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

Date: Monday 11 to Thursday 14 March and
Monday 18 to Thursday 21 March 2024
Time: 9.30am
Meeting Room: Stevenson room
Venue: The Franklin Centre, 12 Massey Avenue,
Pukekohe, Auckland

HEARING REPORT – VOLUME FOUR

8 NOTICES OF REQUIREMENTS FOR AUCKLAND COUNCIL AND 1 NOTICE OF REQUIREMENT FOR WAIKATO DISTRICT COUNCIL FOR THE PUKEKOHE TRANSPORT NETWORK

NOR 8 (WAIKATO DISTRICT COUNCIL) TE TUPU NGĀTAHI – SUPPORTING GROWTH ALLIANCE

COMMISSIONERS

Chairperson

Dave Serjeant

Commissioners

Nigel Mark-Brown

Basil Morrison

Bevan Donovan

**KAITOHUTOHU WHAKAWĀTANGA HEARINGS
ADVISOR**

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Note: The reports contained within this document are for consideration and should not be construed as a decision of Council. Should commissioners require further information relating to any reports, please contact the hearings advisor.

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 requiring authority or submitters is allowed at the hearing. Only the hearing commissioners are able to ask questions of the requiring authority or submitters. Attendees may suggest questions to the commissioners and they will decide whether or not to ask them.

The Hearing Procedure

The usual procedure for a hearing 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 Requiring Authority** (the applicant) will be called upon to present their case. The Requiring Authority may be represented by legal counsel or consultants and may call witnesses in support of the application. After the Requiring Authority has presented their case, members of the hearing panel may ask questions to clarify the information presented.
- **Submitters** (for and against the application) are then called upon to speak. Submitters' active participation in the hearing process is completed after the presentation of their evidence so ensure you tell the hearing panel everything you want them to know during your presentation time. Submitters may be represented by legal counsel or consultants and may call witnesses on their behalf. The hearing panel may then question each speaker.
 - Late submissions: The council officer's report will identify submissions received outside of the submission period. At the hearing, late submitters may be asked to address the panel on why their submission should be accepted. Late submitters can speak only if the hearing panel accepts the late submission.
 - Should you wish to present written evidence in support of your submission please ensure you provide the number of copies indicated in the notification letter.
- **Council Officers** will then have the opportunity to clarify their position and provide any comments based on what they have heard at the hearing.
- The **requiring authority** or their representative then has the right to summarise the application and reply to matters raised. Hearing panel members may ask further questions. The requiring authority's reply may be provided in writing after the hearing has adjourned.
- **The chairperson** will outline the next steps in the process and adjourn or close the hearing.
- **The hearing panel** will make a recommendation to the Requiring Authority. The Requiring Authority then has 30 working days to make a decision and inform council of that decision. You will be informed in writing of the Requiring Authority's decision, the reasons for it and what your appeal rights are.

Note: The reports contained within this document are for consideration and should not be construed as a decision of Council. Should commissioners require further information relating to any reports, please contact the hearings advisor.

**EIGHT NOTIFIED NOTICES OF REQUIREMENTS TO THE AUCKLAND COUNCIL
UNITARY PLAN AND ONE NOTIFIED NOTICE OF REQUIREMENT TO THE WAIKATO
DISTRICT PLAN BY TE TUPU NGĀTAHI – SUPPORTING GROWTH ALLIANCE**

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Karen Bell, Planner

Reporting on NOR 8 Mill Road and Pukekohe East Road Upgrade. These are part of eight Notice of Requirements (Auckland Council) and one Notice of Requirement (Waikato District Council) for the Pukekohe Transport Network.

REQUIRING AUTHORITY: TE TUPU NGĀTAHI – SUPPORTING GROWTH ALLIANCE

NOR1 - DRURY WEST ARTERIAL

Notice of requirement lodged by Auckland Transport for a designation for a new transport corridor with active mode facilities in Drury West, extending south from the intersection of State Highway 22 and Jesmond Road to the edge of the Future Urban Zone near Runciman Road, Drury.

NOR2 – PUKEKOHE LINK

Notice of requirement lodged by Waka Kotahi NZ Transport Agency for a new state highway including a shared path from Great South Road, Drury in the northeast, connecting State Highway 22 in the west, and the area in the vicinity of Sim Road/Cape Hill Road, Pukekohe in the south.

NOR3 – PAERATA CONNECTIONS

Notice of requirement lodged by Auckland Transport for two new transport corridors including active mode facilities. One between the two extents of Sim Road, Paerata across the North Island Main Trunk Rail Line. The second between Paerata Rail Station and Sim Road, Paerata.

NOR4 – PUKEKOHE NORTH-EAST ARTERIAL

Notice of requirement lodged by Auckland Transport for a new transport corridor including active mode facilities between State Highway 22, Paerata on the north west and Pukekohe East Road, Pukekohe in the south east.

NOR5 – PUKEKOHE SOUTH-EAST ARTERIAL

Notice of requirement lodged by Auckland Transport to upgrade part of Pukekohe East Road and Golding Road, and a new connection from Golding Road to Svendsen Road, Pukekohe across Station Road and the North Island Main Trunk Rail Line - including active mode facilities.

NOR6 – PUKEKOHE SOUTH-WEST UPGRADE

Notice of requirement lodged by Auckland Transport to upgrade of specific intersections and the regrade of specific driveways on Nelson Street, Ward Street, West Street and Helvetia Road for active mode facilities.

NOR7 – PUKEKOHE NORTH-WEST UPGRADE

Notice of requirement lodged by Auckland Transport to upgrade Helvetia Road, Pukekohe in the south-west and a new corridor from Helvetia Road to SH22 Paerata in the north-east including active mode facilities.

NOR8 (AUCKLAND COUNCIL) – MILL ROAD AND PUKEKOHE EAST ROAD UPGRADE

Notice of requirement lodged by Waka Kotahi for an upgrade of Mill Road (Bombay) in the east for additional vehicle lanes and a shared path and an upgrade of Pukekohe East Road, Pukekohe in the west for a shared path.

NOR8 (WAIKATO DISTRICT COUNCIL) – MILL ROAD AND PUKEKOHE EAST ROAD UPGRADE

Notice of requirement lodged by Waka Kotahi NZ Transport Agency to designate land, under the Resource Management Act 1991 (RMA), for an upgrade of Mill Road (Bombay) in the east for additional vehicle lanes, a shared path and an upgrade of Pukekohe East Road, Pukekohe.

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Notice of Requirement

Section 168 of the Resource Management Act 1991

Date:	4 December 2023	DES:	
Reporting Planner:	Louise Allwood, Stantec NZ	Property Ref:	
		Site Visit on:	11 December 2023
Applicant:	Waka Kotahi New Zealand Transport Agency		
Property Address:	248, 240, 300 A, 306 Pukekohe East Road, Pukekohe 5, 21 Turbott Road, Pukekohe 28, 64, 86, 80 Mill Road, Bombay 14 Jericho Road, Pukekohe		
Legal Description:	Record of Title NA1325/39 - Lot 1 DP 43900 Record of Title 950201 - Lot 2 DP 550743 Record of Title 950200 - Lot 1 DP 550743 Record of Title NA91A/199 - Lot 2 DP 152398 Record of Title NA63D/644 - Lot 2 DP 113535 Record of Title NA91A/198 - Lot 1 DP 152398 Record of Title NA63D/643 - Lot 1 DP 113535 Record of Title NA20C/355 - Part Lot 1 DP 26124 Record of Title NA8A/165 - Part Lot 3 DP 29079 Record of Title NA8B/1298 - Part Allot 26 PSH OF Pukekohe Record of Title NA43D/507 - Lot 2 DP 86017 Record of Title NA43D/508 - Lot 3 DP 86017 Record of Title NA572/228 - Part Allot 29 PSH OF Mangatawhiri Record of Title NA166/252 - Part Allot 29A PSH OF Mangatawhiri Record of Title NA43D/506 - Lot 1 DP 86017		
Area to be Designated:	Legal Description	Address	Approx. land to be designated (m ²)
	Lot 1 DP 43900	248 Pukekohe East Road	165
	Lot 2 DP 550743		11890
	Lot 1 DP 550743	240 Pukekohe East Road	458

		RD 2 Pukekohe	
	Lot 2 DP 152398	300 A Pukekohe East Road PUKEKOHE	7876
	Lot 2 DP 113535	15 Turbott Road PUKEKOHE	1493
	Lot 1 DP 152398	306 Pukekohe East Road PUKEKOHE	3142
	Lot 1 DP 113535	21 Turbott Road PUKEKOHE	932
	Part Lot 1 DP 26124	28 Mill Road BOMBAY	14053
	Part Lot 3 DP 29079	14 Jericho Road PUKEKOHE	3770
	Part Allot 26 PSH OF Pukekohe	64 Mill Road BOMBAY	2321
	Lot 2 DP 86017		1805
	Lot 3 DP 86017	86 Mill Road BOMBAY	2188
	Part Allot 29 PSH OF Mangatawhiri	80 Mill Road BOMBAY	1386
	Part Allot 29A PSH OF Mangatawhiri	80 Mill Road BOMBAY	267
	Lot 1 DP 86017		1503
	Mill Road		
District Plan	Operative Waikato District Plan (Franklin Section) 2013: AND Proposed Waikato District Plan (Appeals Version 2022)		
District Plan Zoning:	Operative Waikato District Plan Franklin Section (operative) – Rural Zone, Environmental Enhancement Overlay Area, Central Rural Management Area, Waikato River Catchment, Designation 149 – First gas Ltd		

	Proposed Waikato District Plan (Appeals Version 2022) – General Rural Zone, Waikato River Catchment, Gas Transmission Line Overlay, Designation, Gas Transmission Line FRSTG-1
Application	Notice of Requirement to construct, operate and maintain and improve a state highway, cycleway and /or shared path, and associated infrastructure – NoR 8 (WDC) Mill Road Pukekohe East Road Upgrade

1. INTRODUCTION

Pursuant to section 168 of the RMA, Waka Kotahi New Zealand Transport Agency (Waka Kotahi) as the requiring authority, has lodged a notice of requirement (NoR) for a designation as part of the proposed Pukekohe Transport Network (NoR 8). The NoR document set included the following: Volume 1: Form 18 for NoR 8 that includes:

- Attachment A: Designation Plans.
- Attachment B: Schedule of Directly Affected Properties; and
- Attachment C: Conditions of Designation.

Volume 2: Pukekohe Transport Network Assessment of Effects on the Environment, September 2023 v1.0 (the AEE) that includes:

- Appendix A: Pukekohe Transport Network Assessment of Alternatives Report September 2023.

Volume 3: Concept Design Drawings / General Arrangement Layout Plans

Volume 4: Supporting Technical Assessments that includes:

- Appendix A: Pukekohe Transport Network Assessment of Transport Effects September 2023.
- Appendix B: Pukekohe Transport Network Assessment of Construction Noise and Vibration Effects September 2023.
- Appendix C: Pukekohe Transport Network Assessment of Operational Noise Effects September 2023.
- Appendix D: Pukekohe Transport Network Assessment of Flood Hazard Effects 12/09/2023.
- Appendix E: Pukekohe Transport Network Assessment of Ecological Effects September 2023.
- Appendix F: Pukekohe Transport Network Assessment of Landscape and Visual Effects September 2023.
- Appendix G: Pukekohe Transport Network Assessment of Effects on Historic Heritage September 2023.
- Appendix H: Pukekohe Transport Network Assessment of Arboricultural Effects September 2023; and
- Appendix I: Pukekohe Transport Network Urban Design Evaluation September 2023.

