider it would be helpful to include the alignment of the stream on Precinct Plan 2 with more explicit reference made to its role as an important public realm structuring element and amenity feature within the Centre.

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² P.3, Further Information Response, Boffa Miskell Ltd., 18/03/2020

Creating a distinct sense of place

- 5.22 The request for further information sought further analysis of the role of maintaining views to the wider landscape to enhance the quality of the public realm and create a distinct sense of place.
- 5.23 The response noted that the land is low-lying in relation to the distant Bombay Hills and Waitakere Ranges and views to these landscape features are unlikely to be retained as the Site and wider area transitions to an urban environment. In relation to the more proximate Hunua Ranges, the response notes ongoing opportunities for visual connections between the future urban area and its hill backdrop. In particular, the retention of east-west axial views along key identified road corridors was noted and the opportunity to align additional east-west streets to enable a visual terminus on the Hunua Ranges as part of subsequent subdivision was identified.
- 5.24 In my opinion, the value of this visual connection in contributing to the sense of place for the developing urban environment should be identified in the policy framework and assessment criteria for subdivision and development.

6.0 Submissions

- 6.1 I have reviewed the summary of submissions and full submissions where these raise matters relevant to urban design, landscape and visual effects considerations. I have also reviewed the relevant further submissions. The submissions raise a number of relevant matters that can be grouped into the following topics:
 - Extent of PPC area and zoning of land;
 - Provision of infrastructure;
 - Consistency with the NPS:UD;
 - Residential amenity;
 - Provision of open space; and
 - Consideration of Mana Whenua values and design.
- 6.2 Following is a discussion of each of these topics.

Extent of PPC area and zoning of land

6.3 The submissions by KiwiRail (#24) seeks the deletion of sub-precinct D with this area removed from the extent of the PPC. The submission by Auckland Council (#27) also seeks that the outer extent of the sub-precinct boundary that extends over and west of the railway line is removed. Given the uncertainty around the final location of the station, as set out in Section 4 above, I agree that this sub-precinct should be deleted (with an expansion of sub-precinct A to include this area). In my opinion Great South Road forms an appropriate edge to the zone to enable land use and design flexibility in relation to future railway station options. As noted above, I also consider the northern extent of sub-precinct A should be re-examined in relation to the likely location of the rail station further to the north towards Waihoehoe Road.



- 6.4 The submission by Jack Burton (#4) seeks the PPC to extend to cover land on the southern side of Brookfield Road and to zone this land BMU. The properties noted in the submission are currently zoned Future Urban. As noted in the submission, the PPC wraps around to the southern side of the western end of Brookfield Road. As an interim development pattern this will result in some incongruity between the two sides of the street and there is not strong rationale for the zone boundary. While there is some rationale in the southern side of the street being zoned to reflect the northern side of the street from an urban design perspective, no further detail has been provided to determine the suitability of this land for development. If not included in the PPC now, a suitable zoning would be determined as part of a subsequent PPC.
- 6.5 The submission by the Papakura Business Association (#11) questions the appropriateness of applying a BMC zone in this location. Economic analysis of the relationship between the two centres is provided by others. From an urban design perspective, I note the advantages of the 'greenfields' nature of this land in delivering a co-ordinated and comprehensive centre, supported by a dense surrounding residential catchment. The BMC zone gives flexibility to enable a scale and intensity that will maximise the potential of a transit-oriented centre. As already discussed, delivery of the rail transit and the co-ordination and integration of land-use with that service is a critical aspect of the rationale for the BMC zone.
- 6.6 Sub-precinct B is intended to be the primary location for large format retail. The submission by NZTA (#23) notes that large format activity is not compatible with the creation of a transit oriented development. While the submission supports the southern end of the PPC area as suitable for bulk retail (if it is to be provided), it seeks the area of sub-precinct B to be reduced by 50%. Others will comment on the demand for large format retail in this location and the spatial requirements to zone sufficient land. In my opinion, sub-precinct B is a suitable location for such activities. These may transition at a future time to more urban and intensive uses as the centre matures.
- 6.7 The submission by Auckland Transport (#27) and NZTA (#23) seek the activity status for large format retail in sub-precincts C and E to be amended to non-complying. Large format retail activities are, by their nature, low intensity and generally car oriented. These activities are not compatible with the intensity of activity associated with transitoriented development or the public realm amenity created to support active mode connections to the train station. Given the location of these sub-precincts in relation to the rail station, I agree that a non-complying activity status is appropriate for subprecincts C and E. I note that the AUP definition for large format retail excludes a number of potentially large and low intensity retail activities including food and beverage, garden centres, marine retail, motor vehicle sales and trade suppliers. Therefore, I recommend that the provisions for the other sub-precincts, and particularly A, C and E, include provisions to ensure a suitable interface is created with the public realm. This includes: buildings fronting and engaging with the street to create a positive interface; avoiding carparking areas directly interfacing with streets or other public spaces and ensuring a high design standard for building design.

Provision of Infrastructure

6.8 As noted above, the delivery of a passenger rail service with a train station as an important urban structuring element is critical to creating a transit-oriented centre. There is currently uncertainty regarding the location of the station and its configuration enabling



suitable integration with a metropoltan urban centre. A number of submission by key stakeholders address this matter.

- 6.9 The submission by Auckland Council (#27) seeks the indicative railway station shown on Precinct Plan 2 be deleted with any other consequential changes to the precinct provisions made. The submission by KiwiRail (#24) seeks to move the 'future train station' and 'station plaza' symbols on Precinct Plan 2 further north to their preferred location. Their submission also suggests that that it should be clear that the locations shown are 'indicative only' and suggests that two separate 'spatial features' precinct plans could be provided; one depicting indicative features, the other confirmed features. The submission by NZTA (#23) seeks that the PPC reflects the final location of the train station.
- 6.10 Given the criticality of the railway station as an important structuring element and catalyst for the creation of a quality, compact urban centre, it would be preferrable to have greater certainty about its location and form in order to accurately reflect this in the PPC provisions. In my opinion, it is important to depict the railway station and associated plaza space on Precinct Plan 2. If greater certainty about its location cannot be provided at this stage, I agree with the submission by KiwiRail, that the annotation should be moved further north. In my opinion, additional clarity could be provided that the location is indicative without the need for an additional plan. One of the values of Precinct Plan 2 is spatially depicting how various features relate to each other.

Consistency with the NPS:UD

- 6.11 A number of submissions seek changes to ensure the PPC is consistent with the NPS:UD. These range from changing the configuration of sub-precincts, with the expansion of sub-Precinct A and deletion of sub-precinct E (as request by NZTA #23 and Auckland Council #22) to increasing height limits within the existing framework of the sub-precincts (as requested by Kiwi Property #15 and Auckland Council #22, and Kāinga Ora #33 and supported by NZTA further submission).
- 6.12 The PPC provisions, including the distribution of sub-precincts has been underpinned by the detailed design analysis and testing depicted in the Civitas masterplan. While the masterplanning has been based on an assumption about the location of the Drury railway station that may not eventuate, I consider the overall urban structure and relationship of BMC and BMU zones/sub-precincts remains appropriate. While enabling a different mix of activities to establish, Sub-precincts E and C provide for a mix of residential and employment generating activities which will benefit from and support the rail transit facility.
- 6.13 A key difference between the zones/sub-precincts is the scale of development enabled with height limits for the sub-precincts:

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- Sub-precinct A: 72.5m;
- Sub-precinct B: 40.5m;
- Sub-precinct C: 25m;
- Sub-precinct D: 72.5m;
- Sub-precinct E: 32.5m; and



- Sub-precinct F: 18m.
- 6.14 I agree with the submitters that suggest that the height limits for sub-precincts E and C should be increased to increase the intensity of activity enabled within an easy walking distance of the rail station and to be consistent with requirements of Policy 3 of the NPS:UD. The submissions by Kiwi Property seeks the following height changes:
 - Sub-precinct E from 32.5m to 40.5m;
 - Sub-precinct C from 25m to 32.5m; and
 - Sub-precinct F from 18m to 26m.
- 6.15 It is unclear from the submission how the height limits proposed have been determined in relation to the number of storeys to be achieved. Clarification on this matter would be helpful. Regardless, in my opinion, the heights proposed provide for considerably increased vertical scale, and potential for increased intensity of use while maintaining a suitable transition from the 72.5m in sub-precinct A. It is important to bear in mind that the height standards are enabling and there are a range of factors that will determine the urban pattern that will ultimately eventuate.

Residential Amenity

- 6.16 The submission by Auckland Council #22) notes that the Daylight and Outdoor Living Space standards are an appropriate addition to the BMU zone standards. The submission seeks the retention of these standards for this zone.
- 6.17 The submission by Auckland Council notes that there is a known gap in the BMU zone and given the emphasis on enabling residential activity within the Precinct, the provisions are important to provide a quality environment for future residents. I agree that the standards are suitable to ensure a reasonable residential amenity is provided. I note that the PPC only proposes these standards to apply to sub-precincts C and E within the BMU zone. In my opinion, they should also apply to sub-precinct F.

Provision of Open Space

- 6.18 A number of submissions seek to ensure suitable provision is made for the delivery of open space.
- 6.19 The submission by Ngāti Te Ata Waiohua seeks the park edge design to all waterways is confirmed. As discussed in Section 4 above, in my opinion, the policy framework, rules and criteria should be more explicit about the outcomes sought for the key open spaces in the PPC area (including stream edges) and should require their establishment along with surrounding development, rather than relying on the Auckland-wide provisions to ensure their delivery.
- 6.20 The submission by Auckland Council (#22) seeks the open space zone along the margins of the Hingaia Stream to be reduced to a width of 20m. In terms of the urban design merits of this open space corridor, I have set out my opinions in Section 4 above.
- 6.21 The Auckland Council submission (supported by Heritage NZ) also seeks indicative open spaces as shown in a map included as Attachment 1 to be included in the precinct plan. This includes a 0.4ha civic space and a 0.5ha neighbourhood Park. The PPC provisions



include reference to the Station Plaza and Homestead Park on Precinct Plan 2. In my opinion, it is important that the Station Plaza has a direct relationship to the railway station and the 'neighbourhood park' is developed around the Homestead. These are important open space structuring elements that have been determined through the masterplan process. As noted in Section 4 above, I also consider the 'town square' as identified in the masterplan will be an important urban amenity space as the metropolitan centre develops and should be suitably referenced and required in the PPC provisions.

Consideration of Mana Whenua values and design

6.22 The submissions by Submissions by Ngāti Te Ata Waiohua (#21) and Ngāti Tamaoho (#35) seek greater recognition of Mana Whenua values in the design process for delivering the urban environments in the PPC area. This includes integrating Te Aranga Maori design principles, responding to features in the landscape and using native planting (supported by Heritage NZ and opposed in part by Kāinga Ora). I have commented on these matters in Section 4 above.

7.0 Conclusions and recommendations

- 7.1 PPC 48 makes provision for a significant and substantial new metropolitan urban centre at Drury. Its location is consistent with the SP for the wider area and is generally appropriate to create a transit-oriented Centre.
- 7.2 However, a critical matter that requires further clarity is the final location and timeframe for delivery of the new Drury Train Station and mechanisms suitable to ensure alignment and integration between delivery of this critical transit infrastructure and surrounding land-use.
- 7.3 The Plan Change has been informed by detailed masterplanning. While this represents only one possible development scenario within the PPC framework, it is useful for understanding key urban design, landscape and visual effects issues PPC.
- 7.4 The UDA and LVEA reports provide suitable assessments of the PPC provisions. I generally agree with the assessments and their conclusion. However, having reviewed these reports and the submissions received I consider considerable uncertainty exists around achieving a transit oriented urban environment that can integrate well with the rail station. In my opinion further analysis is required to demonstrate that integration between the railway station and urban environment of a metropolitan centre scale can be achieved.
- 7.5 In addition, I consider the following matters require further consideration and should be addressed through amendments to the PPC provisions. These matters are important to ensure the PPC appropriately gives effects to the RPS and the creation of a suitable efficiency, functionality, design quality and character is achieved for this metropolitan centre. These matters include:
 - Further consideration of the distribution of sub-Precincts in relation to the railway station. Rather than defining sub-precinct D as accommodating the railway station and associated plaza, provision for this infrastructure could be included in an extended sub-precinct A and identifying important urban design principles to be achieved by the station and its integration with the metropolitan centre. This would enabe greater flexibility for its location to be determined;

- Provide further clarity about the future train station location and amend the
 annotation on Precinct Plan 2 (together with annotation for Station Plaza). Provide
 additional clarity that these locations are indicative. However, its noted that the
 configuration shown in the most recent plans for the railway station would severely
 limit the ability to create an urban environment that integrates well with the station;
- amended / expanded Precinct provisions to ensure staging of development is aligned to co-ordinate the delivery of the rail infrastructure with surrounding development;
- ensure provisions require the key elements of the railway station entrances, station plaza and key retail street are co-ordinated and delivered in an integrated manner;
- Delete the annotation of the indicative collector road from SH1 directly into and across the key retail street from Precinct Plan 2;
- Amend the activity status of large-format retail in sub-precincts C and E to noncomplying;
- Seek further clarity regarding the rationale for height limits sought for sub-precincts
 E, E and F in the submission by Kiwi Property and look to increase the heights enabled in these locations;
- Extend the reference to residential outlook and open space standards to apply to sub-precinct F;
- Identify the Fitzgerald Stream and Hingaia Stream alignments on Precinct Plan 2 as important public realm structuring elements;
- Include additional policy reference and associated provisions to respond to the importance of the Fitzgerald Stream corridor as an important public realm structuring element and amenity feature within the Precinct;
- Amend the policy framework, rules and criteria to be more explicit about the
 outcomes sought for the key open spaces and require their establishment along
 with surrounding development, rather than relying on the Auckland-wide provisions
 to ensure their delivery;
- Expand the policy framework and associated provisions in relation to the creation of a 'town square' civic space, requiring its delivery at a suitable phase in the overall development of the Precinct;
- Amend the policy framework, matters of discretion and associated criteria for subdivision and development to clarify the role and importance of creating good street edges to public open spaces with buildings oriented to front onto and activate spaces in order to ensure safety, activation and amenity for the public realm for all sub-precincts;
- Acknowledge the key routes through the different sub-precincts to provide activemode transport connections to the train station and the importance of adjacent development to create a good amenity for these routes;



- Expand reference to the application of Te Aranga Design Principles to apply to the design of the public realm (including streets);
- Expand the policy framework for the precinct, assessment matters and associated criteria for subdivision and development to acknowledge the value of visual connections to the wider environment in contributing to the urban environment's sense of place. In particular, east-west axial views along key road corridors and their alignment to terminate with views to the Hunua Ranges and foothills should be highlighted;
- Give consideration to extending southern boundary of sub-precinct F to include properties on the southern side of Brookfield Road to the intersection of Fitzgerald Road;

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

16 February 2021

To: David Mead, Reporting Planner

From: Robert Brassey, Principal Specialist Cultural Heritage

Subject: Private Plan Change – PC48 (private): Drury Centre Precinct, Drury – Historic

Heritage Assessment (archaeology)

1.0 Introduction

1.1 I have undertaken a review of the private plan change on behalf of Auckland Council in relation to effects on historic heritage. My review is focussed on effects on archaeological sites. It does not address effects on built heritage, which is the subject of a separate review by Cara Francesco, nor does it address effects on mana whenua cultural values.

I have a Master of Philosophy degree with first Class Honours in anthropology specialising in New Zealand and Pacific archaeology. I have worked in the field of historic heritage management for nearly 40 years, including more than 20 years for Auckland councils. My experience spans archaeology, built and maritime heritage and heritage policy and planning.

- 1.2 In writing this memo, I have reviewed the following documents:
 - S32 Assessment report Drury Metropolitan Centre PPC request
 - Appendix 1 Drury Centre Plan Change
 - Appendix 5 AUP Objectives and Policies Assessment
 - Appendix 14 Archaeological Assessment
 - Appendix 15 Historic Heritage Assessment Flanagan Homestead
 - Appendix 19 Ngāti Tamaoho CVA
 - Drury-Opāheke Structure Plan 2019
 - Drury Structure Plan historic heritage topic report 2017
 - Relevant submissions and further submissions

2.0 Key historic heritage issues

There are buildings and archaeological sites of historic heritage value within the plan change area.

The archaeological report provided by the applicant is a high-level assessment based primarily on desktop research. The scope is limited, in part because 40% of the plan change area was unable to be accessed. There are significant information gaps, primarily in relation to sites associated with the New Zealand Wars of the 1860s.

The assessment does not provide sufficient information to determine if archaeological sites within the plan change area are of significant heritage value and if they will be affected by the proposed plan change.