NoR 8 is located within the jurisdiction of Auckland Council (AC) and Waikato District Council (WDC). This report assesses the NoR 8 Mill Road Pukekohe East Road Upgrade applied to the land is located within the jurisdiction of WDC. Where land falls within the jurisdiction of AC this has been assessed within a separate report named Notices of requirement (NoR) under section 168 of the RMA by Waka Kotahi New Zealand Transport Agency for NoR 2: Drury to Pukekohe Link and NoR 8: Mill Road and Pukekohe East Road Upgrade, dated 15 December 2023 prepared by Karen Bell Consultant Planner.

The purpose of the designation as described is to construct, operate and maintain and improve a state highway, cycleway and / or shared path, and associated infrastructure. The overall project is for the construction, operation, maintenance and improvement of a state highway and cycleway and/ or shared path, and associated infrastructure on Mill Road, Bombay and Pukekohe East Road, Pukekohe. This work includes:

- A state highway including a shared path,
- Associated works including intersections, bridges, embankments, retaining walls, culverts, stormwater management systems;
- Changes to local roads, where the proposed work intersects with local roads;
- Construction activities including construction areas and the re-grading of driveways

The NoR was lodged pursuant to section 168 of the Resource Management Act 1991 (RMA). Pursuant to Section 184(1)(c) of the RMA, Waka Kotahi seeks a lapse period of 20 years for the implementation of the proposed designation.

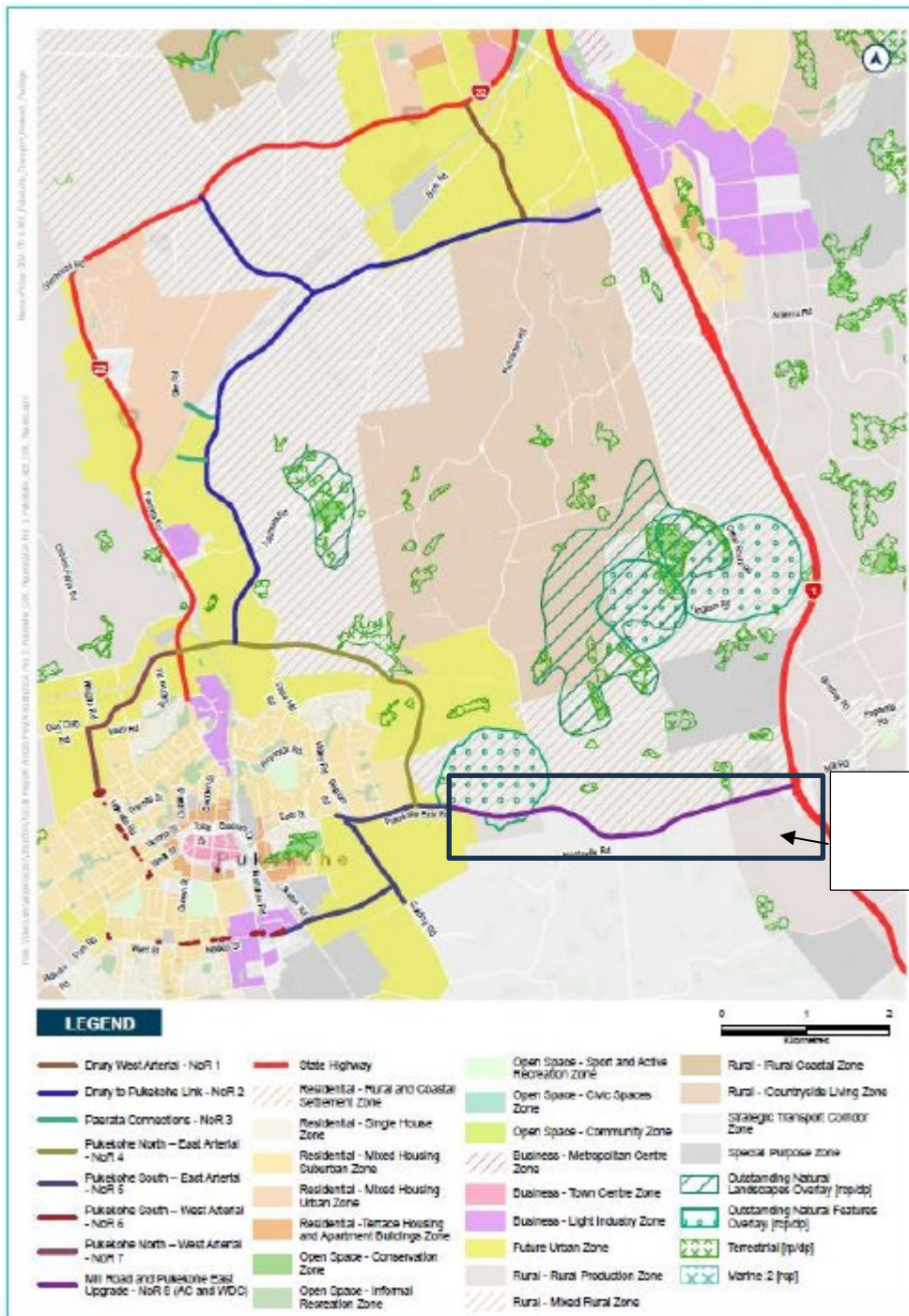
Following review of the documents submitted it was concluded that there was sufficient information lodged and it was not necessary to request further information from the requiring authority.

This report is supported by the following technical assessment reviews:

- Technical Specialist Report – Transport, Arrive Ltd, dated 12 December 2023
- Technical Specialist Report – Stormwater, dated 14 December 2023
- Technical Specialist Report – Construction and Operational Noise and Vibration Assessments, dated December 2023
- Technical Specialist Report – Arboriculture, dated 6 December 2023
- Technical Specialist Report – Ecology, dated 14 December 2023
- Technical Specialist Report – Urban Design and Landscape dated 14 December 2023
- Technical Specialist Report – Archaeology and Historic Heritage dated 6 December 2023

2. SITE AND SURROUNDING ENVIRONMENT

The general location of the project is shown on Figure 1 (taken from the AEE) below. The reader is also referred to the NoR plan set which outlines the extent of any existing designations and the extent of the NoR. The plan set is referenced as Attachment A: Designation Plans to Form 18. This report relies on the site and environment descriptions provided on behalf of Waka Kotahi as set out in sections 9.13 of the AEE supporting the NoR and within each of the technical assessments.



This application (NoR 8 - Light purple line)

Figure 1 General location plan of NoR being sought and local area (this plan also shows the NoRs sought by Waka Kotahi)

Figure 2 and 3 (taken from the AEE) below identifies the general location of the proposed works. The project is located along the boundary of AC and WDC.

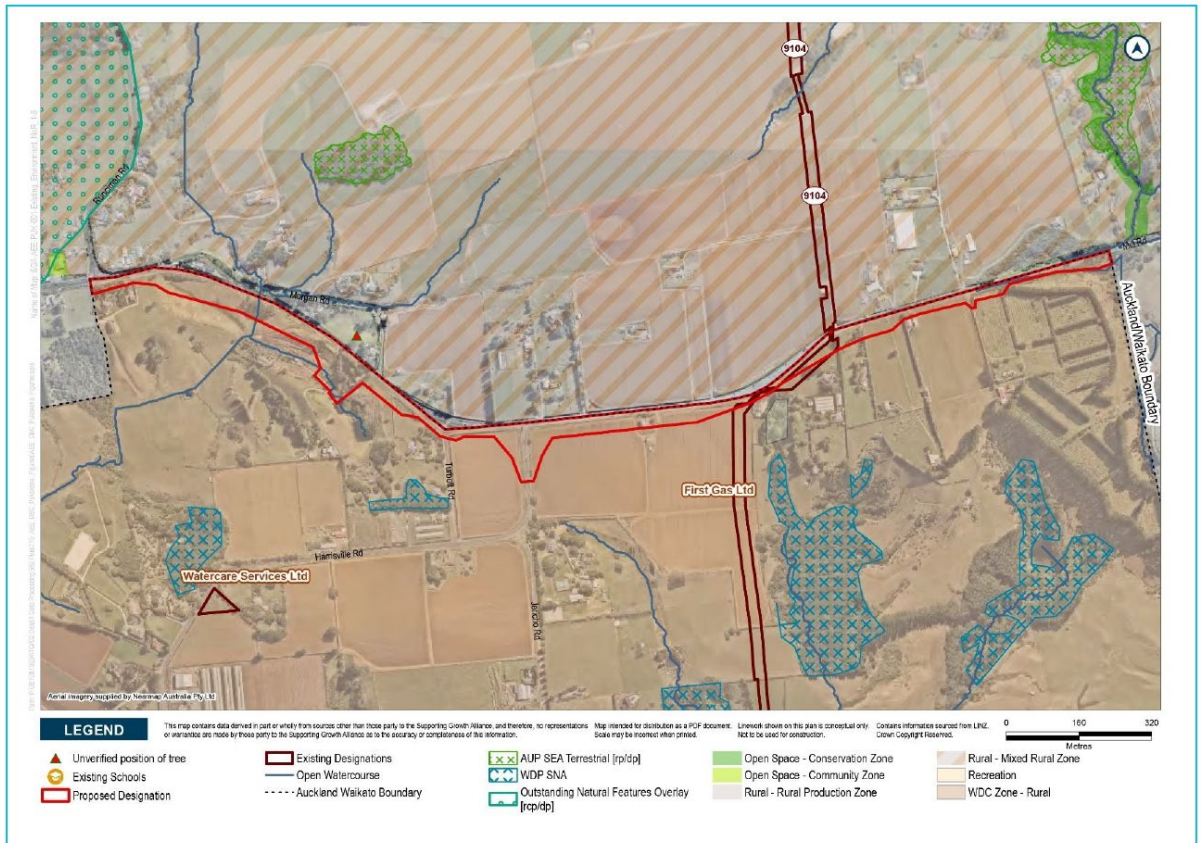


Figure 2 NoR 8 (WDC) - Mill Road and Pukekohe Road Upgrade

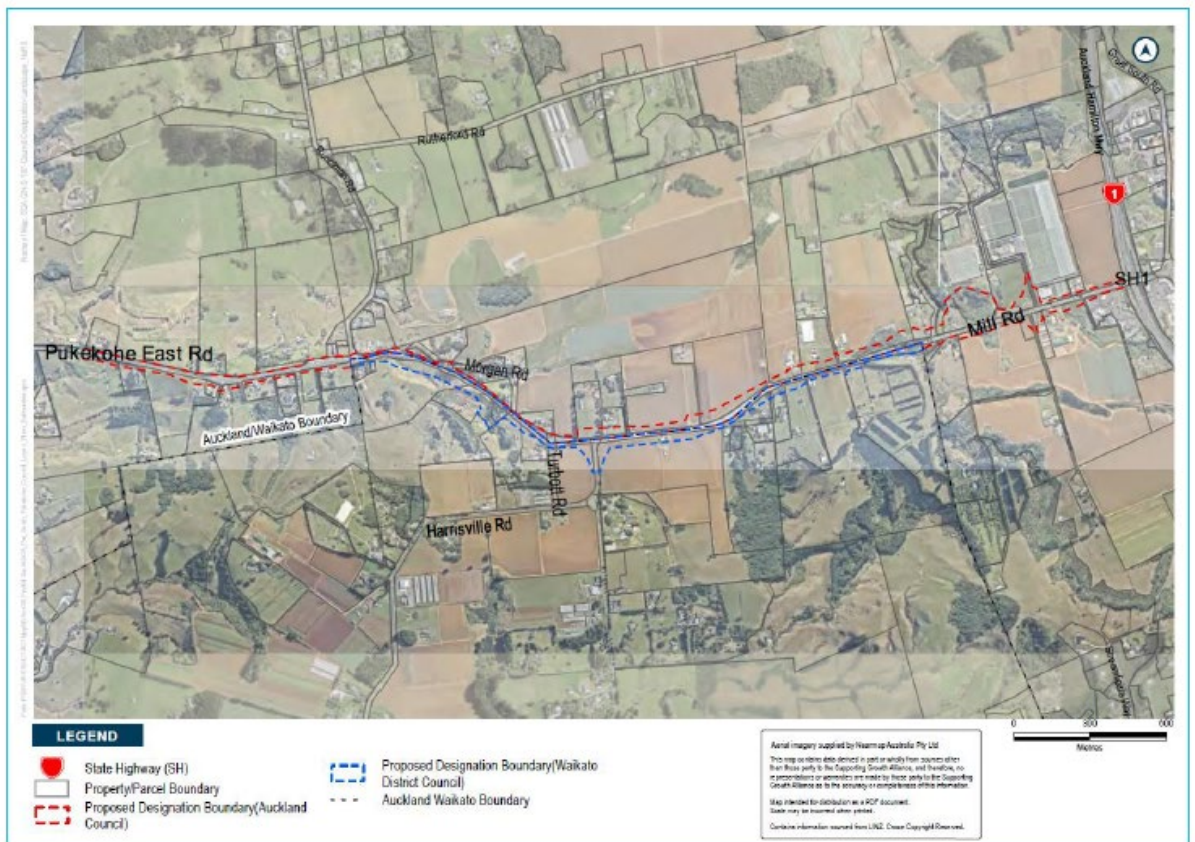


Figure 3 Mill Road (Bombay) and Pukekohe East Road Upgrade split by jurisdictional area (Auckland Council (shown in red dash) and Waikato District Council (shown in blue dash))