It is therefore recommended that the plan change provisions are amended to require the identification and assessment of archaeological sites to determine if there are effects on sites of significant heritage value prior to land disturbance for development or planting within the plan change area, and for identified adverse effects to be managed appropriately.

3.0 Applicant's assessment

The applicant has provided two historic heritage assessments. The heritage assessment prepared by Ellen Cameron and Rod Clough of Clough Associates (Appendix 14) addresses archaeological values. A separate built heritage assessment of a building (Flanagan homestead)

within the plan change area has been undertaken by Matthews and Mathews. This second report has been reviewed by Cara Francesco and is not considered here.

The archaeological assessment provides a high-level assessment of archaeological sites recorded or likely to be present in the plan change area based on desktop research and limited field inspection. The assessment notes that the applicant does not own all the land within the plan change area and that a significant proportion of the area was unable to be accessed by the heritage specialists for the purposes of visual inspection.

The archaeological assessment identifies five recorded archaeological sites located within the plan change area, together with additional unrecorded sites of military camps associated with the New Zealand Wars. The locations and extents of the latter are not identified, nor the extents defined, in the assessment. All sites date from the historic era and none are of Māori origin. The report concludes that all sites will potentially be affected by future development.

The values of four recorded sites are assessed against the criteria in the AUPOP historic heritage regional policy statement (B5.2.2). The fifth recorded site was not accessed or assessed. Brief statements of significance are provided for all sites.

The report, dated September 2019, acknowledges that the full effects on archaeological and historic heritage values are not yet known due to access limitations and lack of detailed design details at the time the assessment was undertaken.

Specific recommendations of the report include:

- Future development plans should take account recorded archaeological sites and avoid them where possible.
- When future development is planned that will affect recorded archaeological sites and areas
 where military camps were located (including the property at 111 Fitzgerald Road) a survey
 should be carried out and an evaluation of the archaeological values should be undertaken to
 determine the level of potential effects and recommend appropriate detailed mitigation measures.
- Interpretive signage and display of mill stones at the [supposed] site of Flanagan's mill (but see 4.0 below).
- Heritage New Zealand archaeological authorities will be necessary and mitigation measures would also be required for any impacts on recorded and unrecorded archaeological sites.

4.0 Assessment of historic heritage effects and management methods

The heritage assessment has significant gaps and limitations. These in part result from the timing of the report and other circumstances beyond the control of its authors.

• The report is a high-level assessment based primarily on desktop research and is dated September 2019. Limited site inspections were conducted on 6 April 2017 and 11 January 2019.

Some of the information upon which the report is based is now outdated. Several archaeological or reported sites have been recorded or updated within 500m of the plan change area since the report was prepared. This includes three sites of Māori origin. The ArchSite record for the site of Flanagan's mill has been updated and places the head water race and the mill site on the west side of the Hingaia Stream, outside of the plan change area.

As noted above and acknowledged in the report, parts of the plan change area (more than 40%) are not owned by the applicant and were not accessed (see Fig 4). It is unclear whether access was sought to these properties.¹ This is a significant information gap.

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¹ The owner and occupant of 111 Fitzgerald Road advises that he was contacted by the applicant, but that access was not sought for an archaeological inspection or heritage evaluation.

Analysis of relevant background information is in some cases insufficient. Drury was the site of considerable military activity during the New Zealand Wars of the 1860s. Images from that period, some of which are included in the report, depict extensive military camps, buildings, and associated infrastructure. There is potential to reconcile archival photographs with the present landscape in the plan change area. For example, the location of Figure 7 (see below), which is an image of a military camp complex² and other historic era buildings and constructed features, is not identified in the report. This image appears to show part of the plan change area. If this is the case it would provide considerable information on the potential location of archaeological evidence relating to the New Zealand Wars and the history of Drury within the plan change area.

I note that the historic heritage topic report for the Drury-Opāheke Structure Plan identifies gaps in the identification, protection, recording and interpretation of sites relating to the New Zealand Wars as an issue (and opportunity) within the structure plan area.³



Figure 1. The image included as Figure 7 of the archaeological assessment.

- The property at 111 Fitzgerald Road, which was not accessed for the assessment, is the site of General Cameron's residence and of the associated officers' camp which occupied the land to the rear of the building. The 1858 house built for Farmer and later used by General Cameron, commander of the imperial forces, was partially deconstructed and rebuilt in the (original) form of the existing dwelling on the property, with some of the salvaged materials evidently used in the construction of the Flanagan homestead. Both buildings have the potential to provide information, through investigation using archaeological techniques, on the construction and modification of the 1858 dwelling and reuse of materials to construct the Flanagan homestead. In addition to the standing building falling within the HNZPTA definition of an archaeological site, the property and environs have archaeological/knowledge value in relation to the occupation of the house and of the New Zealand wars officers' camp and associated structures.
- The significance assessments are brief, lack detail and supporting evidence, and are in places
 inconsistent. For example, on page 55 of the report the authors state that the Flanagan
 homestead site has considerable local historical significance for its association with the
 Flanagans, who were an early farming family in the area. In contrast, the Flanagan mill site is
 assessed as moderate under the same criterion (page 53).

On page 51 the report states that the Flanagan homestead site (R12/1125) has limited value apart from historical and knowledge criteria, for which it is considered to have moderate local significance. On page 55 the same site is assessed as being of considerable significance against four criteria including historical and knowledge, and moderate in relation to two others.

² Believed to be the militia and volunteer camp

³ Plan.Heritage 2017:45

While full significance evaluations may not be justified, significance assessments should be consistent with council's non statutory methodology⁴, and should be supported by evidence where appropriate. For example, the assessment of the Flanagan mill site states that mills were common features in the area and the site type is not rare. However, no supporting evidence regarding which 'area' is being referred to (there appear to be no other recorded mill sites in the Drury area), how many of these are intact or protected (very few regionwide), and whether they are flax, flour or timber mills. Flanagan's mill was at different times both a flour and flax mill.

• The report recommends that further assessment be undertaken, that recorded sites should be avoided where possible, and mitigation measures be undertaken when future development plans are available. There is no explicit evidence to indicate that the plan change, as proposed, has sought to avoid recorded archaeological sites. Archaeological sites are not mentioned in the plan change report. Rather, the proposed plan change will enable development and effectively limit avoidance or mitigation options to those that are able to be achieved under the Heritage New Zealand Act legislation, or as elective measures by owners or developers once the plan change has legal effect.

5.0 Submissions and further submissions

5.1 Heritage New Zealand Pouhere Taonga (Heritage New Zealand)

Heritage New Zealand (#31) has submitted that the plan change area has notable 19th century historical associations, and that there is the potential for undiscovered archaeology within the area. In the absence of a detailed archaeological assessment they seek that conditions be included in the plan change precinct provisions requiring such an assessment during the resource consenting or subdivision process so that adverse effects on archaeological remains can be avoided or mitigated where possible (5.2). In particular Heritage New Zealand requests that the precinct provisions include requirements in relation to sites R12/755 (General Cameron's house and associated camp), the R12/1222 (tramway), and the Flanagan mill site (R12/967) as recommended in the archaeological assessment.

Heritage New Zealand also seeks a requirement within the precinct provisions that the riparian margins/open space zone along the Hingaia Stream be the subject of further archaeological assessment to inform development plans, including planting. Heritage New Zealand additionally seeks that the open space zoning be slightly extended east in the northerly part of the precinct, to provide better protection for archaeological sites.

Heritage New Zealand (FS 10) has provided further submissions in relation to historic heritage and other related matters. Several of these relate to the provision of additional riparian margins or open space, on the basis that this will better provide for the protection for unidentified archaeological sites.

Kainga Ora (FS6) has made further submissions on these matters. Although it is not entirely clear from further submission point 31.1, it appears that the position of Kainga Ora is that a fulsome archaeological assessment should be undertaken prior to the plan change occurring and that it does not support amendment of the precinct provisions to include a requirement that it be undertaken prior to development. Kainga Ora (submission point 31.8) also opposes in part the inclusion of precinct provisions requiring archaeological assessment of the riparian boundaries to inform plans, including planting. Kainga Ora (31.11) supports in part the inclusion of appropriate conditions in the precinct provisions to address any Maori cultural values that may have been identified or as requested by iwi.

Heritage New Zealand (submission point 22.3) has also submitted in support of a submission by Auckland Council (FS 35) seeking the provision of a notable tree assessment and scheduling of any notable trees identified in the assessment.

5.2 Response

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⁴ Methodology and guidance for evaluating Auckland's historic heritage. Version 2, August 2020. Auckland Council.

In relation to the first matter raised I concur with the concerns of Heritage New Zealand regarding the adequacy of the archaeological assessment. As there are substantial information gaps in relation to the assessment of archaeological sites it is not, in my opinion, possible to reach the conclusion that there will be no adverse on any places of historic heritage significance.

I also agree in relation to Kainga Ora's submission point that the plan change should be, or should have been, supported by a fulsome archaeological assessment of the plan change area undertaken prior to notification.

This is an unsatisfactory situation because, as I have explained above, there is evidence that the plan change area has archaeological values that have not been adequately identified, documented or assessed. While a more complete and up to date desktop and on-site assessment should have been provided, much of the area is not owned by the applicants and is unable to be accessed as of right. This situation therefore presents a conundrum.

Heritage New Zealand has proposed that, in the absence of a full archaeological assessment, that the plan change provisions be amended to require detailed assessments prior to development. I support this proposal and have suggested how this might be achieved below. I consider that the second matter raised (the desirability of further archaeological assessment of riparian margins and open space) could also, in part, be addressed by an amendment.

With regard to the provision of wider riparian margins, I agree that there is a possibility that unrecorded archaeological sites may exist along the margins of the Hingaia Stream. The site of the Flanagan mill dam lies within the stream, the dam abutments likely extended into the riparian margin, and a footbridge may have provided access to the mill. A Māori eel weir existed upstream from the plan change area in the 1850s, providing evidence that Māori made use of the stream corridor.

On the other hand, the land in the Drury vicinity was for the most part unsuited to Māori horticulture, and there are few recorded occupation sites of Māori origin other than in the coastal environment or along navigable streams. The Hingaia Stream does not appear to have been navigable by canoe through the plan change area. There is some evidence to indicate that the navigable Ngākoroa Stream to the west of the plan change area was used as a north-south transport route.

I note that the route of the Hingaia Stream has been changed in places during the 20th century, so parts of the original stream bed lie outside riparian margins proposed as part of the plan change, and other parts do not correspond to the original stream margins. Therefore, unidentified archaeological sites may be present along the original route.

In my opinion provision of a minimum 20m riparian margin along the Hingaia Stream would have some value as a precautionary approach to unidentified archaeological sites in the absence of a comprehensive archaeological assessment. On the other hand, if riparian zones are planted without sites being identified and avoided, such sites will potentially be modified or destroyed by tree root incursion. Therefore, it is essential that prior assessment of planting areas takes place. In order to ensure that archaeological sites and extents are identified prior to riparian planting taking place along streams I propose that the precinct provisions that apply to riparian planting are amended as set out below.

I consider that there is currently insufficient evidence to support a 20m riparian margin to protect unidentified archaeological sites along all streams in the plan change area.

I support the further submission by Heritage New Zealand and the original submission by Auckland Council seeking a notable tree assessment and scheduling of trees, where appropriate.

Relict plantings can sometimes be an indicator of subsurface historic-era archaeological sites. Planted trees can contribute to the setting of historic heritage places or be significant historic heritage features of value or significance. It is usual practice for a survey of private plan change areas to be undertaken for potential notable trees, including any that are of historic heritage value. Those meeting the criteria should be scheduled as notable trees or, where appropriate identified as features of a scheduled historic heritage place.

I recommend that the proposed plan change provisions are amended to require identification and assessment of archaeological sites prior to land disturbance for development or planting, or demolition of pre-1900 buildings in the plan change area. Any significant adverse effects on places meeting the Historic Heritage RPS criteria should be managed appropriately and in accordance with the RPS. This may include addition to the Schedule 14.1 Schedule of historic heritage.

Inclusion of the following policies (together with associated rules) is suggested:

Undertake identification and assessment of historic heritage prior to development in accordance with the objectives and policies in the Historic Heritage Regional Policy Statement B5.

Avoid where practicable significant adverse effects on significant historic heritage places. Where significant adverse effects cannot be avoided, they should be remedied or mitigated so that they no longer constitute a significant adverse effect.

New development shall have regard to the protection and conservation of the historic heritage values of any adjacent significant historic heritage places.

IX.9 Special information requirements

(1) Riparian planting plan

An application for land modification, development and subdivision which adjoins a permanent or intermittent stream must be accompanied by:

(a) a riparian planting plan identifying the location, species, planter bag size and density of the plants. Plant species should be native;

(b) an archaeological assessment prepared by a professionally qualified archaeologist showing the location and extent of any archaeological sites to be avoided.

6.0 Conclusions and recommendations

In my opinion:

- The applicant has not adequately assessed the private plan change effects on the environment related to historic heritage, and in particular archaeological sites.
- The private plan change is not consistent with the direction and framework of the AUP, including giving effect to the objectives and policies in the Historic Heritage Regional Policy Statement (B5).
- There are significant information gaps in relation to archaeological sites, in particular sites associated with New Zealand Wars which are likely to be present within the plan change area.
- The provision of wider riparian margin along the Hingaia Stream would provide enhance protection for recorded archaeological sites and potentially for unidentified sites along the stream corridor. I support an amendment to provide for a 20m riparian margin along the Hingaia Stream through the plan change area.
- The lack of a notable tree assessment represents an information gap in relation to trees of
 potential historic heritage value or significance. I support submissions seeking a notable tree
 assessment and scheduling of trees, where appropriate.

I recommend that the plan change provisions be modified to require the identification and assessment of archaeological sites to determine if there are effects on sites of significant heritage value, prior to land disturbance for development or planting within the plan change area, and for identified adverse effects to be managed appropriately. Without such an amendment, I am unable to support the proposed plan change.

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

16 April 2021

To: David Mead, Reporting Planner, Hill Young Cooper

From: Cara Francesco, Principal Specialist Built Heritage, Auckland Council

Subject: Private Plan Change – PC48 (Private): Drury Centre Precinct, Drury – Historic

Heritage 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 specific vegetation of potential historic heritage interest. This advice does not address effects on archaeology, which is the subject of a separate review by Robert Brassey, nor does it address effects on mana whenua cultural values.
- 1.2 I have worked for the Auckland Council in historic heritage policy for ten years. In this time, I have undertaken historic heritage evaluations, inputted into plan changes, and overseen the development of the Methodology and guidance for evaluating Auckland's historic heritage. I have also provided built heritage input into the Auckland Council, Drury-Opāheke Structure Plan. I have a Bachelor of Planning (First Class Honours) from the University of Auckland.
- 1.2 In writing this memo, I have reviewed the following documents:
 - PC 48 Plan Change Summary
 - PC 48 Section 32 Report
 - PC 48 Appendix 1: Drury Centre Plan Change
 - PC 48 Appendix 6: AUP Objectives and Policies Assessment
 - PC 48 Appendix 11: Ecological Assessment
 - PC 48 Appendix 14: Archaeology Assessment
 - PC 48 Appendix 15: Heritage Assessment
 - PC 48 Appendix 26: Comparison of Auckland-wide zone and Precinct Provisions
 - Drury-Opāheke Structure Plan 2019
 - Drury Structure Plan historic heritage topic report 2017

2.0 Key historic heritage issues

- 2.1 The issues this memo addresses relate to:
 - 2.1.1 The historic heritage significance of the Flanagan Homestead at 120 Flanagan Road, particularly the level of significance. As well as management through the proposed plan change, including precinct provisions for retention and re-use.
 - 2.1.2 Trees of potential historic heritage significance at 120 Flanagan Road associated with the Flanagan Homestead. Including potential management through the proposed precinct provisions.
 - 2.1.3 The residence and site at 111 Fitzgerald Road, Drury, and the merits of a precinct provision requiring a heritage assessment be undertaken if affected by future development.

3.0 Applicant's assessment

Flanagan Homestead (120 Flanagan Road) and associated vegetation

¹ Auckland Council. *Methodology and guidance for evaluating Auckland's historic heritage*. Version 2. August 2020. Accessed from: https://www.aucklandcouncil.govt.nz/arts-culture-heritage/protecting-our-heritage/Documents/methodology-guidance-evaluating-aucklands-historic-heritage.pdf

Heritage assessments

- 3.1 Two historic heritage reports prepared for the applicant (Kiwi Property Group Limited) assess the Flanagan Homestead (the homestead) against the significance criteria in B5.2.2. Policies of the Auckland Unitary Plan Operative in Part 2016 (AUP). An initial archaeological framed assessment of the homestead is included within the Archaeology Assessment by Clough and Associates Ltd (Cameron, E, and Clough, R), August 2019. The Heritage Assessment by Matthews and Matthews, August 2019, provides a more detailed report on the homestead in relation to its built heritage value.
- 3.2 Both assessments identify the Flanagan Homestead as meeting 'considerable' against five of the eight significance criteria: (a) historical, (b) social, (d) knowledge, (f) physical attributes, and (h) context. The assessment identifies each of these values as being of local significance.
- 3.3 The Matthews and Matthews Historic Heritage Assessment considers the Flanagan Homestead to be of overall considerable heritage value to the Drury area. Based on this assessment, it appears the homestead would meet the thresholds for scheduling in Schedule 14: Schedule of Historic Heritage in the AUP. The assessment, however, does not explicitly make a statutory recommendation, such as to schedule the place.
- 3.4 The Matthews and Matthews Historic Heritage Assessment concludes that the Flanagan Homestead:
 - Could be readily adapted for a variety of ongoing uses
 - Preference for in-situ retention and adaption if practicable and
 - Careful investigation is needed for any relocation to ensure authenticity and integrity remain. ² Although not a desirable option, any new location should provide a setting compatible with the homestead's heritage value if relocation is required.

4. Associated vegetation

- 4.1 The Matthews and Matthews Heritage Assessment notes mature trees remain to the homestead's east side, including totara and puriri.³ The assessment ascribes values under the aesthetics criterion for the mature vegetation to the east side, framing the residence to the north as part of the homesteads setting.⁴ The concluding discussion notes that the setting, including mature trees, particularly to the east of the residence, is important in demonstrating how the residence was positioned and the views framed by landscaping.⁵
- 4.2 Also, of relevance, the Tonkin and Taylor Assessment of Ecology Effects, September 2019, prepared for Kiwi Property Group Limited, identifies 120 Flanagan Road as having a cluster of mature native and exotic canopy trees with well-developed understory. A table of the general species identified within the plan change area is included.⁶ However, it is unclear whether this table relates specifically to species present on 120 Flanagan Road surrounding the homestead or across the plan change area more generally.

Section 32

- 5. The section 32 report⁷ addresses built historic heritage relating to the Flanagan Homestead to the extent that it notes that:
 - The spatial positioning of the Drury centre is based on several factors, including the homestead ⁸

² Following the International Council on Monuments and Sites (**ICOMOS**) New Zealand Charter 2010 (Section 10)

³ Matthews and Matthews Heritage Assessment, p 17

⁴ Ibid, p 30

⁵ Ibid, p 31

⁶ Tonkin and Taylor. Assessment of Ecological Effects. Prepared for Kiwi Property Group Limited. September 2019. p 3 and 8

⁷ PC 48 Section 32 report. Prepared by Barker and Associates

⁸ Ibid, p 15

- Homestead Park proposes to incorporate the homestead into an open space setting ⁹
- The intention is to retain the homestead for a community purpose within an open space area, with no formal protection or scheduling proposed under the AUP ¹⁰
- Retention of the homestead in its existing location, or if necessary, relocating the building to an alternative location nearby
- A proposed assessment criterion within the precinct to encourage the integration
 of the homestead within open space and as a focal point for the new Drury
 Centre while acknowledging the significant changes envisaged through
 urbanisation of the area¹¹ and
- Effects on heritage values existing within the plan change area will be appropriately managed or mitigated through this assessment criterion and its assessment through future resource consent.¹²

6. Plan change content

- 6.1 The plan change proposes some provisions relating to the Flanagan Homestead. This is framed more generally and does not directly reference the homestead's heritage values within the provisions directly.
- 6.2 Objective IX.2 (3) indirectly addresses the Flanagan Homestead by way of reference to incorporating distinct built site features. This objective sets out that: "Development of the Drury Centre creates a distinctive sense of place, including incorporating distinctive natural and built site features, responding to land form and respecting Mana Whenua values".
- 6.3 Policy IX.3(14) again recognises the incorporation of distinct site features but does not detail what these are. This sets out that:
 - "In addition to matters (a)-(c) of Policy E38.3.18, ensure that the location and design of publicly accessible open space contributes to a sense of place for the Drury Centre including by:
 - (a) Incorporating distinctive site features;"....
- 6.4 Cascading on, Table IX.4.1 Activity table (A4) proposes "Additions and alterations to buildings not otherwise provided for" as a Restricted Discretionary (RD) activity.
- 6.5 As proposed in the plan change, additions and alterations would trigger this activity rule, requiring resource consent as part of the development of the Drury Centre.¹³
- 6.6 The corresponding assessment criterion IX.8.2 (2) (b) relating to the homestead is proposed as:
 - "Encourage the existing Homestead building to be retained, repurposed and incorporated into a high amenity urban park for informal recreation, which forms a focal point of the Drury Centre;"
- 6.7 Furthermore, in relation to vegetation, an assessment criterion Ix.8.2 (2) (c) proposes to consider:
 - "Whether existing indigenous trees are retained within Homestead Park where possible;"
- 6.8 The Flanagan Homestead appears to be proposed to be within Homestead Park. The location of the park is indicative only. It is proposed through assessment criteria IX.8.2 (2)(a) that the park be:
 - "provided in the locations generally consistent with that shown on IX.10.2 Drury Centre Precinct Plan 2".

7. 111 Fitzgerald Road

¹⁰ Ibid, section 10.8.2 p 77

⁹ Ibid, p 24

¹¹ Ibid, p 56

¹² Ibid. 10.8.2 p 78

¹³ While this activity refers to additions and alterations, I interpret 'relocation' or 'demolition' as triggering this rule too, as either would result in altering the building

The Clough and Associates Archaeology Assessment notes that:

- 7.1 The residence at 111 Fitzgerald Road is believed to have been used by Lieutenant-General Duncan Cameron as his headquarters in 1862 during the New Zealand (Waikato) Wars and the Great South Road construction.¹⁴ It is said the upper storey of the residence was removed in the 1880s, and the material incorporated into the construction of the Flanagan Homestead approximately 500 metres to the west at 120 Flanagan Road. The report notes a period of shared ownership between Flanagan brothers Robert and Joseph and James McBurney in the 1880s.¹⁵
- 7.2 The report also notes that the residence and site are not located on land owned by Kiwi Properties and were not accessed for preparing the report. The assessment notes that a historic heritage evaluation of the residence has not been undertaken, and therefore potential effects from future development cannot be determined at present. It recommends that if future development is planned that will affect the residence and property, there is an evaluation of archaeological heritage values to determine the level of effects. ¹⁶ 17

8. Assessment of built historic heritage effects and management methods

Flanagan homestead

Scope and limitations

- 8.1 I viewed the homestead from limited, public realm vantage points in December 2020.
 Otherwise, my findings are based on the photographic documentation within the Matthews and Matthews Heritage Assessment.
- 8.2 The heritage assessments have not considered accessory buildings to the rear of the homestead, several of which appear on a 1942 site aerial (Appendix 1, figure 3). I, therefore, I am unable to comment on any associative values with these buildings.

Historic heritage significance

- 8.3 Places are eligible for inclusion in Schedule 14.1 Schedule if:
 - (a) the place has <u>considerable</u> or <u>outstanding</u> value in relation to one or more of the evaluation criteria in Policy B5.2.2 (1); and
 - (b) the place has <u>considerable</u> or <u>outstanding overall</u> significance to the locality or greater geographic area.
- 8.4 I have undertaken a review in Appendix 1, Table 1, outlining my findings of the homestead's values in relation to the values identified in the Matthews and Matthews Heritage Assessment. My professional judgement is that the Flanagan Homestead has overall moderate local historic heritage value. This is in contrast to the applicants' two heritage assessments that find the Flanagan Homestead to be of overall considerable local value. While I consider it meets one of the evaluation criteria (historical), I do not consider the place meets the required overall threshold to be eligible as a category B historic heritage place in the AUP, based on the information currently known.
- 8.5 Criteria value levels not concurred with are (B) social, (D) knowledge, (F) physical attributes, and (H) context. In these instances where the applicant's heritage assessments found considerable local value, I consider this to have moderate local value in relation to those criteria. I concur with the moderate local value ascribed in relation to (E) technology and (G) aesthetic. I also agree the place has considerable local (A) historical value. However, in my opinion, this one value alone is not sufficient in this case,

¹⁴ Clough and Associates, p 17, 18, 49

¹⁵ Clough and Associates, p 17

¹⁶ Clough and Associates, p 57

¹⁷ The Matthews and Matthews Heritage Assessment for 120 Flanagan Road also includes some historical narrative on 111 Fitzgerald Road.

¹⁸ As part of the Auckland Council Opaheke-Drury Structure Pan a request was made to visit the site in December 2017. Access was not granted at that time, nor as part of preparing the subject memo

particularly as I do not consider the geographic threshold of at least considerable significance to a locality or greater geographic area has been met overall.¹⁹

Vegetation associated with the Flanagan homestead

- 8.6 Proposed assessment criterion IX.8.2 (2) (c) looks to consider through future resource consent(s) whether existing indigenous trees are retained within Homestead Park, where possible.
- 8.7 A photograph from circa. 1912 (Appendix 2, figures 1 and 2), not included in the Matthews and Matthews Heritage Assessment, shows there was considerably less vegetation than there presently is immediately around the homestead. The vegetation present appears from the photograph to be to the rear of the residence (possibly a shelterbelt of pine) and what appears to be some smaller vegetation to the immediate eastern side of the homestead. Furthermore, Appendix 2, figures 3 and 4 show an aerial and an oblique of the site subsequently in 1942 and 1963. By which point, there are more obvious plantings to the east of the homestead. Appendix 2, figure 5 illustrates the vegetation as it is within the last few years, which is substantially expanded.
- 8.8 Comparing these images over time demonstrates that much of the vegetation does not relate to the homestead's formative years.
- 8.9 In the Matthews and Matthews Heritage Assessment, value is ascribed under the aesthetics criteria for the homestead being surrounded by mature vegetation and plantings. The physical description refers to the presence of totara and puriri.
- 8.10 I consider that the supporting plan change material does not provide sufficient information to specifically determine the exact plantings (either native or exotic) of historical association with the Flanagan Homestead. Some of the trees to the east of the homestead appear to be the oldest remaining today; however, the remainder of the area around the homestead appears from images over time to be more contemporary.

Management options/ Precinct provisions

- 8.11 The Flanagan Homestead is currently on land proposed to be within the Metropolitan Town Centre Zone and Sub Precinct A. This will enable building heights of up to 72.5 meters.
- 8.12 It appears Flanagan Homestead is indicatively intended to be within 'Homestead Park'. It appears this will be a publicly accessible open space, but within a private centre, not within an open space zone. Building height and form are proposed to be managed where adjacent to publicly accessible open spaces to minimise shading effects.²⁰
- 8.13 While I do not consider the place meets the values threshold to warrant scheduling in the AUP, alternative management options that reflect that the place does have some historic heritage values could have merit embedded within the precinct. Particularly as there is agreement between the applicant's heritage experts and I that Flanagan Homestead has considerable local value under the historical criterion.
- 8.14 Refinements to the proposed precinct provisions to clearly reinforce retaining, repurposing, and incorporating the homestead into the proposed urban park would be supported, based on its historical criterion value.
- 8.15 Retention in situ with an appropriate setting is the most desirable conservation outcome, in my opinion. It is recognised, however, that relocation may be necessary in this case. Thus, I consider clear and specific consideration of the homestead within the provisions is desirable to ensure any relocation does not degrade the place's existing values. This also

¹⁹ The *Methodology and guidance for evaluating Auckland's historic heritage*, p11 (accessed from: https://www.aucklandcouncil.govt.nz/arts-culture-heritage/heritage/protecting-our-heritage/Documents/methodology-guidance-evaluating-aucklands-historic-heritage.pdf notes that "It is not common for historic heritage places to only have significance in relation to a single criterion. The body of evaluations undertaken to date has shown that overall significance generally derives from the contribution of multiple criteria"

²⁰ PC 48 – Drury Centre Plan Change. p 3

provides an opportunity for the enhancement of these values to be considered through the resource consent process.

- 8.161 consider that 'retention' and 'adaptive re-use' mentioned in proposed IX8.2(2)(b) of the plan change relate broadly to principles of heritage management. However, I am of the view the choice of criterion wording does not explicitly recognise the homestead having a degree of heritage value. Instead, this appears to relate to it being a 'distinct built site feature'.
- 8.17 I consider merit in further refining the precinct provisions to further address the retention, re-use, modification, and setting of the Flanagan Homestead, linking it to having a degree of historic heritage value that should be retained. I recommend refining and expanding the existing proposed associated objective, associated policy, and assessment criterion to frame this more directly around heritage matters.
- 8.18 If additional provisions are incorporated into Sub Precinct A, they could address:
 - Retention and adaptive re-use compatible with the homestead's heritage value
 - New buildings within the immediate vicinity to consider the relationship with the homestead in terms of scale, form, and materiality to not detract from the homestead's character qualities
 - · Additions and alterations to maintain and enhance historic heritage values
 - Encourage removal of later, intrusive additions
 - Any new additions to be discrete, at the rear, and sympathetic and take cues from the historic portion of the homestead while not mimicking the historic building
 - Relocation (limited to within sub precinct A, Homestead Park) to maintain heritage values, appropriate orientation to provide for key physical attributes to be seen from within key frontage areas of the open space setting and
 - Avoidance of demolition.

9. 111 Fitzgerald Road

- 9.1 I visited 111 Fitzgerald Road on 11 February 2021 to inspect the residence internally and externally, including isolated areas of the subfloor. I also previously undertook a site inspection on 7 July 2017, in the context of the Opāheke-Drury Structure Plan.
- 9.2 Some historical research relating to 111 Fitzgerald Road was undertaken as part of the structure plan's background work. No information was located on the Auckland Council property file or other archival sources that record modifications to the building over time to assist with considering and understanding the place.
- 9.3 Lieutenant-General Duncan Cameron, commander of the British Army in New Zealand from 1861, had been a career soldier by the time he arrived in New Zealand. He was considered one of the most accomplished officers of the British Army. His association with the subject site appears to have been for a period during 1862 and 1863 as his headquarters while leading the invasion into the Waikato. The residence related to a wider camp in the area, including support structures such as raupo huts and tents around the vicinity of the residence. Construction of the residence is said to date from the late 1850s (Appendix 3, figure 6).²²
- 9.4 The first photographic documentation of the residence that I have identified that externally resembles how the residence appears today is dated to the 1960s, in particular a photograph from May 1963 (Appendix 3, figure 7).
- 9.5 In my opinion, the residence's present outward exterior fabric does not have a striking resemblance to the one photograph of the building's rear and side elevations attributed to being used as General Cameron's headquarters. Some interior features of the residence observed are akin to the turn of the twentieth century. However, viewing areas in the

²¹ Duncan Cameron Biography. New Zealand History. Accessed from: https://nzhistory.govt.nz/people/duncan-cameron

²² The camp area around the building appears likely to have extended into the western end of 113 and 125 Fitzgerald Road, which adjoins to the subject site

crawl space underneath the northern side elevation of the residence²³ reveals fabric that I consider supports some of the building origins from the late 1850s, being re-used or retained within parts of the current residence. Wide subfloor boards (Appendix 3, figure 10) were observed, a feature generally only seen in very early buildings in New Zealand. Pit-sawn timber markings were also observed in the sub-floor area. Furthermore, a pile of large, stacked boulders beneath the current chimney may also suggest evidence of materials from an earlier construction date (Appendix 3, figure 11).

- 9.6 The observation of these building components supports the case that the late 1850s residence said to have been used by General Cameron during the New Zealand (Waikato) Wars was in the location of the current-day residence.²⁴ This would also support the case the building was partially deconstructed in circa the 1880s and rebuilt as the existing residence on 111 Fitzgerald Road. Some materials, presumably from the previous upper level, were also then used in the Flanagan Homestead construction nearby at 120 Flanagan Road.
- 9.7 Another association with General Cameron's headquarters includes the building having been Reverend Thomas Norrie's short-term residence before the New Zealand (Waikato) Wars (i.e., the late 1850s/early 1860s). Norrie was influential in establishing and disseminating the Presbyterian faith in southern Auckland and through into parts of the Waikato from 1855 until his death in 1905.
- 9.8 In my opinion, the associations with the New Zealand (Waikato) Wars camp on this site and a lesser extent, a short time with Reverend Norrie are of historical interest. In relation specifically to the residence, however, I consider these associations are likely to be moderate. This is due to the overall legibility of the residence to the 1860s period of significance. In my opinion, the residence's outward legibility has changed significantly to the building's one known photograph from this time.
- 9.9 There are known historical and likely fabric interconnections between 120 Flanagan Road and 111 Fitzgerald Road. There is a period of ownership of the site forming current-day 111 Fitzgerald Road by the Flanagan family. There also are associations with James McBurney as the owner, followed by his son David McBurney. The McBurney's were of some interest in relation to the earlier farming and community history of Drury. A subdivision took place involving the McBurney property and that owned by the Flanagan's in 1892. Upon James McBurney's death in 1903, the farm was conveyed to Robert Flanagan. Flanagan, in turn, died in November 1916. The property left Flanagan family ownership in 1921. At this time, an approximate three-acre site immediately around the residence was placed in a separate title (see Appendix 3, figure 8). There has been a series of private owners since.
- 9.10 Options to address heritage at 111 Fitzgerald Road through the plan change could include the addition of provision(s) in the precinct requiring that a detailed heritage evaluation is undertaken in the event of future development works to the residence (and/or site). This aligns with the submission from Heritage New Zealand Pouhere Taonga (Heritage New Zealand) as well as a recommendation in the Clough and Associates Heritage Assessment.
- 9.11 The memo prepared by Robert Brassey for Auckland Council on heritage matters of an archaeological nature recommends the plan change provisions are amended to require policies together with associated rules relating to identification and assessment of historic heritage prior to development. This also includes recommending a policy relating to avoiding where practicable significant adverse effects on significant historic heritage places.