Most of the surrounding area is currently rural in nature and is used for agricultural purposes. The State Highway 1 (SH1) and Great South Road interchange and rest stop facilities are located to the east. Residential development is also located to the east in Bombay and to the west in Pukekohe.

The immediate topography is generally flat. Majority of the land has been cleared for agricultural purposes with the exception of pockets of vegetation which follow boundaries, are shelter belts or are blocks of established vegetation. The Assessment of Arboricultural Effects identifies one tree that is subject to the rules and provisions of Part 15.6 Vegetation Clearance under the Operative Waikato District Plan as it meets the definition of Indigenous Vegetation, Tree 8/47 Totara tree located at 300 Pukekohe East Road.

Firstgas Ltd has a designation for the Pukekohe to East Tamaki Gas Pipeline (FRSTG-1 and 149) which interacts with the project. Watercare Services Ltd also has a designation (WSL-8 and 144) for feed tank for water supply purposes within the immediate project area located at 730 Harrisville Road. Noting Watercare Services Ltd has other designations in the project area that are located over 600m away.

The project is located in the Waikato River Catchment Area and two stream catchments, the Ngakoroa Stream and Tūtaenui Stream. The Tūtaenui Stream catchment ultimately flows to the Waikato River, while the Ngakoroa Stream drains to the Manukau Harbour.

Five Significant Natural Areas are located to the south of the project, however the NoR does not interact with them. They are varying distances from the NoR boundaries. There is also an Ecological Corridor identified under the operative Waikato District Plan (Franklin Section) nearby at 300B Pukekohe East Road.

The AEE identifies bat passes being recorded within the NoR during April/May 2023. Suitable bird habitat within the project area includes Australasian bittern, White heron, Dabchick (all threatened) and Banded rail, Spotless crane, and South Island pied oystercatcher (at risk). Native herpetofauna (copper skink and ornate skink) are identified as likely to occur within suitable habitat in the Pukekohe Transport Network.

Archaeological site R12/1208 (Bombay Flour Mill or Pilgrims Mill) is located to the south of the designation. The Pukekohe East tuff ring is also located within the project area and directly interacts with it. This is of cultural significance to iwi.

In relation to assessing the approach to the likely receiving environment, Section 8.4 of the AEE outlines that assessing the effects on the environment as it exists today will not provide an accurate reflection of the environment in which the effects of the construction and operation of the transport corridor will be experienced. The AEE sets out today's land use, zoning, type, likelihood for change for the environment (ranging from low to high) and the likely future zoning that relates to those areas subject to Future Urban Zones.

The likely future environment or likely future zone in relation to NoR 8 is stated in the AEE as the rural zoning. It is anticipated this will remain the same in the future in the WDC area. Noting some areas within the jurisdiction of AC are zoned Future Urban Zone at the western extent of NoR 8 and this will likely change to residential – Mixed Housing Suburban.

2.1. Projects consent applications interface with the project.

Table 8-4 of the AEE sets out other projects that interface with the NoRs. Waka Kotahi's SH1 Papakura to Bombay Motorway project interfaces with NoR 8 at the SH1 Bombay interchange improvements with Mill Road – Pukekohe East Road Upgrade at Mill Road. Waka Kotahi is anticipated to lodge Notices of Requirement for route protection in late 2023.

The Waikato 2070 Waikato District Council Growth & Economic Development Strategy (non-statutory document) sets the direction for future growth. In addition, the Future Proof Strategy is a 30 year growth management and implementation plan for the

Hamilton, Waipa and Waikato sub-region. The Franklin District Growth Strategy 2051 (dated 2007) identifies growth issues, prioritises growth outcomes and provides a growth strategy for the Franklin area under the operative Waikato District Plan (Franklin Section). Tuakau is located approximately 9km and Pokeno is located about 10km from NoR 8. NoR 8 is proposed to have interregional benefits, particularly for Tuakau and Pokeno. AC's Plan Change 78 proposes to intensify the Pukekohe town centre, in addition to large areas of land zoned Future Urban.

As identified in section 9 of the AEE there are a number of developer-led plan changes, resource consents and developer interest in Pukekohe in proximity to the Pukekohe Transport Network. None of the land subject to the plan changes or resource consents listed in section 9 adjoin or are directly affected by NoR 8.

3. BACKGROUND TO THE NOR

Section 2 of the AEE provides background and context for this application. In summary, this NoR forms part of a wider programme of works for the Pukekohe Transport network NoR's for Waka Kotahi NZ transport Agency (Waka Kotahi) and Auckland Transport (AT) as requiring authorities under the RMA. The NoR's are to designate land for future strategic transport corridors to provide for the future construction, operation, maintenance and improvement of transport infrastructure in the Pukekohe, Paerata and Drury areas of Auckland and Waikato.

There are eight projects that involve nine different NoRs which form the Pukekohe Transport Network Projects. Three of the NoRs are from Waka Kotahi and six from AT. The Table below (taken from the AEE) contains a description of each of the NoRs. This s42a report covers one NoR submitted by Waka Kotahi to WDC shown in bold in the Table.

NoR	Project	Requiring Authority	Council	Description
NoR 1	Drury West Arterial	AT	Auckland Council	A new transport corridor with active mode facilities in Drury West extending south from the intersection of SH22 and Jesmond Road to the edge of the Future Urban Zone near Runciman Road, Drury.
NoR 2	Drury Pukekohe Link	Waka Kotahi	Auckland Council	A new state highway including a shared path. It includes sections of new and upgrades of existing transport corridors from Great South Road, Drury in the north-east, connecting to State Highway 22 in the west, and the area in the vicinity of Sim Road/Cape Hill Road, Pukekohe in the south.

NoR	Project	Requiring Authority	Council	Description
NoR 3	Paerata Connections	AT	Auckland Council	Two new transport corridors including active mode facilities: One new connection between the existing Sim Road (south) and the Paerata Rail Station. The second new connection between the two extents of Sim Road across the North Island Main Trunk (NIMT).
NoR 4	Pukekohe North-East Arterial	AT	Auckland Council	A new transport corridor including active modes from SH22, Paerata in the north-west to Pukekohe East Road, Pukekohe in the south-east.
NoR 5	Pukekohe South-East Arterial	AT	Auckland Council	A new and upgraded transport corridor in Pukekohe including active mode facilities. It upgrades part of Pukekohe East Road and Golding Road and a new connection between Golding Road (north of Royal Doulton Drive) and to Svendsen Road across Station Road and the NIMT.
NoR 6	Pukekohe South-West Upgrade	AT	Auckland Council	The upgrade of specific intersections and the regrade of specific driveways on Nelson Street, Ward Street, West Street and Helvetia Road for active mode facilities.
NoR 7	Pukekohe North-West Arterial	AT	Auckland Council	The upgrade of Helvetia Road, Pukekohe in the south-west and a new corridor from Helvetia Road to SH22 Paerata in the north-east including active mode facilities.
NoR 8	Mill Road and Pukekohe East Road Upgrade	Waka Kotahi	Auckland Council	An upgrade of Mill Road (Bombay) in the east for additional vehicles lanes and a shared path and Pukekohe East Road, Pukekohe in the west for a shared path.
NoR 8	Mill Road and Pukekohe East Road Upgrade	Waka Kotahi	Waikato District Council	

Te Tupu Ngātahi Supporting Growth (Te Tupu Ngātahi) is a collaboration between AT and Waka Kotahi to plan transport investment in Auckland's future urban zoned areas over the next 10 to 30 years. The key objective of Te Tupu Ngātahi is to protect land for future implementation for the required strategic transport corridors/infrastructure.

Auckland is New Zealand's largest city and is predicted to grow to 720,000 people to reach 2.4 million over the next 30 years. This generates additional demand for housing and jobs. Majority of this growth will occur within existing urban areas, however substantial urban growth is planned around Pukekohe, Paerata and Drury West. The Waikato District is also experiencing significant growth and the pressure of development. The Waikato District has been experiencing 3% population growth year-on-year over the past decade. Mill Road and Pukekohe East Road are key transport routes for those travelling between Pukekohe and North Waikato, these provide important connections between Auckland and Waikato.

There have been several previous phases for this project which consisted of:

- 2015 forming Transport for Future urban Growth Programme
- 2016 development of the Transport for Future urban Growth programme business case
- 2019 Indicative business cases for each growth area were approved. The South Indicative Business Case recommended a Indicative Strategic Transport network for Drury, Paerata and Pukekohe, this was endorsed in February 2019.
- 2020 The strategic South Detailed Business Case commenced with options assessment identifying the preferred options and presented to public in 2020
- 2020 New Zealand Upgrade Programme announced funding for implementation of the Mill Road components of the Strategic South DBC.

The current form of the transport network in these areas is not capable of supporting the significant growth anticipated. The Pukekohe Transport Network will improve safety, integration, access, reliability and resilience and travel choice. Overall it seeks to improve connectivity and resilience providing high quality, safe and attractive transport environments.

Route protection is required as there is ongoing pressure from developments in Pukekohe occurring or planned in the future, this includes structure plans, developer interest, private plan changes and resource consents and other projects, these are described in further detail in section 9.1 of the AEE.

4. PROPOSAL

The NoR 8 (WDC) Mill Road Pukekohe East Road Upgrade project is comprehensively described within the NoR documentation and a summary of this description is provided in the sections below. For completeness, the below describes the entire project as the jurisdictional boundary is located within the existing roads and both designations are required to be implemented in order to construct the project. Where specific detail has been provided in relation to the proposed works located within the jurisdiction of WDC this has been described.

Form 18¹ specifically describes the area of the proposed designation (Mill Road and Pukekohe East Road Upgrade) as shown on the Designation Plans included in Attachment A of the application (NoR 8 (WDC)).

¹ Notice of Requirement for a designation of land, dated 2 October 2023, Waka Kotahi New Zealand Transport Agency NoR 8 (WDC) – Mill Road and Pukekohe East Road Upgrade.

Form 18 specifies NoR 8 applies to an area of land of approximately 5.3 hectares located on Mill Road, Bombay and Pukekohe East Road, Pukekohe located within the jurisdiction of WDC. NoR 8 applies to 15 land parcels (excluding existing roads). The land directly affected by NoR 8 is identified in the Schedule of Directly Affected Property included in Attachment B of the application.