10. Drury-Opāheke Structure Plan

10.1 A heritage outcome included in the Drury-Opāheke Structure Plan and its supporting historic heritage topic paper recommends as a subsequent step considering potential

²³ Viewed February 2021

²⁴ An observation also made in the Matthews and Matthews Heritage Assessment, p 14

- places of interest that may warrant scheduling or any other formal protection as part of subsequent processes (i.e., in relation to plan change preparation).²⁵
- 10.2 As an output of the council developed Drury Opāheke- Structure Plan, August 2019, a study list was developed to identify places for further potential consideration. This list included the residences at 120 Flanagan Road and 111 Fitzgerald Road. At that time, the residence at 111 Fitzgerald Road was assigned a medium priority (across low, medium, and high). This in part, reflected the then lack of verified information surrounding the history of the building time. The late 1850s building origins have subsequently, however, been verified through the site inspection referred to above.
- 10.3 The residence at 120 Flanagan Road was not assigned a specific priority level as details of what remained of the residence had not been established at that time, failing permission from the landowner for a site visit. However, the Matthews and Matthews Heritage Assessment has substantially added to the information now known about the Flanagan Homestead to consider the place in the context of this proposed plan change.

11. Submissions

- 11.1 Heritage New Zealand has raised relief points relating to built heritage and associated vegetation (submission 31). One further submission point from Counties Power Limited (FS9) is indirectly of relevance.
- 11.2 Decisions requested, and my corresponding comments are:

Submission	Summary	Further submission(s) of relevance	Commentary
Heritage New Zealand Pouhere Taonga	Retain and re-use Flanagan Homestead R12/1125 in situ on its original site, with the park including an appropriate extent of its setting		I support and encourage the homestead's retention in its current position but recognise relocation may also be an option. I, therefore, recommend the plan change provisions be refined to clearly consider heritage values should relocation be proposed.
31.2	(including plants and trees with historical association to the homestead)		I support in principle the retention of plantings and trees from the homestead's formative years (such as any appearing present in the 1912 photograph). There, however, remains a lack of detail in my opinion on exactly the extent of this vegetation of historical association.
			Furthermore, from reviewing aerial imagery, much of the vegetation does not appear to relate to the homestead's formative years. Trees (appearing to be pines) to the rear of the homestead no longer appear to be present, which were the key substantial planting visible around the homestead in 1912. It is not known when the puriri and totara mentioned in the Matthews and Matthews Heritage Assessment were planted.
Heritage	Include Flanagan		I recommend submission point 31.3 by Heritage New Zealand
New Zealand	Homestead within Schedule		in part be rejected in so far as it relates to scheduling the Flanagan Homestead as a category B place in Schedule 14.1:
Pouhere	of Historic Heritage as a		Schedule of Historic Heritage in the AUP.
Taonga	Category B Historic		Contour of Fricting From age in the Field.
31.3	Heritage place. Alternatively, include provisions in the precinct which more accurately reflect the location of the homestead and its extent with suitable objectives, policies and rules for its ongoing protection.		I recommend accepting in part the Heritage New Zealand submission point 31.3 in so far as it relates to including precinct provisions with suitable objectives, policies, and rules for the ongoing protection of the homestead as an alternative approach to scheduling. I consider this tool would more appropriately reflect the value level I consider the homestead has and which can be tailored for the place.
Heritage New	Amend IX.8.2(2)(c) to include any non-	Counties Power Ltd	As noted for submission 31.2, there is currently a lack of detailed information to establish which earlier
Zealand	indigenous trees	Liu	plantings/vegetation to the east of the homestead are exotic
Pouhere	identified as having	FS 9	(versus native species) and their date of origin. This
Taonga	specific historic heritage		information has not been sufficiently provided in the
	association and values in	Seeks	supporting plan change material. Therefore, I cannot

²⁵ Drury-Opāheke Structure Plan. Auckland Council. August 2019. p 44

31.4	relation to Flanagan Homestead.	that the criteria for protecting non-indigenous trees under IX.8.2(c) takes into account the proximity of these trees to critical electricity infrastructure	currently provide a position on the merits or otherwise relating to the inclusion of non-indigenous vegetation provisions in so far as it relates to making a heritage contribution. In relation to the further submission from Counties Power, this has been recorded here as a matter of record but is considered beyond the historic heritage remit to provide a position. ²⁶
Heritage New Zealand Pouhere Taonga 31.5	Include a condition in the precinct provisions that a heritage evaluation be undertaken if General Cameron's House R12/755 is to be affected by future development.		I consider it would be appropriate for precinct provisions setting out that a heritage evaluation be undertaken if the residence at 111 Fitzgerald Road is to be affected by future development. This would also need to include rules/ activity table line items, and depending on the status, assessment criteria within the precinct for Sub Precinct C to address the consideration of heritage on this site in relation to any future development.
			Matters relating to the archaeological potential of the land surrounding the residence are addressed in the memo prepared by my colleague Robert Brassey. Mr. Brassey's memo addresses considering precinct provisions be added for the assessment of archaeological sites prior to land disturbance activities and also pre-1900 buildings, for which this residence and its surrounds would be covered by.

12. Conclusions and recommendations

- 12.11 do not concur with the overall value levels ascribed in the applicant's historic heritage assessments in relation to the Flanagan Homestead. I consider the homestead has moderate overall local significance. The place in my opinion does not meet the significance threshold in B5.2.2.(3) of the AUP for scheduling in Schedule 14: Schedule of Historic Heritage.
- 12.2 While not of sufficient value to warrant scheduling, in my opinion, scheduling is not the only relevant tool to manage places with heritage values. I consider an appropriate alternative approach of specific heritage provisions to manage the Flanagan Homestead through the precinct has merit. While retention and re-use of the homestead are addressed in the proposed precinct provisions as notified, I support the precinct provisions being amended to reference the homestead's heritage values rather than only referring to it just as a distinctive site feature.
- 12.3 In principle, I support the retention and management of plantings and trees if from the homestead's formative years (such as any appearing present in the 1912 photograph). There remains, however, a lack of detail on exactly the extent of this vegetation of historical association, such as the exact location, species, and the number of historical association trees. I cannot currently provide a position on the merits of the inclusion of non-indigenous vegetation, which may provide a heritage contribution due to lack of information. It would

²⁶ Auckland Council submission 22.33 notes that "Surveying for potential notable trees and scheduling of any trees that meet the criteria is standard practice for a plan change to urbanise land. This does not appear to have been done". The relief is to "provide a notable tree assessment and the scheduling of any notable trees identified in that assessment". As an overall relief point, this falls outside the direct remit of historic heritage, and therefore commentary has not been provided. It is noted, however, that further submission (FS10) by Heritage New Zealand, to the Auckland Council submission point 22.33 seeks to allow the submission and does relate to heritage. This submission notes that: "Heritage New Zealand supports the submission in so far as any trees are identified as notable in terms of their historic heritage associations, such as in relation to areas of known historic settlement including Flanagan Homestead".

- need to be demonstrated there are indigenous plantings of historic association with the homestead in order to support a provision for retaining exotic trees for historic heritage associated reasons.
- 12.41 support the inclusion of a condition in the precinct provisions that a heritage evaluation be undertaken in the event the residence (R12/755) (and site) at 111 Fitzgerald Road is to be affected by future development. This could include rules/activity table line items and assessment criteria within the precinct for Sub Precinct C to address the consideration of heritage on this site in relation to any future development.
- 12.5 Overall, I suggest modifications to refine further precinct provisions concerning addressing the above matters to be in a position to support the plan change in relation to historic heritage.

Appendices

Appendix 1: Table 1. Review of significance for Flanagan Homestead – 120 Flanagan Road

Appendix 2: Comparison images of Flanagan Homestead and site over time

Appendix 3: Comparison images of residence at 111 Fitzgerald Road over time

Appendix 1: Table 1. Review of significance of Flanagan Homestead - 120 Flanagan Road

Criteria	Matthews and Matthews report and significance findings	Authors analysis and significance findings
a) historical: The place reflects	Considerable, local	Considerable, local
important or representative	The homestead has considerable local historical	 I consider the associations with the late 1850s residence relating to current day 111
aspects of national, regional or	significance for its long association with the Flanagans,	Fitzgerald Road, associated with James Farmer is of moderate value as it pertains to 120
local history, or is associated with	who were an early farming family in the area. The	Flanagan Road. The Flanagan Homestead contains remnants of the former house. It has
an important event, person, group	house has historical significance for its association with	been altered to such an extent the historical values associated with the circa.1858 house is
of people or idea or early period of	the farming history of the Drury area. The house's site	not overall highly legible to read that historical association beyond a moderate value level.
settlement within New Zealand,	is part of allotment 29, Parish of Opaheke, purchased	 While I consider the New Zealand (Waikato) Wars was a significant historical event, I
the region or locality	under Crown Grant by James Farmer in 1853, who also	consider the Flanagan Homestead does not demonstrate this beyond a moderate value level.
	purchased the adjacent allotment 26 under Crown	• I concur, however, that the homestead is associated with an early local Drury family of some
	around 1858 Farmer had a house built on his Drury	importance, the Flanagan s. The family has had a long-standing association with the homestead and site particularly its original occupant. Robert Flanagan, and his family. The
	property which was used by General Cameron as his	Flanagan's farmed the site, and it appears family members lived in the residence from the
	headquarters in the early 1860s overseeing troops	1880s until recently, spanning approximately 120 years. Robert and his brother Joseph
	engaged in construction of the Great South Road south	Flanagan, who owned the land, were reasonably well-known early local settlers involved in
	of Drury. The Flanagan Homestead is associated with	and contributed to the early Drury community. I consider this aspect appears to make a case
	having been built on land owned by James Farmer and	ior considerable local filistorical value when the follogevity of the association and its earlier
	possibly incorporating part or materials from the c.1858 house.	
b) social: The place has a	Considerable, local	Moderate, local
strong or special association	The house is believed to be of considerable local	While the naming of the road after the family is of some interest, it alone does not
with, or is held in high esteem	significance for its social values. The long association	demonstrate considerable social significance for the homestead.
by, a community or cultural	with the Flanagan family is reflected in the naming of	The Heritage Assessment is not clear which group the homestead is of considerable value
group for its symbolic, spiritual,	Flanagan Road.	to. As a private residence with more limited public visibility and access overall, a case has
commemorative, traditional or		not been made in my opinion to demonstrate it is held in high esteem either in a
other cultural value		contemporary or legacy context. I consider further evidence would be needed to substantiate this
c) Mana Whenua: The place has a	An assessment of the place's value to Manu Whenua	Not assessed. Any values would need to be determined by Mana whenua.
strong or special association with,	has not been undertaken as part of this evaluation.	
or is held in high esteem by, Mana		
Whenua for its symbolic, spiritual,		
commemorative, traditional or other cultural value		

d) knowledge: The place has	Considerable, local	Moderate, local
potential to provide knowledge	Evidence of early pit sawn timber is visible in the attic	I consider the residence is of some buildings archaeology interest. Specific areas of pit sawn
through scientific of scribiary study or to contribute to an	and the nouse has potential to leveal further information about the use of early materials in its	umber identified with the autorarea assist in supporting the local histories that the Franagan Homestead was derived in part from an earlier building. Iikely a late 1850s residence nearby
understanding of the cultural or	construction.	at 111 Fitzgerald Road.
natural history of New Zealand, the region, or locality		While of some interest to understanding late 1850s construction techniques and materials, the presence of some pit sawn timper does not constitute a considerable ability to pain.
		substantial new information about hit sawn timber more generally. Furthermore, obtaining
		this knowledge would also likely require the dismantling of parts of the historic portions of the
		house.
		 Potentially, knowledge value can be achieved through enabling access to the space for
		public interpretation purposes moving forward if the homestead was converted to a
		community or accessible location (i.e., cate).
		In relation to the circa. 1880s villa construction, arguably much of that could be obtained from
		other places of sources within the region, such that the potential appeals no more than moderate.
e) technology: The place	Moderate, local	Moderate, local
demonstrates technical	The Flanagan Homestead incorporates evidence of	I concur the presence of some pit sawn timber in the attic illustrates the application of a
accomplishment, innovation or	early pit sawn timber components as well as c.1880s	particular technology relating to the use of materials and that this is illustrative of an early
achievement in its structure,	residential construction techniques and materials and is	building construction technique, which became phased out. With some of the materials
construction, components or use	considered to be moderate significance in terms of its	utilised from another building (likely the building at 111 Fitzgerald Road) and then repurposed
or materials	technological Values.	into the subject building in areas in the 1880, this is of moderate value. The presence of
		1880s residential construction techniques and materials is also of moderate value.
f) physical attributes: The place is	Considerable, local	Moderate, local
a notable or representative	A good representative example of a Victorian timber	 I consider the Flanagan Homestead is not a strong representative example of a Victorian villa
example of a type, design or style,		as an architectural type. Albeit I recognise it is uncommon locally as a type and style.
method of construction,	have been made over time, the house retains much of	 As noted in the Matthews and Matthews Heritage Assessment, as constructed the residence
crattsmanship or use of materials	its exterior and interior form, fabric and detailing.	had a central gutter, with a hip across the front and a projecting gabled bay. The photograph
or the work of a notable architect, designer engineer or huilder		In Appendix 2, figure 2 illustrates this was the roof form as of 1912. This was subsequently
designed, englished of ballace		modified into a nipped foot of the villa's easient side; Modifications also resulted in changes to the front versindsh, where previously there were fretwork and eave brackets shove the
		verandah. In my opinion, the overall front and side roofline of the building as viewed
		externally has been reasonably modified. In this instance, I do not consider these roof
		modifications are of value in terms of the evolution of the building, which can sometimes be the case.
		Furthermore, changes to the residence's exterior were undertaken in 1976 and again in 1986
		of reasonable footprints and merged into the house's historic fabric. These additions adopted
		the approach of attempting to take cues from the existing house. This, however, was
		executed in a manner that in my opinion, has created a pseudo villa addition in areas
10		externally. The replacement of some earlier window joinery with afurnifium framing and allowed a aluminium in the additions also adds to the overall level of change and the intrusive nature of
10		some modifications.

		 Based on viewing the photographs alone, some portions of the interior appear to be of interest.
		Overall, I consider that there are a limited number of residences and buildings within the landscape of Druty and surrounds from the late Victorian period. However, the intrusive
		modification to the residence diminishes its overall physical attributes significance, making it of moderate physical attributes value locally instead of considerable, in my opinion.
g) aesthetic: The place is notable	Moderate, local	Moderate, local
or distinctive for its aesthetic,	It is distinctive in its surrounding context as a Victorian	 I observed some vistas of the front north western gable and bay of the homestead from
visual, or landmark qualities	villa farmhouse set within landscaped grounds within	specific nearby locations such as at the roundabout between Great South, Waihoehoe, and
	the wider fular latituscape. Marule trees to the east side as well as plantings to the east frame views from the	Norrie Koads. This creates some visual presence of the building beyond the site, given it is otherwise concealed from view from the public realm.
	house to the north.	 I concur currently, the rural setting enables the villa to be read as a residence associated with
		farming.
		 The physical modifications discussed under the physical attributes criterion also lead to the
H	-	place having moderate aesthetic value, in my opinion.
h) context: The place contributes	Considerable (local)	Moderate, local
to or is associated with a wider	Makes a contribution to the local historical context. It	 The St John's Church and Drury Hall, while buildings from the 1860s-1880s, do not
historical or cultural context,	has collective value as part of a group of inter-related	sufficiently establish considerable historical context value with the Flanagan Homestead, by
streetscape, townscape,	houses associated with early farming families in Drury,	virtue of being from the same period of development the locality. I consider this association
iandscape of setting	one of a small number of Viotorian era huildings in	The office and discussed in the horizons and in the horizons and the first the fact that the first the first than the first the first than th
	One of a small fidinger of victorial era buildings in	 The other residence discussed in the neftrage assessment is 111 Franagan Road. The two residences have a pariod of shared ownership by members of the Flanagan family and
	1863 and other early buildings such as the Drury Hall.	appear very likely to have an interconnected fabric history. While this is of interest. I consider
		this to be a moderate context association as well.
		 The Flanagan Homestead has a historical and non-contiguous landscape context associated
		with other Victorian-era residences in Drury. This includes the Clarke residence (albeit highly
		modified) and outbuildings (at 1159 Great South Road), and the former Chamberlin
		Homestead (at 349 Drury Hills Road). This non-contiguous collection, however, is not
		considered to have more than moderate value, either.

*Values in red are those found to differ from the values assigned in the Matthews and Matthews Heritage Assessment for the Flanagan homestead at 120 Flanagan Road.

Appendix 2: Comparison images of Flanagan Homestead and site over time



Figure 1: 'A harvesting scene in the Waikato District, Auckland, carting the oat crop on a Drury farm'. 18 January 1912. Sir George Grey Special Collections, Auckland Libraries, AWNS-19120118-2-2

The Flanagan farm with homestead and trees in the background.



Figure 2: Zoom in on above 1912 photograph of the northern front and eastern side elevations of Flanagan Homestead, alongside a contemporary photograph - Matthews and Matthews, 2019

Areas in yellow showing locations within the frame of the photograph where there have been apparent modifications resulting in either a change in roof line, change in design or loss of fabric, with the introduction of intrusive fabric elements.

To be read alongside the memo on historic heritage for PC 48, prepared by Cara Francesco, Principal Specialist Built Heritage, 16 April 2021

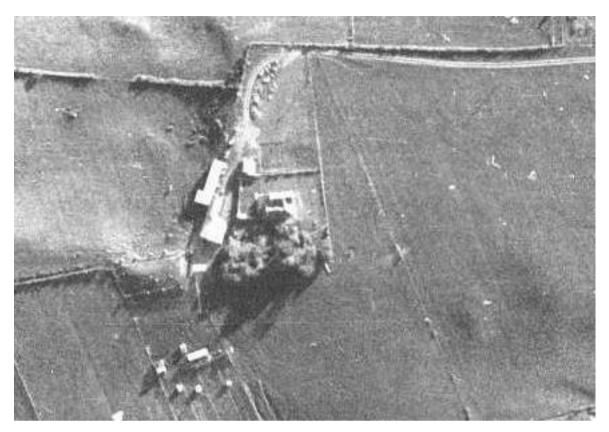


Figure 3: Aerial zoom in of 120 Flanagan Road, 27 May 1942.Retrolens Survey Number 192. Accessed from:

 $\frac{\text{https://retrolens.co.nz/map/\#/1773160.2837090012/5891077.430957225/1773537.9901181855/5891}{338.093166883/2193/14}$

A more confined area of vegetation appears visible in the 1942 aerial of 120 Flanagan Road. This relates to a shelterbelt of trees, which also appear visible in the background of the circa—1912 photo of the Flanagan Homestead.



Figure 4: Aerial view Whites Aviation, 2 August 1963, WA-60569-G Alexander Turnbull Library, Wellington, New Zealand.

To be read alongside the memo on historic heritage for PC 48, prepared by Cara Francesco, Principal Specialist Built Heritage, 16 April 2021



Figure 5: Circa 2017 aerial base map. Auckland Council Geomaps.

This aerial shows both the current building footprint of the Flanagan Homestead and the extent of the current surrounding vegetation.

Appendix 3: Comparison images of residence at 111 Fitzgerald Road over time



Figure 6: Zoom in of PA1-q-250-47, Alexander Turnbull Collection, National Library of New Zealand. Building attributed to being the headquarters of General Cameron in 1862 during the New Zealand (Waikato) Wars.



Figure 7: 7-A498, Sir George Grey Special Collections (25 May 1963). The image is annotated "Showing 'Waihoihoi' at Drury, reputedly used as General Cameron's headquarters during the New Zealand Wars".

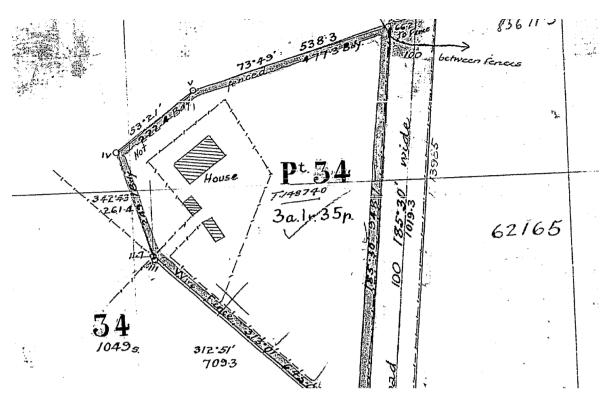


Figure 8: DP15235. Plan of part of Lot 34 of sub of Allots 26.29.31 Opaheke Parish. July 6th, 1921.

On this 1921 survey plan, the residence at what is today 111 Fitzgerald Road is shown with a rectangular footprint. *This does not align with the current footprint of the building, following an L shape footprint.



Figure 9: Portion of the northern side and western rear elevation of the residence where a small portion of the subfloor area of the house was accessed. AC, 10 February 2021.



Figure 10: Approximately 210mm floorboards visible, suggest this area of the building has an early date of construction, aligning with a late 1850s date of construction. AC, 10 February 2021.



Figure 11: Two layers of boulders in the vicinity of the current fireplace. AC, 10 February 2021.



Figure 12: Side (southern) and rear (western) elevations of residence. AC, 10 February 2021.



Figure 13: Front (eastern) and side (southern) elevations of residence. AC, 10 February 2021.



Figure 14: Front (eastern) elevation of residence. AC, 10 February 2021.

Memo (technical specialist report to contribute towards Council's section 42A hearing report)

18 January 2021

To: David Mead, Consultant Lead Planner, Hill Young Cooper Ltd, for Auckland

Council

From: Andrew Kalbarczyk, Senior Specialist – Contaminated Land, Contamination, Air &

Noise, Specialist Input, Resource Consents

Subject: Private Plan Change – PC48, Kiwi Property Holdings No.2 Precinct, Drury

East (Metropolitan Centre) - Contamination Assessment

1.0 Introduction

I have undertaken a review of the request for the above Private Plan Change, on behalf of Auckland Council in relation to potential adverse effects on human health and the receiving environment, associated with the potential contamination within the subject area.

The area of the proposed Private Plan Change covers approximately 95ha of land in total. 'Kiwi Property Holdings No.2' owns 52ha of land within the subject area, while other properties are owned by various parties. The subject area is currently zoned in the Auckland Unitary Plan (Operative in Part) as 'Future Urban Area'. The Private Plan Change request seeks to re-zone the subject area to a mix of Metropolitan Centre, Mixed Use, and Open Space – Informal Recreation.

I hold a MSc degree in Environmental Biology from University of Warsaw (Poland) and Certificate in Environmental Science from Thames Polytechnic in London. I hold a Certified Environmental Practitioner: Site Contamination Specialist certification from the Certified Environmental Practitioner Scheme, established as an initiative of the Environment Institute of Australia and New Zealand (EIANZ), aimed at advancing ethical and competent environmental practice. I work as a Senior Specialist – Contaminated Land in the Contamination, Noise & Air Team, Specialist Input, Resource Consents. I have held this role at Auckland Council and formerly Auckland Regional Council since 2006. I have extensive experience within contaminated land management, resource consenting, and consent compliance monitoring relevant to contaminated land.

In writing this memo, I have reviewed the following documents lodged in support of the proposed Private Plan Change:

- Drury: Kiwi Property Holdings No.2 Ltd: Private Plan Change Request: S32 Assessment Report, prepared by Barker and Associates Ltd, dated August 2020
- Geotechnical and Environmental Due Diligence: Review to Support Plan Change
 Application: Drury Metropolitan Centre Plan Change: Drury, Auckland, prepared for Kiwi
 Property Group Ltd, by ENGEO Ltd, dated 13 August 2019 ('the Due Diligence report')

Additionally, I have also reviewed the following report commissioned by Auckland Council to provide an understanding of the contamination constrains affecting the greater area of the future development within the Drury Future Urban Zone, which includes the 'Kiwi Property Holdings No.2' Precinct:

 Technical Investigation: Contamination Assessment: Drury Future Urban Zone, prepared for Auckland Council by Riley Consultants Ltd, dated 16 March 2018 ('the Technical Investigation report')

2.0 Key contamination issues (relevant to protection of human health and the environment)

This Private Plan Change request is reported to be generally consistent with sound resource management practice and Part 5 (Standards, Policy Statements, and Plans) of the Resource Management Act (RMA). Also, it is reported to be consistent with the Drury-Opāheke Structure Plan, endorsed by Auckland Council on 6 August 2019, and the concurrently-lodged two Private Plan Change requests, associated with the future development within the Drury Future Urban Zone, made by Fulton Hogan Land Development Ltd, and Oyster Capital Ltd.

I consider the following regulations, plan, and policy statements to be relevant to the assessment of the proposed Private Plan Change request, in the context of contamination of the land and the associated effects on human health and the environment:

- Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations, Ministry for the Environment, 2011 (NES:CS)
- Chapter E30 of the Auckland Unitary Plan (Operative in Part) (AUP(OP)), Objectives E30.2(1) and Policies E30.3.(1 and 2)
- The Auckland Council Auckland Regional Policy Statement, particularly Section 17, Objectives 17.3.1-3, and Policies 17.4.1.1-4.
- National Policy Statement for Freshwater Management, updated in 2020, particularly Part 2, Objectives 2.1(1)(a-c), and Policies 2.2(1-5 and 13).

The current assessment of the Private Plan Change request and supporting documentation is focused on identifying any major constrains, associated with the contamination status of the subject area, which would present an impediment to the proposed re-zoning of the land into generally more-sensitive land use. Any other than major constrains, associated with potential contamination of the subject area can be dealt with at a later stage, under the requirements of the relevant regulatory consenting process, associated with the future development.

Detailed assessment of the suitability of individual parcels of land within the area subject to the proposed Private Plan Change will need to be undertaken prior to obtaining relevant resource consents required for carrying out land-disturbance works, the actual change of land use, and subdivisions. The regulations, plan, and policy statements listed above will be applicable once again during the consenting process, and at that stage site-specific investigations and remediation of the land (where required) will be carried out. To those pieces of land within the subject area, which have formerly been affected by any contaminating activities, the regulations of the NES:CS and Contaminated Land Rules of the AUP(OP) will be relevant and considered in the consenting process.

Based on the reviewed Technical Investigation report, the following sources of contaminants of concern have been identified as the potential constrains to the proposed Private Plan Change and relevant future development:

- Existing building structures constructed prior to 1980. Those are associated with the presence of lead and asbestos in the cladding/roofing of the building structures and in the shallow subsurface soils. The contamination status of such soils would need to be determined through a process of undertaking a site-specific Preliminary Site Investigation/Detailed Site Investigation. In case such investigations reveal the presence of unacceptably elevated levels of lead and/or asbestos (exceeding the relevant standards for protection of human health or guidelines for the protection of the environment), remediation of the affected sites and controlled disposal of the contaminated soil will be required.
- The presence of some commercial/industrial land-use properties within the subject area
 Depending on the type of commercial/industrial activities, the soil within such properties
 may be contaminated with a number of heavy metals, polycyclic aromatic hydrocarbons,

or volatile organic compounds. The contamination status of such soils would need to be determined through a process of a site-specific Preliminary Site Investigation/Detailed

Site Investigation. In case such investigations reveal the presence of unacceptably elevated levels of contaminants, remediation of the affected sites and controlled disposal of the contaminated soil will be required.

- The presence of closed landfills within the subject area
 Depending on the outcome of a site-specific Preliminary Site Investigation/Detailed Site Investigation, the soils within the given land may be adversely affected by landfill gas, heavy metals, polycyclic aromatic hydrocarbons, volatile organic compounds, and nitrates, rendering the relevant properties unsuitable for the residential development.
- The current (at the time of actual development) or former horticultural land use Depending on the outcome of a site-specific Preliminary Site Investigation/Detailed Site Investigation, the soils within the given land may be adversely affected by elevated concentrations of arsenic and selected heavy metals, and organochlorine pesticides. In case such investigations reveal the presence of unacceptably elevated levels of contaminants, remediation of the affected sites and controlled disposal of the contaminated soil will be required.
- The current (at the time of actual development) or former use of the land for primary production
 - Depending on the outcome of a site-specific Preliminary Site Investigation/Detailed Site Investigation, the soils within the given land may be adversely affected by elevated concentrations of heavy metals, polycyclic aromatic hydrocarbons, or other petroleum hydrocarbons. In case such investigations reveal the presence of unacceptably elevated levels of contaminants, remediation of the affected sites and controlled disposal of the contaminated soil will be required.
- The presence of unknown potential contamination sources, such as uncertified asbestos dumps, farm dumps, rubbish/waste dumps, demolition material dumps, as well as sites affected by historical pollution incidents and fires. The actual risk associated with the above activities would need to be assessed through the process of a Preliminary Site Investigation/Detailed Site Investigation. Depending on the outcome of such investigations, the soils within the given parcel of land may be adversely affected by asbestos, landfill gas, heavy metals, polycyclic aromatic hydrocarbons, volatile organic compounds, and nitrates. Remediation of the land prior to the residential development may be required.

Recommended by the Technical Investigation report is undertaking representative Preliminary Site Investigations/Detailed Site Investigations within the area subject to the proposed Private Plan Change, in order to confirm the contamination status of the properties in question and identify the presence of any site-specific constrains for the future development.

The above recommendation has been incorporated into the overall recommendations relevant to the proposed Private Plan Change, in Section 6.0 of this Memo.

3.0 Applicant's assessment

The 'Due Diligence report', provided in support of the request for the proposed Private Plan Change has identified a number of sites within the subject area, which are associated with the current or former contaminating activities, described on the Hazardous Activities and Industries List, Ministry of the Environment (HAIL). Those HAIL activities include the following range:

- The presence of petroleum storage tanks for fuel at one of the properties
- The presence of several drums for agrichemicals at one of the properties
- The former bulk storage of fertilisers at one of the properties

- The presence of two commercial glasshouses at one of the properties, with the low-level potential for persistent bulk storage and use of pesticides (although further investigation is required)
- The potential former use of organochlorine pesticides at one of the properties, as part of the commercial flower-growing operation
- The presence of timber storage yard at one of the properties, with yet-unverified former bulk storage of treated timber outside
- The potential presence of fibrous asbestos, asbestos fines, and asbestos containing materials (ACM) in soils at several properties, associated with the on-site building materials
- The presence of unverified-origin fill in several locations within the subject area, which may be contaminated in exceedance of the Soil Contaminant Standards (relevant to the protection of human health) and/or Permitted Activity soil acceptance criteria (relevant to the protection of the environment)

Also identified was the presence of heavy metals concentrations exceeding the natural background levels for volcanic soils, which may preclude the material from being categorised as 'Cleanfill material', as defined in the AUP(OP) at one of the properties.

While no obvious evidence of soil contamination, such as waste products, stained soil, bare soil patches or odours, was found during the site inspections, further investigations are recommended within the report to confirm the actual contamination status of the individual properties. Such additional investigations are anticipated to have the potential to encounter some asbestos pipes, timber and steel workshops, stockpiled fill, former farm dumps, private closed landfills, burn pits, former dairy farm areas, and building structures associated with the presence of asbestos or storage of chemicals, associated with farm activities.

It is noted that the 'Due Diligence report' involved indicative intrusive testing of the soil within those parcels of land, which are owned by Kiwi Property Holdings No.2 Ltd only. Additional assessment of the risks within the remainder of the subject area is yet to be undertaken.

At this stage, no contamination of concern has been identified to be present, based on indicative intrusive soil sampling completed to date. The applicability of the NES:CS to the future land development is confirmed in the S32 report.

However, no parcels of land have been identified as being at risk of significant contamination that might severely impact the proposed Private Plan Change or future commercial, recreational, and residential development.

Further environmental investigations of the parcels of land identified to have been affected by HAIL activities is recommended within the report. Also recommended is remediation of those selected parcels of land, which contain any contamination hotspots identified to be unsuitable for the proposed commercial, recreational, and residential land use.