The objectives of Waka Kotahi for the Mill Road and Pukekohe East Road Upgrade – NoR 8 (WDC) are to:

Provide for an upgrade transport corridor from SH1 (Bombay Interchange) to Pukekohe that:

- a) Improves connectivity*
- b) Is safe*
- c) Provides resilience in the transport network*
- d) Integrates with and supports planned urban growth*
- e) Integrates with and supports the existing and future transport network*
- f) Improves travel choice and contributes to mode shift*

4.1. Overall proposed key features

Mill Road will be upgraded to four lanes (2.1 kms) from State highway 1 to Harrisville Road as shown in Figures 2 and 3 above. It is proposed to indicatively be 30m wide with four lanes for general traffic and walking and cycling on the southern side as shown in figure 4 (taken from the AEE) below.

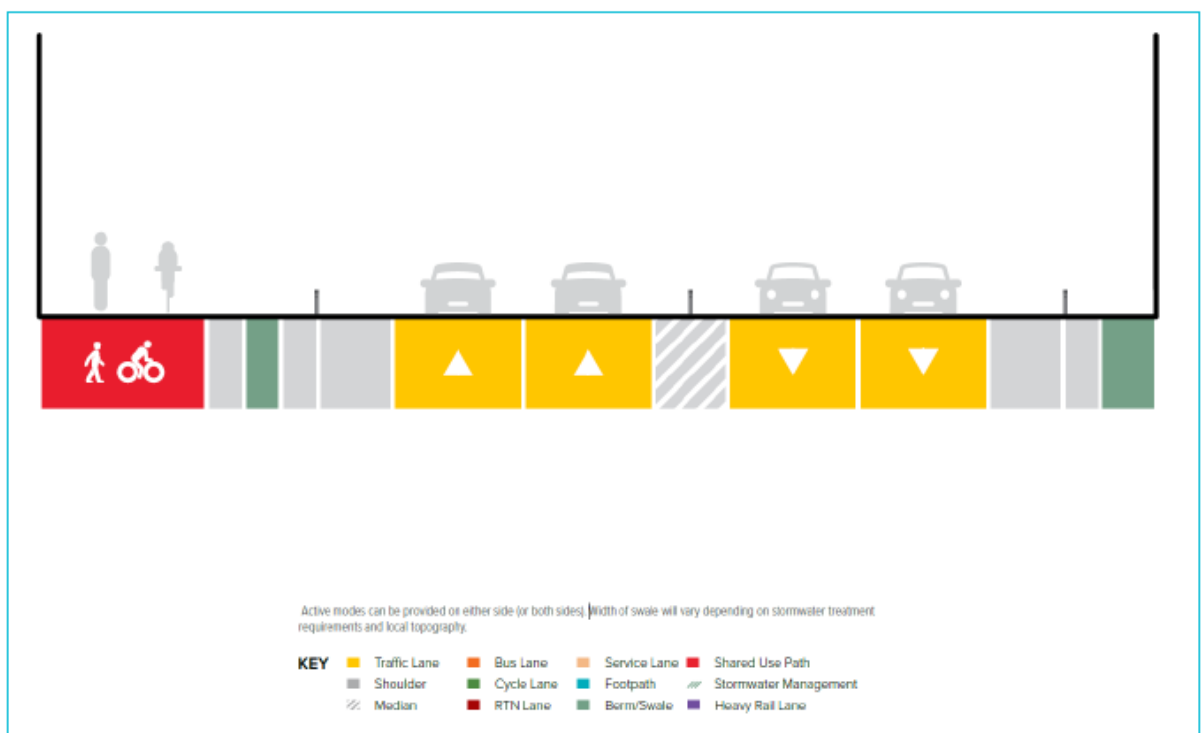


Figure 4 indicative generic 30m wide cross section with four lanes for general traffic, with active mode facilities on the southern side on Mill Road

Pukekohe East Road is proposed to be upgraded (3.4 kms) for active transport facilities on the southern side from Harrisville Road in the east to NoR 5 in the west, an indicate cross section is demonstrated in figure 5 (taken from the AEE) below.

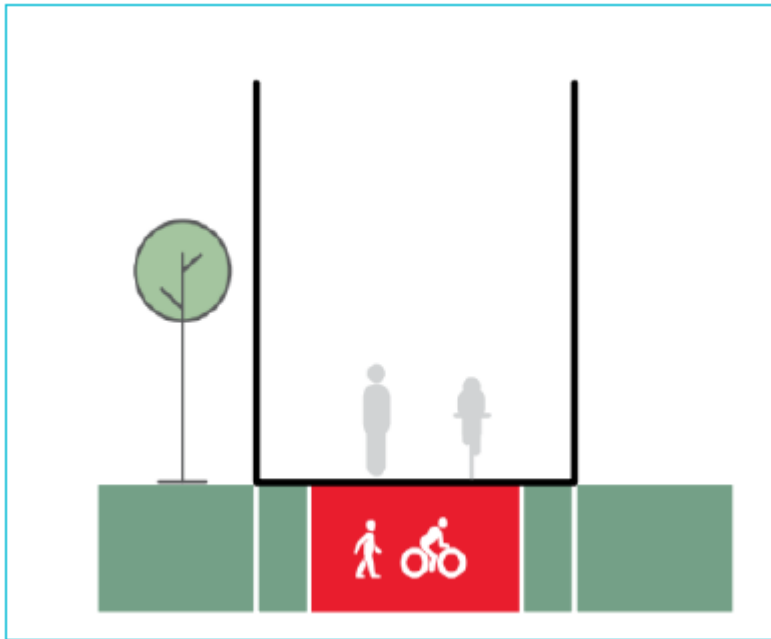


Figure 5 Indicative Rural Strategic Active Mode Corridor - 6m wide cross section for active transport facilities on one side of the southern side of the corridor. Proposed on Pukekohe East Road.

One new stormwater treatment wetland, swales and new and upgraded culvert are proposed.

4.2. Proposed Changes to the Road Network

The proposed design and changes to the network are described as widening the south side west of Harrisville Road to provide for a swale and active mode paths combined with batter slopes. A new dual-lane roundabout at the Harrisville Road intersection with a proposed active mode paths that stop a short distance along Harrisville Road. Mill Road is proposed to be widened to four lanes between the Southern Motorway and Harrisville Road with active mode paths on the southern side of Pukekohe East Road between Harrisville Road and NoR 5. The speed limit is proposed to be 80km/h. East of Harrisville Road through to the regional boundary the project requires land on the southern side of the road to provide for widening the carriageway to four lanes with a median, swales, and active mode path(s) on the southern side of the road.

4.3. Construction Programme and Methodology

Section 8.2 of the AEE provides an indicative construction methodology which has been split into three subparts; sequencing of main construction activities, identification of indicative land required for construction works and approximate duration of activities. Exact construction staging will be determined at detailed design stage. The AEE describes the typical construction sequence as follows:

- Enabling works, including site investigation and service relocation;
- Site establishments for main contractor;
- Establish traffic management to enable access and establish construction areas;
- Earthworks, establishment of environmental controls, topsoil stripping and cut to fill activities;
- Structures work, including bridges, retaining walls and culverts;
- Network drainage;
- Pavement construction; and
- Finishing works, including linemarking, landscaping and disestablishment.

The proposed works of NoR 8 are anticipated to take approximately 3 to 4 years to construct.

4.4. Land Requirement

The table located within section 3.2 of the AEE, notes that there are 68 properties directly affected for NoR 8 (i.e. the designation boundary will extend across these parcels) within the jurisdiction of AC and WDC. 65 are noted as being privately owned, totalling approximately 168,814m², two AC properties totalling approximately 1,636m², one hydro property totalling approximately 131m². The land use is described as agricultural -pastoral, rural-residential.

Form 18 states the land required for the designation is held in a number of parcels of land ownership and comprises a total area of 5.3 ha within the jurisdictional boundary of Waikato District located on Mill Road, Bombay and Pukekohe East Road, Pukekohe. Form 18 specifies the NoR applies to 15 land parcels (excluding existing roads). There are 17 existing dwellings directly affected.

Figure 3 located above shows the land subject to the project and the land required for NoR 8. Refer to the Land Requirement plans contain in Attachment A of the NoR and Attachment B of the NoR (property details) for further information on the land required.

The schedule and designation plans also include sections of the following roads Mill Road, Harrisville Road, Pukekohe East Road, and Turbott Road.

5. CONSULTATION

Consultation has occurred and is referenced in section 10 of the AEE and is not repeated here.

5.1. Mana Whenua

The AEE notes that only Mana Whenua can speak to the impact that a project may have on their cultural values, heritage and aspirations and that the assessment undertaken in the AEE draws on engagement that has been undertaken with Mana Whenua and inputs provided by Mana Whenua representatives during the concept design of each corridor. Cultural Values Assessment from Ngāti Te Ata Waiohū to inform the options assessment and a CIA from Ngāti Te Ata Waiohū to inform the concept design and AEE.

The AEE also notes that the Pukekohe Transport Network does not directly affect any identified properties or land currently being negotiated under Treaty settlements, land returned under a Treaty settlement, marae, Māori freehold lands, Tupuna Maunga Affected Areas, Tangata Whenua Management Areas, or within the coastal environment under the Marine and Coastal Area (Takutai Moana) Act 2011. The AEE notes that much of the Network is within the Ngāti Tamaoho statutory acknowledgement area, which recognises the association between Ngāti Tamaoho and a particular area and enhances the iwi's ability to participate in specified RMA processes.

Waikato Tainui advised for NoR 8 Mill Road-Pukekohe East Road Upgrade they defer to Ngāti Te Ata Waiohū, Ngāti Tamaoho and Te Ākitai Waiohū.

There did not appear to be any specific feedback related to NoR 8 within the application documents.

6. RESOURCE MANAGEMENT ACT 1991 NOTIFICATION REQUIREMENTS

As requested by the applicant, all the NoRs within the Pukekohe Transport Network Projects were publicly notified on 13 October 2023 pursuant to section 149ZCB of the RMA. The closing date for submissions was 13 November 2023. In total 16 submissions were received to NoR 8 (WDC), these are set out below and included within **Attachment B** of this report.