The report concludes with the statement that based on the information collected to date, the proposed Private Plan Change will be generally suitable for the future commercial, recreational, and residential development, while some localised remediation of isolated contamination hotspots may be required. Resource consents under the NES:CS are anticipated to be required to those properties, which are found to be affected by former or current HAIL activities, and so are further environmental investigations.

Based on the information gathered in the course of collating the Due Diligence report, there appear to be no significant issues of concern with regards to contamination within the subject area, and therefore, the potential adverse effects relevant to the proposed Private Plan Change, the change in land use, future development, and subsequent commercial, recreational, and residential land use are considered to be no more than minor.

The Due Diligence report provides a series of recommendations for future work to be carried out subsequently to the completion of the proposed Private Plan Change process. They include the following components:

- Undertaking site-specific Preliminary Site Investigations and Detailed Site Investigations
 for individual parcels of land at a later stage, prior to the lodgement of the relevant
 resource consent applications and prior to the commencement of the commercial,
 recreational, and residential development.
- Undertaking remediation at those parcels of land, which are found to be affected by contamination in concentrations exceeding the relevant Soil Contaminant Standards for protection of human health and/or environmental guidelines for protection of the environment.

I consider the methodology used in the Due Diligence report as being satisfactory and relevant to the proposed Private Plan Change. Also, I concur with the conclusions reached in the applicant's environmental assessment. Lastly, I accept the recommendations for further, site-specific environmental investigations of the properties at risk of being affected by localised contamination hotspots.

4.0 Assessment of the effects on human health and the environment, and management methods

The purpose of my review was to obtain an understanding of the constrains affecting the proposed Private Plan Change and the relevant future development, associated with the potential contamination of soil and groundwater within the subject area.

My review included the assessment of the Due Diligence report, submitted in support of the Private Plan Change request, and the compliance of the proposed Private Plan Change with the purpose of the NES:CS regulations, and the objectives and policies of the AUP(OP), Auckland Council Auckland Regional Policy Statement, and National Policy Statement for Freshwater Management, relevant to the contaminated land management.

I consider the information provided within the Due Diligence report as being adequate for obtaining sufficient understanding of the scale and significance of the actual or potential adverse effects, and positive effects on human health and the environment, anticipated from the implementation of the proposed Private Plan Change. Based on the content of the report reviewed, I concur with the applicant's conclusion that the proposed Private Plan Change is generally consistent with the purpose of the NES:CS regulations, and the objectives and relevant policies of the AUP(OP), Auckland Council Auckland Regional Policy Statement, and National Policy Statement for Freshwater Management, and that it will be generally suitable for the intended future commercial, recreational, and residential development.

Additional, site-specific Preliminary Site Investigations and Detailed Site Investigations will likely be required to determine the contamination status of the land and relevant consenting requirements. Included within such further investigations would also need to be the historical use of hazardous materials, such as lead (in lead-based paint) and asbestos (in the cladding of building structures and sheds, and in fences) within the subject area.

5.0 Submissions

I have reviewed all 35 submissions received with regards to the proposed Private Plan Change. None of the submissions expressed any concerns relevant to the potential or actual contamination of soil or groundwater within the subject area, that may affect human health or the environment as a result of the proposed Private Plan Change or the associated future development.

Two submissions referred to the contaminant run-off from the existing and new roads and carparks within the subject area. One of them, Submission #15, from Kiwi Property Holdings

No.2, in support of the Private Plan Change request, states that the contaminant run-off will be efficiently managed through the Stormwater Management Area Flow (SMAF 1) provisions. The other Submission, #22, from Auckland Council, in opposition to the Private Plan Change request, expressed the submitter's concern about the currently insufficient plan for protection of the ultimate receiving environment, namely the upper Manukau Harbour from continued contaminant discharges from existing and new roads and carparks. Those two submissions are considered to be relevant to the stormwater management and not the contaminated land management aspect, and therefore they are no further addressed in this review.

Submission #22 also expressed the submitter's concern about the cumulative contaminant loading within the receiving environment of the upper Manukau Harbour, from the discharges off the roads and building structures with exterior materials with exposed surfaces that are made from contaminants of concern, such as copper, lead, and zinc. That submission is also considered to be relevant to the stormwater management and not the contaminated land management aspect, and therefore it is no further addressed in this review.

6.0 Conclusions and recommendations

I consider the documentation provided in support of the Private Plan Change request to be sufficiently adequate to identify the relevant potential effects on human health and the environment. of the implementation of the proposed Private Plan Change on human health and the environment.

There are no significant information gaps identified within the information provided in support of the Private Plan Change request, which would prevent obtaining sufficient understanding of the scale or significance of the actual or potential environmental effects anticipated from the implementation of the proposed Private Plan Change, in my view.

There appear to be no significant issues of concern with regards to contamination within the subject area, that would affect the Private Plan Change in principle. However, a number of potentially contaminating land-use activities and relevant soil contaminants of concern have been identified. A recommendation has been made that further, site-specific Preliminary Site Investigations and Detailed Site Investigations be carried out prior to the consenting process, in order to assess the actual contamination status of the properties within the subject area and inform the remediation requirements.

From the perspective of contamination and the associated potential effects on human health and the environment, the proposed Private Plan Change is considered to be consistent with the purpose of the NES:CS, and relevant objectives and policies of the Contaminated Land Rules of the AUP(OP), Auckland Council Regional Policy Statement, and National Policy Statement for Freshwater Management.

None of the 35 submissions received have raised an issue of concern relevant to the contamination of the soil, surface water, or groundwater, associated with the current or historical land use.

Overall, from the perspective of the current contamination status of the subject area and the potential effects on human health and the environment, I recommend that the proposed Private Plan Change be supported, subject to the following recommended actions to be subsequently taken prior to and during the commercial, recreational, and residential development:

- Undertaking site-specific Preliminary Site Investigations and Detailed Site Investigations
 for individual parcels of land, to identify the potential risks to human health and the
 environment and enable to determine and implement the relevant mitigation options.
- Undertaking remediation at those parcels of land, which are found to be affected by contamination in concentrations exceeding the relevant Soil Contaminant Standards for

protection of human health and/or environmental guidelines for protection of the environment.

- Implementing adequate controls, management procedures, and mitigation measures during the development of individual parcels of land, in order to protect human health and the environment.
- Adopting the proposed options to avoid, remedy, or mitigate the identified adverse effects on human health and the environment, as per recommendations made in the Due Diligence report, provided in support of this Private Plan Change request.
- Monitoring of surface waters during the construction to ensure the protection of the receiving environment.

APPENDIX 5

EXPERT CONFERENCINGJOINT WITNESS STATEMENTS

AUCKLAND COUNCIL:

PRIVATE PLAN CHANGE 48: DRURY CENTRE PRECINCT – KIWI PROPERTY HOLDINGS LTD

PRIVATE PLAN CHANGE 49: DRURY EAST PRECINCT – FULTON HOGAN LAND DEVELOPMENT LTD

PRIVATE PLAN CHANGE: 50 WAIHOEHOE PRECINCT – OYSTER CAPITAL.

JOINT WITNESS STATEMENT (JWS) PLANNING (1) - 31 MAY 2021.

Expert Witness Conferencing Topic: Planning

Held on: 31 May 2021, commencing at 9am.

<u>Venue:</u> Committee room, level 26, Auckland House, 135 Albert St, Auckland Central.

Independent Facilitator: Marlene Oliver.

Admin Support: Cosette Saville.

1. Attendance:

The list of expert participants is at the end of this Statement. Their area of expertise (planning) is identified with their names.

2. Environment Court Practice Note 2014.

- i. All participants agree that the Environment Court Practice Note 2014 provides relevant guidance and protocols for the expert conferencing session.
- ii. All participants agree to comply with the relevant provisions of the Environment Court Practice Note 2014.
 - The Auckland Council (as regulator) participants attended as observers, given their role as s42A reporters.
- iii. All participants agree to make themselves available to appear at the hearing in person if required to do so by the Hearing Panel (as directed by the Hearing Panel's Directions).

3. Basis of participation

Karyn Sinclair (Auckland Transport) and John Duguid, Chris Turbott and Ezra Barwell (Auckland Council (as submitter)) recorded their concern about caucusing prior to

the receipt of the s42A report and agree to participate at a high level only and will not be able to comment on specific provisions at this stage of the process.

Mike Hurley (The Ministry of Housing and Urban Development (HUD)) recorded that HUD has an interest in purchasing a part of the Oyster Capital (PC50) land. This proposal arose after the original submission had been lodged.

4. Kainga Ora proposal to re-zone 1-1A East St.

Michael Campbell for Kainga Ora explained the basis for seeking the land described as 1-1A East Street to be rezoned from Future Urban zone (FUZ) to THAB and Local Centre zone in PPC50.

Paul Sousa for Phil Hogan (owns 1A East Street) noted that Phil Hogan and Kainga Ora are aligned in their requests and joint technical documents will be provided.

Karyn Sinclair for Auckland Transport did not support the inclusion of the further land in the plan changes. The implications for transport infrastructure have not been considered, including upgrades to Great South Road and cumulative effects. Karyn understands that the ITA does not include additional land and the triggers similarly have not included the additional lands. No Section 32 analysis has been presented to date.

Cath Heppelthwaite for Waka Kotahi supports Auckland Transports position. Noting that planning provisions relating to any additional land areas have not yet been circulated.

John Duguid and Christopher Turbott (Auckland Council (as submitter)) supported the positions stated for Auckland Transport and Waka Kotahi, and he noted that there would be issues related to the shortfall of funding for infrastructure similar to the issues raised in relation to PC48 land.

David Mead (Auckland Council (as regulator)) raised the issue about scope, for including additional land in the plan changes, noting there are several other submissions seeking to include additional land in the plan changes. This also raises questions around whether other parties would have lodged submissions or further submissions if they had understood that further land was being requested for inclusion in the plan changes. Secondly, the issue of the extent of technical analysis to support including additional areas, compared to the documentation lodged with the original PPC's applications.

5. Approaches to open space.

Rachel Morgan for the Applicants outlined that the submissions (primarily Auckland Council) sought more details about open space be provided in the planning provisions. In response to these submissions the applicants will be providing further details including amendments to policies, matters of discretion and assessment

criteria, and mapping of key open space areas and streams. A revised master plan is being prepared for PC48. Details will be provided in evidence.

Christopher Turbott and Ezra Barwell for Auckland Council (as submitter) advised that they have not had time to consider these details. Christopher noted that he would support indicative open space being shown in a precinct plan in principle but would still need to consider this particular proposal. He does not support these details being included in the zoning plans unless it is esplanade reserve. Christopher confirmed that as a general principle he does not support the land under the transmission line corridor being zoned open space. The land in the corridor should take the same zoning as the adjacent land – this is consistent with the current AUP approach.

John Duguid for Auckland Council (as submitter) raised the issue around ownership and zoning of open space areas, noting that the Council has specific policies and processes in place, to guide the provision and acquisition of open space.

Nick Roberts for the Applicants advised that some open space areas may be privately owned and that there is scope in the planning provisions to leave this option available.

David Mead for Auckland Council (as regulator) requested that there be clarity around the ownership of open space and reserve areas that are proposed to be zoned open space. He noted that other forms of easement or protection mechanisms could also be considered for some areas, such as the gas pipeline and the transmission line corridor.

Mike Hurley for HUD sought further rezoning for open space, but he supports the precinct plan approach to identifying areas of open space. Mark Thode for Kainga Ora supports the indicative open space areas otherwise identified on the Masterplan documentation as being identified on precinct plan.

6. Educational facilities

Karin Lepoutre for the Ministry of Education (MoE) sought additional objectives and policies enabling educational facilities. Karin supports revised objective 4 in PC49 to read "Development is supported coordinated with the supply of by appropriate sufficient transport, water, energy, education and communications infrastructure".

Karin is going to further consider the requirement for a supporting policy.

Karin will want to review the revised triggers for transport upgrades as it is understood they will include reference to community infrastructure.

David Mead for Auckland Council (as regulator) raised the NPS-UD reference to definitions of "additional infrastructure" and "development infrastructure". These have a different policy intent.

David Mead also raised the need to not duplicate provisions that are already in the AUP relating to infrastructure, in particular education facilities. AUP Chapter B2 refers to social facilities.

Karin considers that the AUP does not adequately enable educational facilities and therefore seeks specific provisions in PC49.

The Applicants experts and Karin on behalf of MoE suggest that a new objective could be an alternative way to provide for education facilities and they will have further discussions to address this point.

Mike Hurley for HUD and Mark Thode for Kainga Ora supports that additional provisions need to be included in PC49 to recognise education facilities.

7. Staging and triggers for staging.

Vijay Lala for Lomai Properties Limited (on PC48, PC49 and PC50) understands that the applicants transport modelling is now based on the SGA modelling, in particular the land use assumptions which reflect assumed growth in Stage 1 west of Jesmond Road. Subject to the modelling outcomes confirming acceptable transport capacity outcomes, Vijay advised that Lomai Properties concerns would be adequately addressed.

John Duguid and Christopher Turbott for Auckland Council (as submitter) stated the view that staging of development in the Drury area should be linked to funding for key infrastructure required to support a quality outcome. Karyn Sinclair for Auckland Transport endorsed John's statement and noted that as the triggers will be changed, confirmation of these changes was required before further comments could be made.

8. Relevance of infrastructure funding to zoning decisions under the RMA. AND

9. Consistency of the plan changes with the growth- and infrastructure-related provisions in the NPS-UD and RPS.

Karin Lepoutre was not present and did not participate in these two items. Nigel Hosken did not participate in these two items.

All other experts (names below) agree that: significant infrastructure investment will be required to service the urbanisation of the PC48, PC49 and PC50 land.

Christopher Turbott for Auckland Council (as submitter) and Karyn Sinclair for Auckland Transport note that significant infrastructure needs to be provided for other plan changes in the area and this should be part of the network analysis and the hearing process for the other plan changes in the Drury FUZ area.

All other experts (names below) agree that: RMA statutory documents require that development is integrated and co-ordinated with the provision of infrastructure. Relevant objective and policies include, but are not limited to: NPS-UD – Objective 6, Policy 1, Policy 8

and Policy 10. Relevant RPS policies include, but are not limited to: B2.2.1(objective 1 and objective 5), B2.2.2 (policy 7), B2.4.2 (policy 6), B3.2.1(objective 5), B3.2.2(Policy 5)(a).

All other experts (names below) agree that: PC48, PC49 and PC50 should address the demands arising from the effects of the plan changes on infrastructure, particularly transport infrastructure. Any infrastructure put in place to address the effects of these plan changes needs to integrate with the wider infrastructure network for Drury, including beyond the plan change areas. The issue of interim solutions versus long term infrastructure upgrades is a key consideration.

Nick Roberts, Rachel Morgan, Vijay Lala, Michael Campbell and Mark Thode consider that the plan changes are required to consider and complement, but not resolve all wider network infrastructure requirements. For example, the interim upgrade of Fitzgerald Road which will complement the full-width upgrade at a later date.

David Mead indicated that the extent of works and the extent of the cumulative effects on the wider network are difficult to define and difficult to attribute to different plan changes. This is yet to be agreed to between the parties.

John Duguid, Christopher Turbott and Karyn Sinclair note that currently the provision of such infrastructure is too uncertain and in particular, that there is insufficient funding available or committed to ensure that integrated and coordinated development can occur in these Plan Change areas.

Nick Roberts, Rachel Morgan, Mark Thode, Michael Campbell, Vijay Lala and Mike Hurley consider that there is sufficient certainty to address the effects of PC48, PC49 and PC50 and that the best option is to rezone the Plan Change areas from FUZ to live zonings (as proposed) and to include a range of mechanisms (including triggers) in the zoning provisions to enable the staging of development to occur as infrastructure is funded and/or provided.

All experts reserve their final positions subject to working through the various amended provisions that parties are providing.

- 10. Amendments proposed to:
- 11. Zoning.
- 12. Objectives and policies.
- 13. Rules.
- 14. Assessment matters.
- 15. Notification provisions.
- 16. Information requirements.
- 17. Reverse sensitivity controls requested by submitters.
- 18. Stormwater provisions.
- 19. Precinct plans/Access A.

These agenda items were not dealt with during this session.

Further planning conferencing to be scheduled for Thursday 10 June 2021. Julie McKee will finalise arrangements.

20. General discussion topic / processing of private plan changes (referred from Transport and Planning JWS #1 held on 24 May, Item 11)

John Duguid noted the concerns of experts and has agreed to set up a session with the planning experts, lawyers and other relevant parties to discuss Auckland Councils processing of private plan changes.