Submission Number	Submitter Name	Position
1	The Telecommunication companies (Chorus, Connexa, Spark, One NZ, and FortySouth)	Oppose if relief sought is not addressed.
2	Alexandra Whitley	Oppose
3	Waikato District Council – Roading Team	Support
4	Andrew Roose and Kathryn Ann Roose	Neutral
5	David Alexander and Lynne Lorraine Lawrie	Oppose
6	David Christopher Neumann	Oppose
7	Ashlee Helen Crane	Oppose
8	Firstgas Ltd	Neutral

Submission Number	Submitter Name	Position
9	Eric Muir	Oppose
10	Lynda Muir	Oppose
11	Heritage New Zealand Pouhere Taonga	Support
12	Rodney Cunningham	Oppose
13	Watercare Services Limited	Neutral
14	Ministry of Education	Supports (in principle)
15	Counties Energy Ltd	Support
16	Campaign for better transport	Support (in favour)

In summary, 5 submissions are in support, 3 submit neutral and 8 submissions are in opposition to NoR 8. The matters raised in the submissions relate to:

- The Telecommunication companies (Submitter No. 1) submit in opposition if the matters are not addressed within their submission. The relief sought seeks to ensure existing and potential future telecommunications infrastructure located in the project corridors are adequately addressed, they submit it is easier to plan now for the future rather than retrofitting necessary telecommunications/broadband infrastructure. Amendments are requested to the Network Utility Management Plan condition to ensure there is opportunity to coordinate further work during the detailed design phase of the project, where practicable. An advice note is also sought setting out the Network Utility Management Plan condition applies to the entities making up The Telecommunication companies.
- A Whitley (Submitter No. 2) submits in opposition on the grounds that the extent of land required is excessive for the proposed works. If consent is allowed to fill in the gully, this will reduce the land take required on 250 Pukekohe East Road. A request is made for open lines of communication.
- Waikato District Council (Roading Team) (Submitter No. 3) submit in support of the proposed works as it will significantly improve safety and connectivity for Waikato District Council residents and other users of Harrisville, Mill and Pukekohe East Roads. Requests priority is given to constructing the RAB (roundabout) treatment at Mill/Harrisville/Pukekohe East Roads.
- A and K Roose (Submitter No. 4) are neutral, however, they raise concerns regarding the loss of 400m² of land and 10 year old grapefruit trees for the purpose of earthworks and a footpath. Requests details of the planting and concerns raised about the possibility of large concrete walls being erected seen elsewhere on other motorways.
- D and L Lawrie (Submitter No. 5) object to the excessive nature of the proposed footpath and two cycle lanes given the anticipated volume of foot and cycle traffic, a single shared path could accommodate this. As a result, unnecessary land is required to facilitate the construction of the three separate paths.
- Mr Neumann (Submitter No. 6) objects on the basis of safety, security, privacy, noise and site coverage.
- Ms Crane (Submitter No. 7) objects on the grounds of the loss of privacy of the front bedroom and main living room are affected due to the close proximity of the public footpath, cycleway and road. Property security is adversely affected due to the proposed location of works.
- Firstgas Ltd (Submitter No. 8) is neutral and notes the NoR proposes construction over the existing pipelines and the lodged plans do not provide a clear indication of the pipeline locations on the southern side of Mill Road. Firstgas submit this

poses a risk to advancing the engineering design without due consideration of the pipeline location and proposed conditions 5 and 10 are unclear or require additional input to manage risk to the gas supply to Auckland and Northland consumers. Firstgas request the lodged drawing set demonstrate all the areas where their gas pipeline and NoR 8 intersect, amendments are also sought to conditions 5 and 10.

- E and L Muir (Submitter Nos. 9 and 10) both submit in opposition on the basis of the walking and cycling facilities need to be amalgamated and located on the northern side of the design.
- Heritage New Zealand (Submitter No. 11) submit in support of the NoR 8 application and the proposed draft condition 21 for a Historic Heritage Management Plan (HHMP) before construction of NoR 8 begins. Heritage New Zealand Pouhere Taonga submits they are supportive of condition 21 on the grounds it will ensure protection of historic heritage and mitigation to manage adverse effects from the construction of the proposed works through the Outline Plan process in the future.
- R Cunningham (Submitter No. 12) submits in opposition for the following reasons; disruption and complications to property access, increased noise, vibration and dust, visual amenity effects, security issues, stock adversely impacted, property value impacts, water supply to the property negatively impacted, lack of detail on how property and water access will be mitigated, and increased stormwater issues.
- Watercare Services Limited (Submitter No. 13) submits they are neutral to the eight proposed NoR's. Watercare note they have no planned projects at the time of writing this that intersect with NoR 8, although they note they may have future developments where requirements change due to growth. Watercare seeks the following relief; that any decisions made on the NoRs responds to the issues raised in their submission and avoids remedies or mitigates potential adverse effects on Watercare's ability to provide water and wastewater services now and into the future. This relates to early engagement and amendments to the proposed conditions, in particular they seek a new condition titled Network Utility Strategic Outcomes Plan to futureproof assets, or amendments to Condition 25 (Network Utility Management Plan), and the inclusion of the Land Integration Plan condition.
- Ministry of Education (Submitter No. 14) submits on all eight NoR applications. They submit there are a number of existing schools within the proximity to the NoRs which have the potential to be impacted by traffic, noise and other nuisance effects arising as a result of future construction works. The Ministry of Education requests amendments to the conditions; so the terminology is consistent on other NoR applications within the Supporting Growth Programme, include reference to schools with proximity to the works to the stakeholder Communication and Engagement Management Plan, and avoid using any roads around schools during the Am and PM periods included in the construction traffic management plan.
- Counties Energy (Submitter No. 15) submit they are generally supportive of the NoRs but note some of their assets (overhead and underground) have not been identified on the drawing set (Medium voltage (11kV and 22kV) lines and low voltage lines, Fibre cable, Pole locations in urban areas where footpaths and cycleway upgrades occupy the back berm, Low voltage cables, equipment associated with underground electricity reticulation located in the berm e.g., pad mounted transformers, switchgear, link boxes and network pillars. Counties Energy requests further consultation and further details in order to confirm and maintain compliance with NZECP34:2001 New Zealand Electrical Code of Compliance for Electrical Safe Distances. Counties Energy state NoR 8, Drawing 8100, Mill Road. The alignment of the high voltage Bombay-Pukekohe (north) 110kV line is incorrect, where it crosses to the north side of Mill Road; and appears to be in area identified for future cut and installation of a culvert, both of

which could compromise the safe operation of a critical asset. Further consultation and detailed planning is required.

- Campaign For Better Transport (CBT) (Submitter No. 16) submit they are in favour of the planned upgrade to Mill Road and note that it is a primary link between Pukekohe and state highway 1 and that the existing road is hazardous. They further submit the third and fourth lanes could be dedicated to a transit and heavy goods lane, they note the road is primarily located in a rural area and demand flows are different to an urban area where bus lanes etc would be more appropriate.

6.1. Late Submission Heritage New Zealand Pouhere Taonga (Submitter No. 11)

It is in the interests of the community in achieving an adequate assessment of the proposal that the submission is considered by the hearings panel in the determination of the matter.

I note that the submitter wishes to be heard in support of their submission at the hearing.

It is noted that the submission was received the next morning at 9:19am, after the close of submissions the previous day and was shared with both the Applicant and Consultant Processing Planner the same day at 2:57pm. Accordingly it is considered that no parties will be disadvantaged nor create any unreasonable delay.

6.2. Submissions lodged with Auckland Council

Five submissions were lodged with AC (Submissions 12, 13, 14, 15 and 16) rather than WDC but are considered to apply to the works located in the jurisdiction of WDC as well and therefore should be assessed and considered within this s42a report. For clarity and completeness these submissions have been considered and assessed within this report, they were submitted by the 13 of November 2023 as stated in the public notice dated 13 October 2023.

7. CONSIDERATION OF THE NOTICE OF REQUIREMENT

7.1. Designations under the Resource Management Act 1991

The RMA provides that the procedures adopted in processing a notice of requirement are generally those adopted for processing a resource consent application. This includes lodgement, requiring further information, notification, receiving and hearing of submissions. In respect of NoR 8 all of those procedures have been followed.

The procedure differs from the resource consent process in respect of the council consideration of the NoR. Section 171(1) of the RMA states:

(1) When considering a requirement and any submissions received, a territorial authority must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to—

(a) any relevant provisions of—

(i) a national policy statement:

(ii) a New Zealand coastal policy statement:

(iii) a regional policy statement or proposed regional policy statement:

(iv) a plan or proposed plan; and

(b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if—

- (i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or*
- (ii) it is likely that the work will have a significant adverse effect on the environment; and*
- (c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and*
- (d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.*

Section 171(1)(a) is addressed in section 9 below.

Section 171(1)(b) is addressed in section 15 below.

Section 171(1)(c) is addressed in section 16 below.

Section 171(1)(d) is addressed in section 17 below.

Section 171(1) is subject to Part 2 of the RMA. Part 2 contains the purpose and principles of the RMA. It has been confirmed by the Environment Court that, in relation to a designation matter:

all considerations, whether favouring or negating the designation, are secondary to the requirement that the provisions of Part II of the RMA must be fulfilled by the proposal.

After considering these matters, the council needs to make a recommendation to the requiring authority under section 171(2) of the RMA which states:

- (2) The territorial authority may recommend to the requiring authority that it –*
 - (a) confirm the requirement:*
 - (b) modify the requirement:*
 - (c) impose conditions:*
 - (d) withdraw the requirement.*

Reasons must be given for the recommendation under section 171(3) of the RMA. This report sets out the advice of the reporting planner.

This report has yet to be considered by the Hearing Commissioners delegated by Waikato District Council to make a recommendation to the requiring authority.

The recommendations in this report are not the decisions on the notices of requirement.

A decision on the notices of requirement will be made by the requiring authority after it has considered the Hearing Commissioners' recommendations, subsequent to the Hearing Commissioners having considered the notice of requirement and heard the requiring authority and submitters.

8. Assessment of Effects on the Environment

Effects on the environment are addressed in section 11 of the AEE. The following discussion addresses effects in the same order they are addressed in the AEE with additional matters included at the end. The relevant specialist reports that provided a review on NoR 8 are referred to and are included in **Attachment C**. Submissions have also been considered and are referred to where relevant.

Requiring Authority AEE

The requiring authority's approach to the assessment of environmental effects is set out in section 8.3 to 8.5 of the AEE. The requiring authority has limited its assessment to matters that trigger a district plan resource consent, i.e. under the Waikato District Plans (Operative and Proposed). The requiring authority's AEE states the reasons for limiting its assessment are that district plan resource consents are the only activities authorised by the proposed designations and alterations. The AEE goes on to state that NES or regional plan consenting requirements, where these are triggered, are not authorised by the designations and will require future resource consents.

8.1. Effects to be disregarded – trade competition

I do not consider there to be any trade competition effects.

8.2. Effects that may be disregarded – written approvals

No written approvals were included for NoR 8.

8.3. Positive effects

Requiring Authority AEE

The AEE describes the positive effects and outcomes that the Pukekohe Transport Network as a whole, these are related primarily to transport and include:

- Improved safety, and consequential reductions in the risk of Death or Serious Injuries (DSI's) for all road users.
- Improvements to walking and cycling facilities
- Improvements to public transport facilities (connecting to key rapid transit stops); and
- Improvements to general traffic and freight (including increased connectivity, capacity, safety and resilience of the network) will provide the following benefits.

Specialist review

Wes Edwards of Arrive Ltd (refer **Attachment C**) has reviewed the Pukekohe Transport Network Assessment of Transport Effects. and notes that the projects collectively are intended to accommodate the increased demand for travel generated by the growth expected to occur in the southern Auckland and northern Waikato regions while addressing some of the adverse effects of that increase. He notes that for that reason alone the projects have significant benefits.

The review also notes that the assessment material provided by SGA evaluates the benefits of the projects assuming that all development would occur with or without the projects, however Wes Edwards is of the view that much of the development is unlikely to occur without the projects, which has not been accounted for in the ATE benefits analysis, although the interplay is acknowledged. He points out that the benefits attributed to the projects may not all occur unless all of the planned growth also occurs and will be less than expected in a partial implementation situation.

Planning review

I consider that the proposed works will have significant positive transport effects for the reasons outlined in the AEE.

The AEE also refers to positive terrestrial ecology, landscape and visual, arboriculture, community and urban design effects. The positive community effects are similar to the transport effects and I agree.

The AEE also sets out positive effects for terrestrial ecology as a result of improved blue/green infrastructure (such as wetlands), landscaping and planting and proposed bat mitigation in association with the landscape planting. It is noted that these positive effects will largely be delivered via the future regional resource consent associated with stormwater treatment e.g. wetlands which are unknown at this point. In the absence of the detail regarding mitigation it is not clear that what is being offered will be more than is required for the regional resource consents and could therefore be classed as having positive terrestrial ecology effects of the NoR.