21. All experts agree to file this joint witness statement with the Hearing Panel.

Signed on 31 May 2021:

Expert Name	Parties (app/sub)	M
Craig Cairncross	Auckland Council (as regulator)	
David Mead	Auckland Council (as regulator)	Sund
John Duguid	Auckland Council (as submitter)	Sonn III
Christopher Turbott	Auckland Council (as submitter)	i Man
Paula Vincent	Auckland Council (as submitter)	
Ezra Barwell	Auckland Council (as submitter)	76 6:20
Karyn Sinclair	Auckland Transport	Bund
Greg Osborne	Drury South Limited	Jes Leve 4-20pm
Nick Roberts	Fulton Hogan Land Development Ltd Kiwi Property Holdings No2 Limited Oyster Capital	Mans
Rachel Morgan	Fulton Hogan Land Development Ltd Kiwi Property Holdings No2 Limited Oyster Capital	Mag
Mark Thode	Kainga Ora	TO 4.05 pm
Michael Campbell	Kainga Ora	10 3:40
Andrew Cave	KiwiRail	

Left room without signing on 31/5/21

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page 7

	Vijay Lala	Lomai Properties Limited	4
	Karin Lepoutre	Ministry of Education	Aler.
•	Emma Howie	Ministry of Education	
	Mike Hurley	The Ministry of Housing and Urban Development (HUD), Te Puni Kōkiri and the Department of Corrections	mpley
	Cath Heppelthwaite	Waka Kotahi	
	Paul Sousa	Phil Hogan	
	Nigel Hosken	Josephine Kleinsman	Africa,

signing on 31/5/21.

AUCKLAND COUNCIL:

PRIVATE PLAN CHANGE 48: DRURY CENTRE PRECINCT – KIWI PROPERTY HOLDINGS LTD

PRIVATE PLAN CHANGE 49: DRURY EAST PRECINCT – FULTON HOGAN LAND DEVELOPMENT LTD

PRIVATE PLAN CHANGE: 50 WAIHOEHOE PRECINCT – OYSTER CAPITAL.

JOINT WITNESS STATEMENT (JWS) STORMWATER & PLANNING (1) - 17 MAY 2021.

Expert Witness Conferencing Topic: Stormwater & Planning

Held on: 17 May 2021, commencing at 9am

Venue: Board Room, Ground Floor, Auckland Town Hall

Independent Facilitator: Marlene Oliver.

1. Attendance:

The list of expert participants is at the end of this Statement. Their area of expertise (stormwater or planning) is identified with their names.

2. Environment Court Practice Note 2014.

- i. All participants agree that the Environment Court Practice Note 2014 provides relevant guidance and protocols for the expert conferencing session.
- ii. All participants agree to comply with the relevant provisions of the Environment Court Practice Note 2014.
 - In this regard Peter Dodd acknowledges that although he has expertise in stormwater matters, he is submitter and therefore is not an independent expert witness.
 - The Auckland Council (as regulator) participants attended as observers, given their role as s42A reporters.
- iii. All participants agree to make themselves available to appear at the hearing in person if required to do so by the Hearing Panel (as directed by the Hearing Panel's Directions).

3. Relevant updates to the Stormwater Management Plan (SMP), including further information requirements.

Flood management and flood modelling (Plan Change 48 and Plan Change 49)

All stormwater experts agree:

Flood management should not worsen flooding effects upstream or downstream of the plan change areas.

This may be achieved by passing flows forward, requiring Great South Road and railway culverts to be enlarged and upgraded. Prior to this, attenuation of flood flows may be temporarily required. The performance outcomes are met and the management strategy chosen will need to be confirmed by a flood modelling assessment. Performance standards for flood management are included in the SMP (refer to page 64, section 8.6.2.1 general requirements for flood management and Table 13 requirements to not worsen upstream or downstream flood effects).

A shared model should be used and the model should be held by Auckland Council. The above matters should be dealt with in the SMP.

Every time there is a resource consent for subdivision / development for part of a plan change area, a flood modelling assessment which reflects what has happened and what is anticipated will be required to demonstrate compliance with the performance standards.

There is a <u>recommendation</u> to the planning expert conferencing to draft an additional policy and assessment matters or standards to give effect to the above paragraphs.

The flood model for Plan Change 48 and Plan Change 49 will be provided by the applicant's experts.

Flood management and flood modelling (Plan Change 50)

Peter Dodd supports Plan Change 50, but expressed his concerns that flood management and modelling for the wider future urban zoned area is required so that efficient use can be made of areas identified in that zoning for urban development that is currently flooding and encourages Auckland Council to take the lead. The experts for Oyster Capital noted that Plan Change 50 does not preclude those wider Slippery Creek floodplain improvements.

Nikhil Prakash raised concerns about managing the overland flow path identified on the Councils GIS system at the interface of Plan Change 50 land and his clients land to the east (160 Waihoehoe Road). He sought clarification about how the SMP dealt with this interface.

Tim Fisher said that continuation of overland flow paths are a requirement of the Waihoehoe SMP (refer to section 5.3(5)).

Nikhil Prakash sought clarification that fill does not displace the flood storage volume of the wider floodplain.

Tim Fisher responded by referring to the principle that "flood management should not worsen flooding effects upstream or downstream of the plan change areas" which will be demonstrated by flood modelling.

Stormwater management Tool box (Plan Change 48 and Plan Change 49)

All stormwater experts agree:

The SMP(s) are the appropriate place to record details about stormwater management tools but this should not limit the range of tools that could be used.

The SMP should be clarified to identify the methods that can be used to achieve the various stormwater management outcomes while retaining flexibility over a range of methods.

Clarify in the SMP, with respect to water quality treatment, runoff from all high contaminant generating activities (as defined in Chapter E9 of the AUP) must be sized and designed in accordance with GD01.

Runoff from all other impervious areas will require a risk-based approach to water quality. For example, where you put rubbish bins you may consider a roof and a gross pollution trap, a footpath around the back of a house requires no treatment, JOAL's, driveways and uncovered carparks (<30) will require water quality treatment for lower contaminant loading and lower risk frequency such as a catchpit with a sump volume and submerged outlet.

Page 57 of the SMP – options should be relabelled to 'Option 1' and 'Option 2'.

There is a <u>recommendation</u> to the planning expert conferencing to refine policies and rules and draft new assessment matters to give effect to the above paragraph.

Revised SMP Table 13 and associated flow chart to be circulated prior to planning expert conferencing. This will be done for Plan Change 50 as well.

NES-FW

Applicants to review the SMP to recognise the NES Freshwater management requirements.

4. Stream erosion and riparian setbacks.

This remains an area of disagreement at this conference, and as it relates to a number of different factors (e.g stream erosion, stormwater and floodplains, amenity, ecology etc.) this issue will be <u>referred to</u> the planning expert conferencing.

The applicant's experts advised that further work is being done relating to stream erosion potential in the Plan Change 48 area. This will be discussed with Auckland Council (as submitter) when it is available and/or presented in evidence.

5. East Street (Kainga Ora).

Kainga Ora has an interest in land downstream of Plan Change 50. David Hughes sought clarification that consideration had been given to the downstream environment in regard to hydrological mitigation and flood risk. In terms of the detail provided in the Waihoehoe SMP, Kainga Ora is comfortable with the set of provisions providing confidence on the mitigation of downstream flood risk. Kainga Ora supports further coordination of the modelling across the catchment between developers, Kainga Ora and Auckland Council (i.e during the resource consent development (detailed design phase). Kainga Ora accepts the appropriate timing for this is during the resource consent phases, as opposed to prior to or during the plan change process.

Tim Fisher noted that Plan Change 50 application relied on Auckland Council modelling, but for resource consent applications more detailed modelling will be undertaken by the applicant's experts.

6. Stormwater provisions in the precincts that have referred to planning expert conferencing.

SMP

There is a <u>recommendation</u> to the planning expert conferencing to draft an additional policy and assessment matters or standards in relation to flood modelling and stormwater treatment as discussed in section 3 above.

Riparian margins

This remains an area of disagreement at this conference, and as it relates to a number of different factors (e.g stream erosion, stormwater and floodplains, amenity, ecology etc.) this issue will be <u>referred to</u> the planning expert conferencing.

Signed on 17 May 2021:

Expert Name	Parties (app/sub)	
David Mead (Plg)	Auckland Council (as regulator)	Dung
Trent Sunich (S/W)	Auckland Council (as regulator)	1
Craig Cairncross (Plg)	Auckland Council (as regulator)	
Christopher Turbott (Plg)	Auckland Council (as submitter)	Rust
Danny Curtis (S/W)	Auckland Council (as submitter)	Hill
Paula Vincent (Plg)	Auckland Council (as submitter)	Part Miles
Greg Osborne (Plg)	Drury South Limited	in love
Pranil Wadan (S/W)	Fulton Hogan Land Development Ltd	Call W
Tim Fisher (S/W)	Kiwi Property Holdings No2 Limited Oyster Capital	Matte
Charlotte Peyroux (S/W)	Kiwi Property Holdings No2 Limited Oyster Capital	Cleyros
Nick Roberts (Plg)	Fulton Hogan Land Development Ltd Kiwi Property Holdings No2 Limited Oyster Capital	Mrs.
Rachel Morgan (Plg)	Fulton Hogan Land Development Ltd Kiwi Property Holdings No2 Limited Oyster Capital	La
David Hughes (S/W)	Kainga Ora	(Ltg)
Mark Thode (Plg)	Kainga Ora	wille
Peter Dodd (S/W)	Self (Peter Dodd)	Mind
Nikhil Prakash (S/W)	Dong Leng	J. College

AUCKLAND COUNCIL:

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PRIVATE PLAN CHANGE: 50 WAIHOEHOE PRECINCT – OYSTER CAPITAL.

JOINT WITNESS STATEMENT (JWS) TRANSPORT & PLANNING (1) - 24 MAY 2021.

Expert Witness Conferencing Topic: Transport & Planning

Held on: 24 May 2021, commencing at 9am.

<u>Venue:</u> Board Room, Ground Floor, Auckland Town Hall.

Independent Facilitator: Marlene Oliver.

Admin Support: Cosette Saville.

1. Attendance:

The list of expert participants is at the end of this Statement. Their area of expertise (transport or planning) is identified with their names.

2. Environment Court Practice Note 2014.

- i. All participants agree that the Environment Court Practice Note 2014 provides relevant guidance and protocols for the expert conferencing session.
- ii. All participants agree to comply with the relevant provisions of the Environment Court Practice Note 2014.
 - The Auckland Council (as regulator) participants attended as observers, given their role as s42A reporters.
- iii. All participants agree to make themselves available to appear at the hearing in person if required to do so by the Hearing Panel (as directed by the Hearing Panel's Directions).

3. Transport modelling assumptions.

<u>Daryl Hughes for the applicants</u> outlined the updates to SGA's Drury traffic model, including adopting the land use and infrastructure and timing assumptions from the SGA model which is different to the plan change documents as notified.

<u>Daryl</u> noted that the revised trigger table was an appropriate framework to assess infrastructure requirements for the plan changes, regardless of the Government's decisions on the timing and scope of Mill Road.

<u>The Applicants</u> will prepare and circulate an addendum to the modelling report to describe these updates and their implications for the plan changes. The addendum report to be circulated on 31 May 2021 with a further expert conferencing session (transport and planning experts) scheduled on 8 June 2021 commencing at 9am at Stantec offices, 111 Carlton Gore Road, Newmarket. Experts to confirm attendance, by email to Julie McKee by 4pm Friday 4 June. <u>Request to Julie McKee</u> to notify all parties.

<u>The Applicants</u> to provide the relevant transport provisions that have been amended following the planning expert conference on 31 May, and before 8 June.

4. Transport upgrade provisions in the precinct (including triggers) (to also be discussed in the planning conference).

<u>All agree</u> that the upgrades along Fitzgerald Road and Waihoehoe Road bordering the plan changes are considered to be 'within the plan change areas and will be subject to walking and cycling upgrades' consistent with the precinct provisions.

<u>The planning expert conference</u> (after the 8 June session) should look at the implementation/workability of the provisions in practice, including robustness of the assessment framework, and information requirements. It is suggested that <u>the applicants</u> provide a flowchart to illustrate the operation of the provisions.

5. Precinct plans/Access A.

Andrew Mein from Waka Kotahi clarified that Tables 'Staging of development with transport upgrades and 'trip generation limit'' e.g Table 6.2.2 and Table 6.3.2 in PPC48, referring to Access A can be removed from the plan changes, but Access A is to be shown as a potential connection on Precinct Plan 2. All agree with this statement as from a traffic capacity perspective, it is not relevant to the triggers.

<u>Applicants</u> requested to clarify the status of proposed roading connections that go beyond the precincts. To be discussed at 31 May planning expert conference.

6. Road cross-section details.

<u>Applicants</u> to circulate updated cross-sections to all parties <u>through Julie McKee</u>. These will be discussed again at the expert conferencing session on the 8th of June.

7. Precinct provisions relating to the train station.

<u>Andrew Cave for KiwiRail</u> requested that the location of the proposed Drury Central train station to be shown in the plan provisions as indicative, but likely to be positioned immediately south of the existing Waihoehoe Road NIMT overbridge (i.e between Flanagan Road and Great South Road), with associated public transport interchange and necessary infrastructure.

The experts (transport and planning) for the following parties agree to this indicative location noting there is a considerable amount of engineering design work to be done, and that separate consent procedures will be required and parties accordingly reserve their rights to participate in those processes, refer to revised Precinct Plan 2 attached. <u>Auckland Transport</u>, <u>Auckland Council</u> (as submitter), <u>Waka Kotahi and the Applicants</u>.

Note that the Applicant is suggesting the notified area Sub-precinct D in Precinct Plan 2, is proposed to be merged into the original Sub-precinct A area. For clarification the original precinct plan is also attached.

<u>The Applicant</u> advised that master planning details such as the station plaza are being revised to reflect the amended location of the train station. These will be available for discussion at the planning expert conference after 8 June.

8. Other transport related amendments to the provisions.

An amended set of provisions relating to transport will be circulated after the 8 June transport conferencing session for discussion at a subsequent planning conference, date to be confirmed (planners bring their diaries on 31 May so that subsequent date can be confirmed).

<u>The Applicants</u> to clarify PPC49 Precinct Plan 1 reference to proposed Mill Road corridor.

9. Submitters outside of the plan change areas seeking to be included, including Kainga Ora's proposal to re-zone 1-1A East St.

The SGA model relates to Auckland Council's adopted Drury-Opaheke Structure Plan area and follows the Structure Plan timing, not just the areas included in PPC48, 49 and 50.

10. Written questions submitted by Nikhil Prakash on behalf of Dong Leng on PPC50

Proposed Plan Change 50:

- 1) My first question relates to the future crossing/bridge for the proposed collector road over the Waihoehoe Stream. Who will be responsible for providing this bridge? What will the funding mechanism be? PPC50 conveniently proposes not having a crossing on its own stream boundary. The burden of cost associated with this stream crossing is a potential development constraint for my client.
- 2) The locations of the proposed collector roads shown in the PPC50 application are not in accordance with the draft Drury-Opaheke Structure Plan and therefore need to be relocated. Their locations will also conflict with the streams to the north and east and will also not properly service the land beyond. Our client therefore seeks an amendment to the locations of the proposed collector roads.
- 3) Waihoehoe Road will be upgraded to arterial road status. The Fitzgerald Road/Waihoehoe Road will become a major intersection in the future and is very close to our clients site (160 Waihoehoe Road). The ITA recommends limited access along the road. Our client wants confirmation that his site will have direct access to Waihoehoe Road.

There was insufficient time to discuss these at this conference, therefore they will be put on the agenda for the 8 June transport expert conferencing session.

11. General discussion topic / Case Management and plan processing

<u>John Duguid for Auckland Council (as submitter)</u> expressed a concern about the status of the applicant's amended provisions and the timing of when all parties would see those provisions.

He also noted the RMA requirement for section 42A reports on private plan changes to address the <u>notified</u> version of the private plan change, and outlined the advice Auckland Council has received that amended provisions put forward by applicants can only be addressed after being formally introduced to all parties in evidence from the applicant. This constraint combined with a fundamental concern about ensuring natural justice, fairness and transparency, has recently led Auckland Council to suggest an approach along the following lines to its Independent Hearing Commissioners:

- Section 42A report is circulated to all parties based on the notified version of the private plan change
- Applicant's evidence is circulated to all parties
- Mediation/expert caucusing
- Submitters' evidence is circulated to all parties
- Addendum to section 42A report is circulated to all parties (if required)
- Applicant's rebuttal evidence is circulated to all parties (if required)
- Hearing.

There was general support from the Councils Independent Hearing Commissioners for an approach along those lines, coupled with the early appointment of a chair to independently direct any pre-hearing processes and set the hearing timetable.

John noted that the current Drury private plan change pre-hearing process differs from the above, however he acknowledged that it involves all relevant parties to the private plan changes. The outcome of this process will be carefully considered and inform a follow-up discussion with the council's Independent Hearing Commissioners, who ultimately determine the nature and timing of any pre-hearing processes.