Positive landscape and visual effects are stated; as enhanced connectivity for Pukekohe and Paerata, creation of attractive environments, reduction in speed limits along the upgraded alignments of existing roads, integration of active travel routes and recreation paths, increased viewing opportunities of the Pukekohe East tuff ring Outstanding Natural Feature (noted in the Auckland Unitary Plan), and the creation of stormwater wetlands to become attractive focal points as a result of planting. I agree these are all positive effects and note a number of these are also benefits arising from urban design.

The AEE notes, the widening of Pukekohe East Road and Mill Road for NoR 8 will provide an opportunity to introduce new trees, where the number of trees is currently limited. The overall tree quality and canopy cover will be improved though the implementation of NoR 8, where the current quality of trees is poor and sporadic.

The NoRs for the Pukekohe Transport Network are designed to include space for a formal berm on both sides of the transport corridor, this allows for planting new trees and to introduce new trees where the numbers of trees are limited.

I do however note, Form 18 and the general layout plans submitted with the NoR 8 application do not provide a sufficient level of detail on the landscaping and urban design proposed which would deliver a number of the positive effects identified. Condition 10 Urban and Landscape Design Management Plan as drafted is more about managing adverse effects rather than ensuring the positive effects as identified are also provided for and secured within the NoR 8 when it is finally constructed. I agree in general with the assessment of the positive effects of the NoR but think that changes to Condition 10 may be needed given the limited detail in the concept plan.

8.4. Effects on Māori culture, values, and aspirations

Requiring Authority AEE

Section 11.3 of the AEE notes that the key matters raised by Mana Whenua relate to impacts on streams and ecology, impacts on tuff rings, hills and landscapes, cultural heritage and sites of cultural significance, growth in rural areas, support for the future transport network, and socioeconomic wellbeing.

Waikato Tainui advised for NoR 8 Mill Road-Pukekohe East Road Upgrade they defer to Ngāti Te Ata Waiohua, Ngāti Tamaoho and Te Ākitai Waiohua.

A cultural values assessment was received from Ngaati Te Ata Waiohua to inform the options assessment and a Cultural Impact Assessment (CIA) from Ngaati Te Ata Waiohua to inform the concept design and AEE. However these were not provided with the NoR.

The AEE notes the Pukekohe Transport Network widens only to the south on Pukekohe East Road (NoR 8) to reduce impacts on the Pukekohe East Tuff Crater. It notes this was discussed with mana whenua throughout the options assessment and concept design processes. It further states these features will be considered further with Manawhenua at future design stages of the project. In respect of NoR 8 this relates to opportunities to recognise the cultural significance of the Pukekohe East tuff crater

(ONF) through the Cultural Advisory Report and ULDMP / Landscape Management Plan that are conditions on the proposed designation for NoR 8.

The AEE states that mana whenua will be invited to prepare a Cultural Advisory Report at the start of the detailed design of the Project (Condition 9). This will identify cultural matters and principles that should be considered in the development of the ULDMP and Landscape Management Plan and the Cultural Monitoring Plan. The AEE states mana whenua will be invited to participate in the development of the ULDMP and Landscape Management Plan to input into the relevant cultural landscape and design matters on each transport corridor.

Planning review

No specialist review has occurred as the CIA was not provided and no submissions have been received from Mana Whenua groups in relation to NoR 8. A submission was received from Heritage NZ Pouhere Taonga (HNZPT) and is discussed in section 8.10 below.

8.5. Traffic and Transport Effects

Requiring Authority AEE

Section 11.4 of the AEE sets out the traffic and transport effects and refers to the technical report Pukekohe Transport Network Assessment of Transport Effects September 2023. The assessment is based on the 'full build out' for the future urban area. This is based on development yield estimates provided by Auckland Council through Opāheke and Pukekohe-Paerata Structure Plans and the Auckland Forecast Centre. This is relevant to WDC as Mill Road serves as a connection from SH1 to this growth area and Tuakau is also located further south. The speed limit on this route is proposed to be 80km/h.

Operational effects

Operational effects are summarised as:

- Safety – overall the project will provide a safer system which is likely to reduce the number of DSIs
- Walking and cycling – overall, the provision of walking and cycling facilities as part of the Pukekohe Transport Network will provide a choice of transport options, reduce reliance on private vehicle trips and result in positive environmental and health benefits.
- General traffic and freight - The increased connectivity and capacity will increase the safety, reliability and resilience of the wider network by limiting the need for strategic traffic to use unsafe rural roads or congested urban roads. Improved corridor capacity will also accommodate more freight movements and improve choice by providing alternative options for both local and strategic freight.
- Property access - For existing properties, the overarching design philosophy for the Project has been to maintain driveway access where practicable. Property access impacts range from minor changes to the physical access arrangements to prohibiting right turn movements into and out of properties, requiring detours. Specifics will be confirmed at detailed design, discussions with landowners as part of the Public Works Act process. Where existing properties will face a diversion impact given that only a left-in and left-out access will be permitted, the engineering design has taken this into account and included new turning facilities to minimise the potential adverse effects.

Construction effects

Construction effects are based on indicative construction methodology and are summarised in the AEE as being:

- temporary effects relating to traffic routing,
- pedestrian and cyclist safety,
- road safety,

- property access,
- on-street and public parking,
- parallel construction of projects and land uses requiring further consideration, such as an arterial road with high traffic volumes applicable to this NoR 8.

Proposed mitigation

The AEE states with regards to operational effects, some existing properties will face a minor diversion impact on the main network given that direct property access will be limited to left turns in and out with the introduction of the wire median shown in the cross section (refer Figure 4 above). Property owner discussions will also be progressed during the Public Works Act process.

Temporary effects from construction activities on the network are proposed to be managed via the implementation of a Construction Traffic Management Plan (Condition 16). The AEE (Section 11.4.3.2) states Site Specific Traffic Management Plans will be developed to manage constraints on access to affected properties.

Specialist review

W Edwards is a consultant acting on behalf of AC and WDC and has provided a transport review (refer to **Attachment C**). Mr Edwards provides commentary on the design changes to the roading network, independencies and staging and property access, which I will not repeat here and are included in section 8 of his report.

Mr Edwards makes the following comment in relation to the submissions received for properties located within WDC in relation to NoR 8:

- Submissions 5, 9 and 10 request the walking and cycling paths be combined and relocated to the north side of the road. Submission 4 is neutral but also queries this point. Mr Edwards notes the shared active mode paths are most appropriate when the volume of pedestrians and/or cyclists is low, and where the speed is lower. He further notes separated paths are most appropriate where the speed or volume of users is higher. He notes that the volume of pedestrians and cyclists on this route is expected to be relatively low in comparison to other routes. He cites previous examples along the Southern Motorway and North-Western Motorway as these are 3m wide bi-directional shared paths therefore being narrower than the proposed 4.5m. Mr Edwards invites Waka Kotahi to provide more information on this matter during the hearing and is in support of the submissions.
- Comments relating to shifting the path to the north side are in NoR 5 Pukekohe South-East Arterial (5:PSEA). In summary shifting the cycle path would impact different properties in the same way and therefore he is neutral with respect to traffic matters in relation to submission points relating to this.
- In response to submission 7, Mr Edwards notes the roadside area is a large vehicle crossing serving to driveways and is located within the road reserve. Given the size of the lot he considers there to be sufficient space to develop an on-site turning area if the submitters wish and therefore doesn't support that the NoR 8 be declined as requested in this submission.
- He supports the Ministry of Educations submission.

Mr Edwards requests the following additional information be provided for the hearing:

- Safety in relation to the conflicts between shared path users (predominantly cyclists)
- Detours and U-turn manoeuvres generated by the removal of right turns at driveways and side roads and how these could be safely managed
- Options for reducing the extent of the designation and the impact on properties by providing a shared path instead of separate active mode paths and or reducing the width of the paths and other roadside features, this is noted in particular for NoR 8.

Mr Edwards considers the assessment of transport effects to be adequate for this Project. Although he notes that the approach of assuming all projects have been implemented in full has some limitations as it does not consider the possibility that some projects or stages of projects may not be implemented. It does not allow for the effects of each individual project to be evaluated separately. He considers that the assessment of alternatives is adequate for the stated purpose and objectives at a higher level but that further consideration is needed for some individual properties. The same position is stated in terms of necessity in terms of the proposed extent of the designation on some individual properties without needing further information.

Mr Edwards recommends the following amendments to conditions:

Condition 12 Existing Property Access be amended so it is worded the same as the same condition in the NoRs submitted by AT (ie Condition 13) for consistency reasons – although no submission point requested this specific relief for the Waka Kotahi projects. Amendments to Condition 16 Construction Traffic Management (CTMP) are also recommended.

Summary

In conclusion, Mr Edwards provides the following preliminary recommendations in addition to recommended changes to condition 12 Existing Property and condition 17 CTM:

I provisionally support 8: Mill Road and Pukekohe East Road Upgrade in Auckland and in Waikato with amendments to the conditions relating to existing property access, and the conditions specifying CTMP requirements, subject to:

- a) further refinement of the design and assessment of alternative methods to reduce the impact on properties including the provision of one shared active mode path rather than separate paths, and the reduction in width of the path and other roadside features;*
- b) further consideration of the safety and efficacy of right turn movements displaced by any median for properties west of Harrisville Road.*

Planning review

The positive operational benefits assessed in the AEE as rising from NoR 8 are related to the delivery of the safety improvements along the route and provision for active modes. These benefits are supported by the submissions from Campaign for Better Transport and WDC (Roading Team).

In terms of the submissions in opposition, a number are specifically concerned about access to their sites, property security, the excessive size of footpath and cycle lanes and their locations. The AEE notes that the rural sites will be able to rely on their existing access although it is assumed that they will need to be altered to accommodate the left in left out turns as the wire median barrier shown in the cross section in Figure 9-35 in the AEE will not allow right turns. Mr Edwards also notes that without a suitable U-turn facility west of Harrisville Road the removal of right turn movements at properties could result in lengthy detours and poor safety outcomes. It would be helpful if the territorial authority provided additional information on this matter and quantified travel times.

The Ministry of Education (submission 14) has submitted in relation to the potential effects of construction traffic from future construction works of the transportation network being delivered through NoR 8 and the other Notices of Requirement on existing schools, or any future schools developed in this area. The Ministry is seeking changes to conditions to ensure that appropriate conditions are included in the designations to mitigate any adverse effects associated with the construction of the Pukekohe transport network. It is noted that the closest schools to NoR 8 are at Bombay on the eastern side of SH1 or in Pukekohe. While it is noted that Mr Edwards supports the submission it would be helpful if the submitter could outline any particular concerns in relation to NoR 8.

I also note the AEE states Site Specific Traffic Management Plans will be developed to manage constraints on access to affected properties, however these don't appear to be secured or mentioned in the proposed conditions set. It would be useful for the requiring authority to clarify this.

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by submitters both in terms of further information and the changes to conditions suggested by submitters and Mr Edwards. I consider that the potential adverse traffic and transport effects can be avoided, remedied, or mitigated, subject to the above, and the proposed conditions as recommended to be amended.

8.6. Construction Noise and Vibration Effects

Requiring Authority AEE

The actual and potential effects of noise and vibration associated with construction of the project are addressed in section 11.5 of the AEE. Construction noise and vibration levels are predicted and are carried out using method recommended in the NZS 6803.

Section 6.2.8 of the Assessment of Construction Noise and Vibration Effects (ACNVE) notes that existing receivers along the length of NoR 8 (Auckland and in Waikato) are located less than 2m from the potential works area. It further notes around 41 existing receivers could experience noise levels that exceed the daytime noise criteria without mitigation, details of these properties are located in Appendix A of the ACNVE. In respect of construction noise, in the jurisdiction of WDC, 23 buildings are predicted to receive noise levels exceeding 70 dB LA eq, of which 17 are identified as residential and 3 are identified as commercial in nature, 3 are identified as garage/storage. The ACNVE further notes noise levels exceeding 85 dB LAeq could still occur intermittently at the closest receivers, if high noise generating activities occur on the construction boundary. Future receivers constructed within 76m of the works could experience noise levels that exceed the 70 dB LAeq noise criteria during high noise generating activities such as pavement works without mitigation.

The AEE notes that overall, the predicted noise levels for the majority of the works will be able to comply with the relevant construction noise standards following mitigation. It notes some receivers will intermittently experience noise levels exceeding 85 dB LAeq (on a worst case scenario) after mitigation where high noise works are occurring on the edge of the designation. It states that this is mitigated with the use of setback distances and the use of equipment with lower source noise levels for large portions of the works so it would comply with the 70 dB LAeq noise criterion as set out in NZS 6803. It further notes that high noise activities are likely to be temporary and intermittent in nature, occurring over short periods and moving along the corridor alignment. Some limited night time works are also noted. The AEE concludes that effects will generally be reasonable for majority of activities.

Vibration

For the majority of receivers, vibration levels in existing and future buildings may exceed Category A standards if they are occupied during the works while the roller compactor passes. Existing receivers in NoR 8 have been identified where the 5mm/s PPV daytime criteria for residential buildings and 10mm/s PPV daytime criteria for commercial buildings for Category B standards may be exceeded. Without mitigation there is the potential for cosmetic damage to buildings. In respect of construction vibration for properties located within WDC Appendix B of the ACNVE identifies four receivers that are predicted to receive vibration levels exceeding 5 mm/s PPV buildings/structures, three are noted as residential and one is noted as a garage or storage.

To manage construction noise and vibration effects and reduce as far as practicable any exceedances noise and vibration standards a Construction Noise and Vibration Management Plan (CNVMP) is proposed to be prepared prior to construction starting. Section 6.3 of the ACNVE sets out the minimum level of information that must be provided in the CNVMP. The AEE also states that a Site Specific or Activity Specific

Construction Noise and Vibration Management Schedules where exceedances are predicted for a sustained period may also be required. The AEE concludes overall construction noise and vibration can be controlled for all NoRs to reasonable levels with the implementation of appropriate mitigation and management measures through a CNVMP.

Specialist review

The review undertaken by Hr Hegley from Hegley Acoustic Consultants (refer **Attachment C**) states it would be more useful for the ACNVE to provide more information on noise levels to each receiver, preferably using the same 5dB bandwidth as Table 6-1 (which provides a description of the effects of construction noise). He states the minimal information provided by the ACNVE makes it difficult to determine the effects of the project, either on a global basis or to individual properties. With respect to NoR 8 the ACNV identifies that with mitigation in place as set out in section 6.3 noise levels over 85 dB LAeq could still occur intermittently at the closest receivers.

The ACNVE simply identifies residences where vibration may exceed 5mm/s and does not provide the level of exceedance. The same is for commercial buildings where they are predicted to exceed 10mm/s but the level of exceedance is also not identified. Mr Hegley further notes amendments to the CNVMP and Schedule to adequately manage adverse effects as a result of night works.

Mitigation proposed

Mr Hegley recommends amendments to conditions relating to the CNVMP and schedules, otherwise no other amendments are recommended to the remainder of the noise and vibration conditions. He further provides comments on the efficacy of mitigation proposed, in particular referencing the barrier mitigation which reports to provide up to a 10 dB reduction in noise. He notes this will be difficult to achieve as noise sources are often elevated and openings in the barriers required for driveways etc further mean the barriers aren't as effective as reported. Mr Hegley notes the effects conclusion that the predicted mitigated noise levels can comply with the 70 dB LAeq noise criterion for most of the construction works is correct but this also needs to be read in the context that the mitigation to the degree relied upon is unlikely for all receivers. He further recommends that barriers proposed for operation noise may be more effective if built at the start of construction rather than the end. He recommends amendments to the CNVMP to this effect. Amendments to Waka Kotahi's conditions 20, 19, 18, 17 are proposed.

Planning review

The duration of works shown in Table 8-2 of the AEE for NoR 8 is 3 to 4 years. While the management of construction noise through CNVMP is a common requirement for works in the road it is noted that long duration projects do require careful management to ensure effects on individual receivers are minimised.

Two submitters have raised concern about the impact of noise on their property and amenity (submission 6 (248 Pukekohe East Road) and submission 12 (80 Mill Road). Having more information about the noise levels predicted for the specific sites and the duration of the works could be helpful in terms of determining the adequacy of the conditions as proposed, and in particular for the high noise generating activities as noted in the AEE.

The Ministry of Education (submission 14) is also concerned about noise effects of construction on existing schools, or any future schools developed in this area. The nearest existing schools are in Bombay and Pukekohe so it is assumed that the concern is related to construction traffic moving past the schools. It would be useful to have this clarified.

I also note the AEE states that a Site Specific or Activity Specific Construction Noise and Vibration Management Schedules where exceedances are predicted for a sustained period may also be required. However, this does not appear to be secured

via the proposed condition set. It would be useful for the requiring authority to clarify this.

Changes to conditions to ensure that appropriate conditions are included in the designations to mitigate any adverse noise effects associated with the construction activities. It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by submitters and by Mr Hegley as it is not clear at this time that the potential adverse construction noise effects in particular can be avoided, remedied, or mitigated.

8.7. Operational Noise and Vibration Effects

Requiring Authority AEE

The AEE addresses the operational noise effects in Section 11.6 and is based on the Assessment of Operation Noise Effects (AONE), included in Appendix C of Volume 4. It sets out the predictions of road traffic noise against NZS 6806:2010 Acoustics – Road traffic noise - new and altered roads (NZS 6806) and other relevant guidance. It considers the NZS 6806 noise criteria as well as the anticipated change in noise level with or without the Project. The existing Protected Premises and Facilities (PPFs) within 200m for rural areas based on NZS 6806. Table 11-1 identifies that NoR 8 has 22 PPFs as a result of altering the road corridor. It notes that no PPFs were assessed adjacent to the active mode upgrade in Pukekohe East Road as there is no elevated noise due to the active modes. The AEE states most PPFs are predicted to receive noise levels in Category A and notes that ambient noise levels are likely to increase as the area urbanises therefore changes in noise levels due to the Project may not be as noticeable at the time.

NZS 6806 criteria for altered roads and external limits for Category A is 64 dB LAeq(24h), with Category B as 67 dB LAeq(24h) and Category C internal noise limits as 40 dB LAeq(24h). The AONE identifies with mitigation in place) such as low noise asphalt and where appropriate noise barriers at all 18 PPF's impacted by NoR 8 within the jurisdiction of WDC, all will fall within Category A, as all noise predictions are less than 64 dB LAeq(24h).

Mitigation measures are proposed to be reassessed prior to construction to confirm the best practicable option for the PPFs that are predicted to receive noise levels above Category A.

Specialist review

Operational noise

Mr Hegley provides a summary of the predicted noise levels for NoR 8 for the portion that is located within WDC's jurisdiction. This range is predicted to be between 48-64 dB LAeq(24 hr)), and he states that a predicted external level of up to 55 dB LAeq(24 hr) can be considered to result in reasonable effects, levels exceeding this can be considered to therefore have an adverse effect. Noise also needs to be considered with the existing noise environment which in the case of altered roads can already be high due to traffic noise. He notes that it is not possible for the road to internalise its effects meaning after implementing Best Practicable Option (BPO) mitigation the effects would remain.

Operational vibration

Mr Hegley considers vibration from the use of the road will meet reasonable expectation and is consistent with other projects, he states this appears to be reasonable.

Mr Hegley didn't provide specific responses to the submissions as the points raised were general in nature.

Mitigation proposed

Mr Hegley recommends various amendments to conditions 28 and 29, 30, 32 to:

- Amend the definition of PPF
- Current predicted noise levels of +2dB are added
- Inclusion of Appendix A of the Assessment of Operational Noise Effects
- Consideration to the mitigation should be given to areas that are developed and where noise sensitive activities are realistically expected to be.
- Deletion of the reference to NZS 6806 as in the context of condition 30 as it does not adequately address section 16 of the RMA in terms of the adoption of the BPO.
- Highlight that should it be practicable and effective barriers intended to control operational noise should be built to also screen construction noise.

Planning review

NoR 8 involves altering an existing road, and it is recognised that the proposed road surface will result in benefits once finally delivered but clearly this could be some time away given the 20 year lapse period. The predicted noise levels comply with the NZS 6806 Category A requirements for all properties located within the jurisdiction of WDC. Noting the predicted noise levels for PPFs are 48-64 dB LAeq(24 hr)), and a predicted external level of up to 55 dB LAeq(24 hr) can be considered to result in reasonable effects.

An understanding of the likely location of permanent noise barriers where the low noise road surface is expected to be insufficient would be helpful. The visual effects of noise barriers should also be considered..

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by submitters (submitters 6, 12, and 14) and the changes to conditions outlined by Mr Hegley to ensure that the potential adverse operational effects in particular can be avoided, remedied, or mitigated.

8.8. Landscape and Visual Effects and Urban Design Evaluation

Requiring Authority AEE

Section 11.9 of the AEE addresses the Landscape and Visual effects. I have also not repeated the general temporary adverse landscape and character effects. The positive effects are outlined in section 8.3 of this report and not repeated here.

Section 11.9.4 .8 of the AEE sets out the potential landscape and visual effects as a result of NoR 8. Construction effects on landscape character are anticipated to be moderate, and to be created by the removal of vegetation and earthworks. Visual amenity effects are anticipated to be low moderate as a result of removing existing vegetation along the road edge or lot boundary. Rural and commercial properties along Mill Road and Pukekohe East Road will have direct and prolonged views of the construction works resulting in low to moderate visual amenity effects for properties immediately adjacent the alignment. Views from rural residential properties within the wider setting will likely be largely visually contained by the existing vegetation pattern, resulting in low visual amenity effects for those properties within the wider setting, and from public viewpoints.

Operational effects are described as modification of features as a result of cut and fill and in particular the active mode path has been relocated to the southern side of the project to reduce impacts on the Pukekohe East tuff ring. Adverse effects on landscape character are assessed as low to moderate. The majority of NoR 8 follows along elevated topography including localised ridges / spurs, the southern edge of the Pukekohe East Tuff Ring and broader landscape patterns. The potential visual amenity impacts on existing properties are assessed to be low to moderate due to the proximity of the upgraded road and modification to the landscape, effects reduce to low where sites are setback from the road reserve. Overall, any potential adverse visual amenity effects on private properties are assessed to be low post mitigation.

Section 11.9.5 of the AEE sets out the proposed mitigation measures for construction effects, A Construction Environmental Management Plan (CEMP) and a Landscape

Management Plan (LMP), are proposed in the WDC NoR 8. In the LMP the following mitigation details are proposed:

- Landscape treatments which reflect cultural values and heritage landforms, and integrate with the surrounding topography, natural environment, and landscape character.
- Landscape treatments which support road safety, consider visual and acoustic amenity for adjacent residential dwellings, and integrate biodiversity and ecology, and stormwater management.
- Planting zones and layouts.
- Site preparation, subsoil and topsoil and mulch treatments.
- Plant sourcing and planting, including hydrodressing and grassing, and use of eco-sourced species.

Pest plant and animal management (to support plant establishment). Landscape and visual outcomes for NoR 8 (WDC) will also integrate with NoR (AC) as the LMP is required to be appropriately aligned with the ULDM of NoR 8 (AC).

The AEE concludes that where designations are located in the rural zone it will change the character of landscape. However the mitigation measures are appropriate and adequate to remedy any potential adverse effects arising from the Project.

The AEE notes that the urban design opportunities identified could be considered by AT, Waka Kotahi or other parties at future stages of design and development but are not required to mitigate effects of the projects.