This topic is to be put on the agenda for the <u>planning expert conferencing session</u> on 31 May for further discussion.

12. All parties agreed to file this report with the Hearing Panel.

Signed on 24 May 2021:

Expert Name	Parties (app/sub)	
Terry Church (T)	Auckland Council (as regulator)	
David Mead (Plg)	Auckland Council (as regulator)	D Dem
Craig Cairncross (Plg)	Auckland Council (as regulator)	
John Duguid (Plg)	Auckland Council (as submitter)	Charles Will
Andrew Prosser (T)	Auckland Transport	CA Great W
Karyn Sinclair (Plg)	Auckland Transport	Marilia
Greg Osborne (Plg)	Drury South Limited	Joseph Jan (
Joe Phillips (T)	Drury South Limited	Mr Challe
John Parlane (T)	Fulton Hogan Land Development Ltd Kiwi Property Holdings No2 Limited Oyster Capital	1 Starto
Daryl Hughes (T)	Fulton Hogan Land Development Ltd Kiwi Property Holdings No2 Limited Oyster Capital	De Drug -
Hilary Papps (T)	Fulton Hogan Land Development Ltd Kiwi Property Holdings No2 Limited Oyster Capital	Jeffyg C.
Nick Roberts (Plg)	Fulton Hogan Land Development Ltd Kiwi Property Holdings No2 Limited Oyster Capital	Mad.
Rachel Morgan (Plg)	Fulton Hogan Land Development Ltd Kiwi Property Holdings No2 Limited Oyster Capital	Righ
Mark Thode (Plg)	Kainga Ora	I worle.
Todd Langwell (T)	Kainga Ora	12000
Andrew Cave (T)	KiwiRail	Ala 24/05/2021
Leo Hills (T)	Lomai Properties Limited	24/05/2021
Vijay Lala (Plg)	Lomai Properties Limited	24/05/2021 24/05/2021
Skip Fourie (T)	Ministry of Education	
Andrew Mein (T)	Waka Kotahi	24/5/21.
Nikhil Prakash (T)	Dong Leng	
Jo Michalakis (Plg)	Counties Power	7 mm 24.5.2
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Interim upgrades – amendments to the precinct provisions

- Interim upgrades that are required prior to any development are addressed in the rules / transport triggers:
- Waihoehoe/Fitzgerald/Opaheke intersection
- Interim upgrade of Waihoehoe/GSR/Norrie intersection
- Waihoehoe Road west upgrade
- Interim upgrades to other local roads will be progressive as development occurs so will be assessed as part of subdivision / development

Upgrades to the Existing Road Network

- (a) Whether Fitzgerald Road/Brookfield Road are progressively upgraded to ensure that safe connections are provided from the site to the Waihoehoe Road/Fitzgerald Road intersection. The section of upgraded road should extend from the site being developed to the Waihoehoe Road/Fitzgerald Road intersection.
- Whether the design of the upgraded road/s accords with the road design cross sections included in Appendix 1 and 1a: (q)
- Where the applicant owns land on both sides of the section of road being upgraded, the design details in Appendix 1 will apply. (i.e. the ultimate design)
- Where the applicant does not own the land adjoining the section of road being upgraded, either on one or both sides, the interim design details in Appendix 1a apply. \equiv

• Interim upgrade of Waihoehoe Road between Fitzgerald and Waihoehoe/GSR/Norrie Road intersection



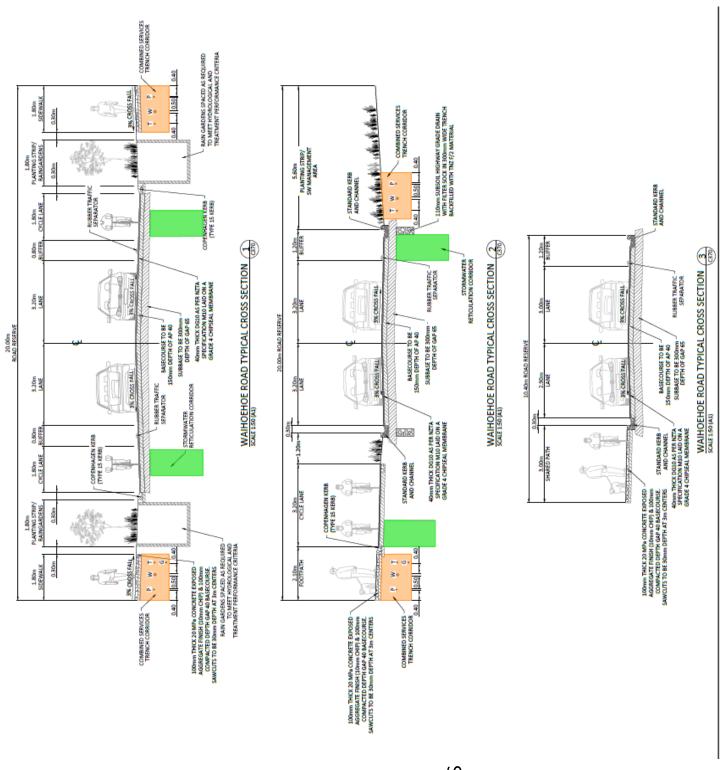
Waihoehoe Road Upgrade Plan

Scale 1:6000 @ A3

Prepared by: Crang Civil

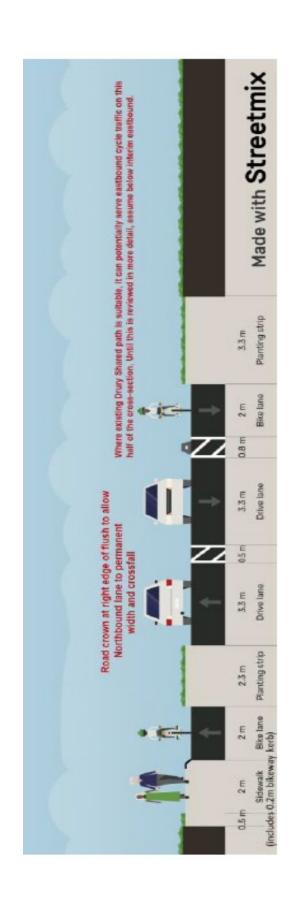


- Interim upgrade of Waihoehoe Road between Fitzgerald and Waihoehoe/GSR/Norrie Road intersection
- Cross sections showing standard interim layout; transition section; and interim rail bridge section as per previous slide



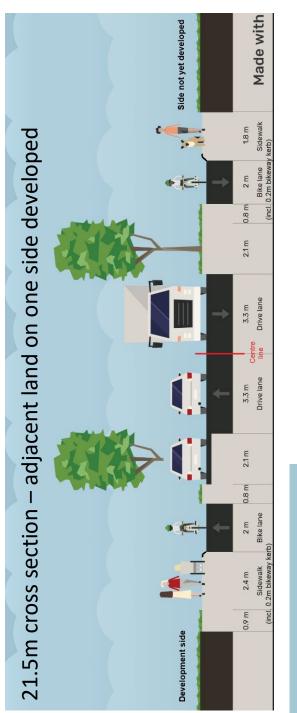
Waihoehoe Road east of Fitzgerald

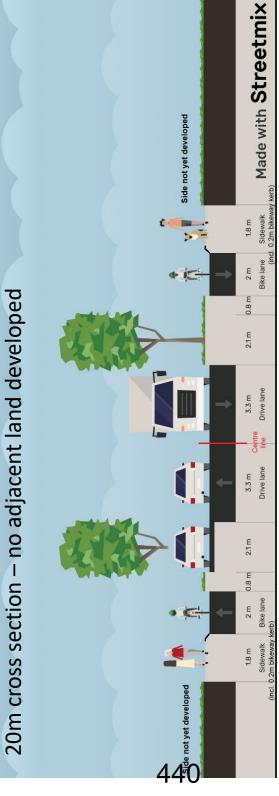
- Interim design for two lane arterial prior to NOR final position / design
- Design for the long term on southern side, as NOR proposes widening to the north
- Otherwise work within the existing 20m road corridor



Fitzgerald Road

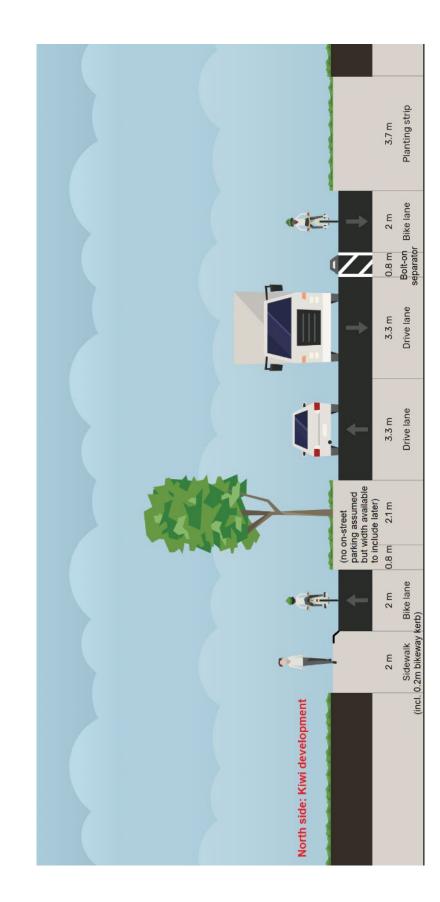
- Interim design for two lane collector
- Design for the long term where the land ownership allows
- Otherwise work within the existing road corridor
- Minor sub standard interim footpath to avoid rework when upgrading interim to long term.



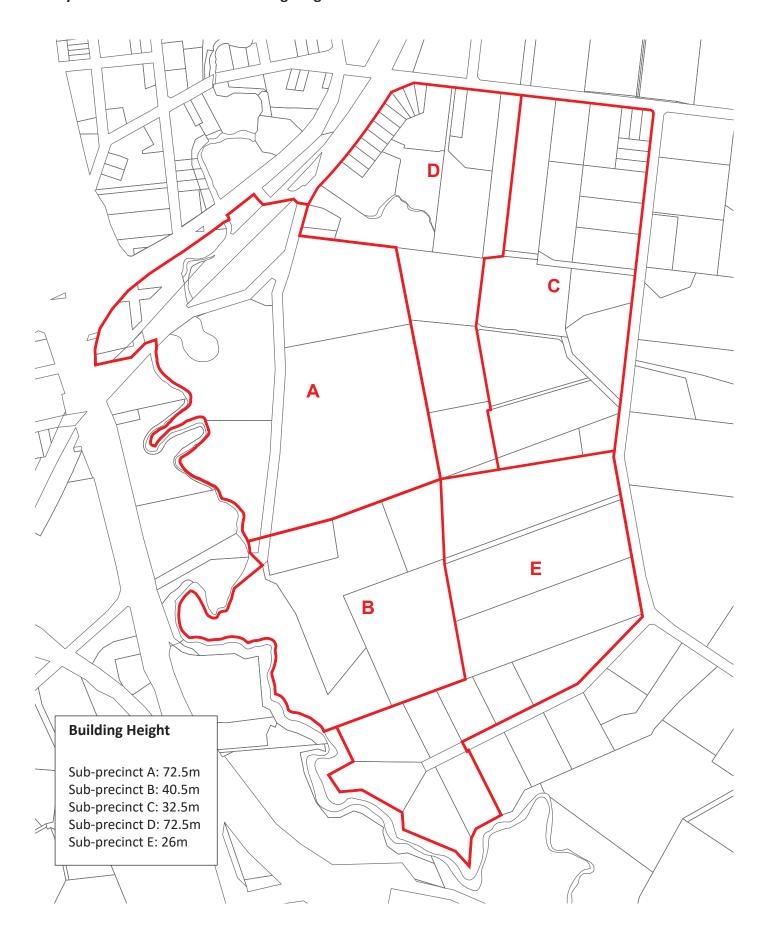


Brookfield Road

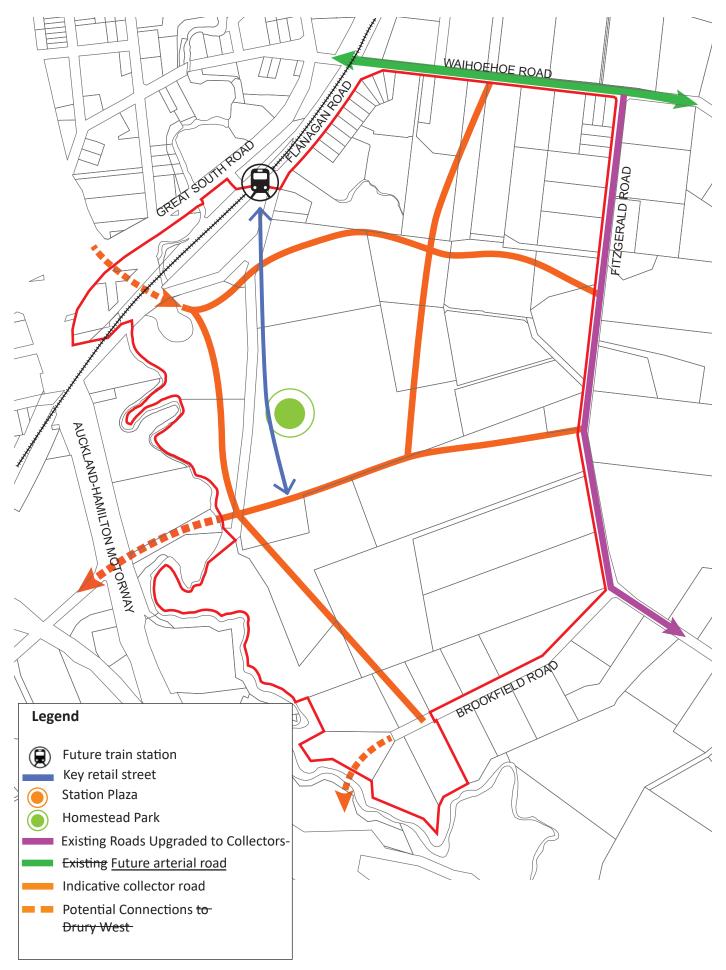
- Design for two lane road with active mode provisions
- Work within the existing 20m road corridor



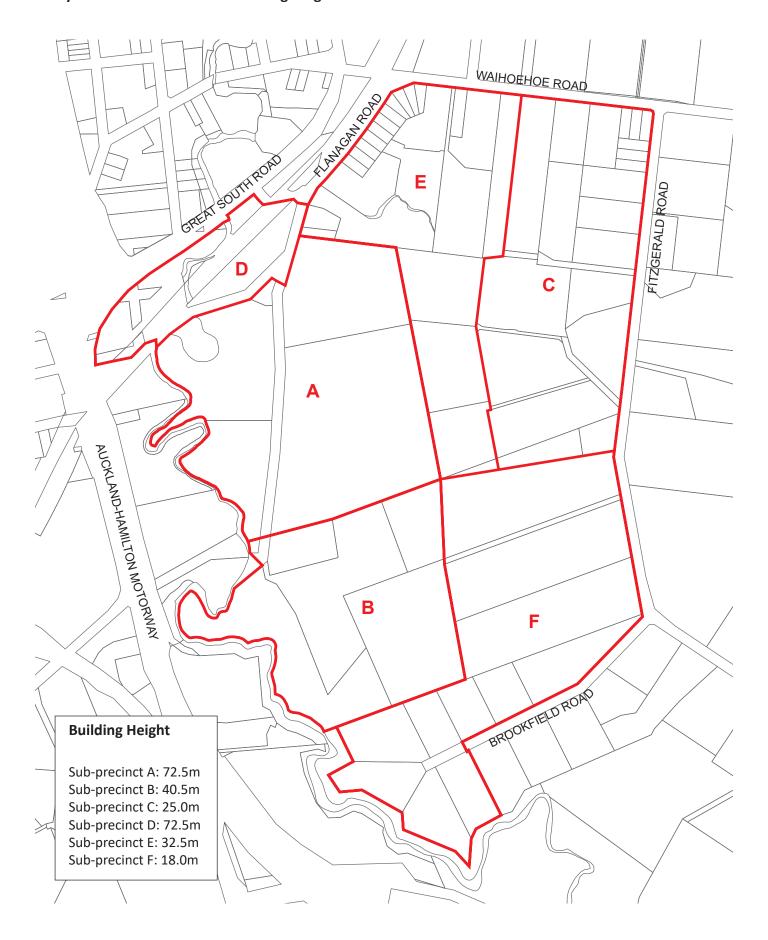
Drury Centre Precinct Plan 1 - Building Height



Drury Centre Precinct Plan 2 - Spatial features



Drury Centre Precinct Plan 1 - Building Height



Drury Centre Precinct Plan 2 - Spatial features