Specialist Review

Ms Skidmore has reviewed the NoR and provided a response which is included in **Attachment C**. She notes Condition 10 for NoR 8 which requires the preparation of a LMP prior to the start of construction for WDC NoR 8, however these conditions do not include specific recommendations made in the UDE and the LVEA. Ms Skidmore suggests it would be helpful if further explanation is provided as to how these recommendations are to be addressed. Ms Skidmore considers the generic nature of the conditions is generally appropriate. However, a number of amendments to the conditions are recommended either to expand on a matter more fully or to include references to specific plans in conditions.

Ms Skidmore notes the Assessment of Operational Noise Effects submitted with the NoR has identified the likely need for noise mitigation the use of low noise road surfaces for NoR 8. Mitigation may include noise walls up to 2 high. The LVEA does not include any assessment of the potential landscape character and visual amenity effects resulting from such mitigation. She notes proposed ULDM requirements for Condition 10, however it is unclear if a ULDM is required as a result of the condition set for WDC. The LMP (Condition 10(d)(ii)) refers to 'landscape treatments which... support acoustic amenity'. Further analysis of the landscape effects resulting from such structures should be set out in evidence.

Ms Skidmore agrees with the assessment set out in the LVEA in relation to the potential landscape effects resulting from the formation of the road within the designation corridor on the Pukekohe East tuff ring. She notes the requirements of condition 10 are suitable.

The submission by R Cunningham has raised concerns about the effect of visual pollution on No. 80 Mill Road. The dwelling on this property has a generous setback from the proposed designation. However, Ms Skidmore states a more detailed assessment of visual effects experienced from this property should be set out in evidence.

Planning Review

As noted above, Proposed Condition 10 (Landscape Management Plan) refers to the Urban and Landscape Design Management Plan (ULDM), however I cannot find any

other reference to how this is secured through the proposed conditions. It also appears the NoR 8 condition set for AC refers to an ULDMP and Urban Design Evaluation whilst the condition set for Nor 8 WDC refers to a LMP. The AEE also makes reference to a ULDMP. This may raise implementation issues if one side of the road corridor has a ULDMP and Urban Design Evaluation whilst the other has an LMP. It would be helpful for the requiring authority to clarify this.

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by submitters (submitter 4 located at 21 Turbott Road and submitter 12, located at 80 Mill Road), changes to conditions outlined by Ms Skidmore and the location and assessment of noise barriers proposed to ensure that the potential adverse effects in particular can be avoided, remedied, or mitigated.

8.9. Natural hazards – flooding and stormwater

Requiring Authority AEE

Section 11.7 of the AEE assesses the potential flood hazard risks associated with the construction, operation and maintenance of the Pukekohe Transport Network. While stormwater effects apart from flooding are not assessed (as they will be assessed during a future regional consent process), provision is made for the future management of potential stormwater effects (stormwater quantity and stormwater quality) by identifying the space required for stormwater management devices i.e. treatment swale and wetlands and incorporating land for that purpose into the designation footprint.

Construction effects

Construction effects relating to flood hazards are summarised as:

- Removal of vegetation can disrupt drainage patterns
- New culvert crossings or other structures can create upstream flooding
- Realignment of existing overland flow paths or drains
- Construction of new attenuation wetlands or upgrades to existing
- Laydown areas can block flow paths
- Bulk earthworks can alter outland flow paths or generate erosion and sediment effects
- Siting of attenuation within existing overland flow paths

Ultimately the approach to construction will be confirmed during the detailed design phase of the project. Mitigation measures are proposed within the CEMP which is secured through a proposed condition of consent.

Operational effects

The flood hazard effects have been assessed with a 2.1 degree (2.1°C) and 3.8 degree (3.8°C) climate change scenario to provide context for a changing climate.

- Flood hazard effects as a result of the operation of the proposed works are summarised as:
- Changes required to the flood levels and therefore the flood freeboard to existing habitable buildings
- Overland flow paths and flood prone areas
- Flood levels on urban land and developed land
- Property access

Specific effects as a result of NoR 8 are assessed as the alignment crosses two flowpaths on Mill Road both are serviced by existing culverts. The proposed road widening will not require any culvert lengthening or include any floodplain filling. At 155 Mill Road (located in the jurisdiction of AC) there is moderate 2.1°C and high 3.8°C existing and future flooding risks, due to low lying elevation. In order to mitigate this the following is proposed:

- Extend culverts at the same diameter and replace the culverts at the same diameter

- Avoid lifting the crown of the road along Mill Road to prevent adverse effects upstream. Avoid lowering the road crown to cause adverse effects downstream.
- Attenuation for the 10 year and 100 year in the Ngakoroa and Tātuanui Streams catchments.

A flood hazard condition (Condition 11) is proposed which requires the detailed design of the transport corridor to be designed to achieve specific flood risk outcomes.

The AEE concludes that flood hazard risks during construction and operation can be adequately managed or mitigated and are secured via proposed conditions.

Specialist review

Trent Sunich, the Councils Consultant Stormwater Technical Specialist has reviewed the NoR and provided a response which is included in **Attachment C**. Mr Sunich notes the project is located within two catchments, the Ngakoroa Stream and Tātuanui Stream. The Tātuanui Stream catchment ultimately flows to the Waikato River, while the Ngakoroa Stream drains to the Manukau Harbour.

A flood hazard summary is provided, Mr Sunich states there are no adverse flood effects expected from the NoR. Any future designs that may include culvert modification can meet the designation conditions by modelling the effect of the works and oversizing the culvert extension if unacceptable flood effects are found. He notes the modelled 3.8° climate change scenario produces an overall higher flood level, but the risk rating remains negligible. The only exception to this is 155 Mill Road, noting this does not impact properties within the jurisdiction of WDC, where he notes more severe climate change impact would change this properties flood hazard from medium to high.

As noted above, the requiring authority has proposed two conditions one to manage and mitigate flood hazards through the detailed design phase and the other requiring a CEMP to manage flood hazards during construction.

Mr Sunich is on balance in agreement with the approach taken in using the risk criteria and the approach to the assessment undertake, with the exception of amendments to the proposed conditions.

Submissions

Mr Sunich addresses R Cunninghams submission which outlines negative impacts to 80 Mill Road, Bombay including increased stormwater runoff into 80 Mill Road. He notes the design plans for the stormwater management for this section of the proposed designation are limited in detail and requests some further commentary from the requiring authority in regard to this submission.

Mr Sunich has reviewed the proposed conditions and recommends the following changes to the flood hazard condition:

- extend the application of the condition of other uses such as community, commercial and industrial floors,
- specify the minimum freeboard requirement in the Outline Plan at the time its submitted,
- diversion of new overland flow paths away from habitable floors,
- no increase in flood plain extent or loss of capacity of overland flow paths
- no increase in flood classification for main vehicle and pedestrian access

In summary Mr Sunich generally supports the NoR subject to recommended amendments to the conditions for the following reasons:

- the flood hazard risk assessment is fit for purpose
- the flood hazard modelling accounts for the effects of climate change in accordance with MfE guidance

- The result of the modelling and reporting is suitable to implement mitigation practices through the performance related flood hazard designation conditions. Further flood hazard modelling is required as part of the Outline plan process
- NoR 8 is not inconsistent with the Waikato Regional Policy Statement and Waikato District Plans subject to imposing the conditions

Planning review

I note that flood effects and the impact of earthworks on flood risk will be considered as part of the regional consent process. I note the CEMP condition requirement for flood hazard to be assessed during construction and the requirements of the regional consent provisions in the WRP will ensure that this effect is adequately addressed.

It is assumed that, Waka Kotahi will, prior to the Outline Plan stage review the effects of climate change in terms of the best in terms of the best information available at that time. I do consider it would be helpful for the requiring authority to provide a response at the hearing on the matter raised by submitter 12, located at 80 Mill Road, changes to conditions outlined by Mr Sunich to ensure that the potential adverse effects of flooding in particular can be avoided, remedied, or mitigated.

8.10. Historic Heritage and Archaeological Effects

Requiring Authority AEE

Section 11.10 of the AEE assesses the actual and potential effects on archaeology and heritage and proposes measures to avoid, remedy or mitigate adverse effects.

Construction effects are summarised as the accidental discovery of archaeological and historic heritage sites and the removal and relocation of buildings within designations if they are pre-1900.

No buildings that are pre-1900 have been identified within the NoR boundaries. Specific NoR 8 effects are identified as R12/1208 Bombay Flour Mill (or Pilgrims Mill) as it is located adjacent to the NoR 8 boundary at 144 Mill Road, Bombay and along the boundary between WDC and AC. The AEE notes there are no visible remains on the surface, it further notes it could be possible that sub surface remains are still present which could be discovered during construction. All other previously recorded heritage places in the project area are not located in proximity to the proposed designation. The AEE notes there are no operational effects on known or unknown historic heritage deposits, and as such no mitigation is proposed in relation to these effects.

A Historic Heritage Management Plan (HHMP) is proposed as a condition to mitigate potential adverse effects on the Bombay Flour Mill. The AEE further notes that an archaeological authority would be obtained from Heritage New Zealand Pouhere Taonga to construct the proposed works.

Specialist review

M Eaves AC's internal heritage specialist has reviewed the NoR and her report is included in **Attachment C** of this report. M Eaves has provided the following comments:

- Satisfied from a historic heritage perspective that all relevant matters have been addressed
- Considers the Franklin Heritage Forum to be an affected party to all of the NoR applications
- Does not support the alterations to the HHMP condition 21 wording as to achieve duty, a specific role should be identified rather than the current wording
- Agrees with the assessment and conclusion set out in paragraph 11.10.4 of the AEE
- As the application is for route protection only, additional resource consents will be sought closer to construction, resource consents will be received by WDC at

that time. The Outline Plan process together with the HHMP will provide appropriate historic heritage management. As noted above, a archaeological authority will also be sought in the future.

Submissions

Heritage New Zealand Pouhere Toanga (Submitter 11) supports NoR 8 and the mechanisms listed in the AEE, but requests further research to assess and clarify if the villa located at 188 Mill Road is pre or post 1900 and if associated sub-surface remains. No. 188 Mill Road, Bombay is located within the jurisdiction of Auckland Council and this is addressed in the AC s42A report. Amendments are requested to condition 21 in relation to legal implications.

Planning review:

As noted above, Heritage New Zealand Pouhere Taonga (submission 11) supports "recommendations set out in September 2023 'Pukekohe Transport Network Assessment of Effects on Historic Heritage' and the suite of conditions set out in the 'Waka Kotahi Condition Set Mill Road and Pukekohe East Road Upgrade' are appropriate; supportive of the intended mechanisms through a HHMP condition"

It is noted that Ms Eaves has expressed concern about wording in the HHMP condition as submitted where 'unexpected' is used instead of 'accidental which she prefers. She has also raised concern about the HHMP condition (c) and suggests for clarification the inclusion of more specificity in relation to who has the role of receiving submitted reports. Otherwise, she agrees with the conditions.

Given the comments made by Ms Eaves it would be helpful for the requiring authority and / the submitter to provide a response at the hearing on the changes to conditions suggested. I consider that the potential adverse effects on historic heritage can be avoided, remedied, or mitigated, subject to the above and managed through the HHMP, Outline Plan and archaeological processes.

8.11. Arboricultural Effects

Requiring Authority AEE

Section 11.11 of the AEE discusses the potential effects of the future construction of the road on existing trees protected under the Waikato District Plans. Positive effects of the NoR are addressed within section 8.3 of this report and not repeated here. Construction effects on trees are summarised as loss of trees adjacent and within the construction corridor, alteration to their growing environment and trimming.

The AEE notes NoR 8 will affect one tree group (tree 8/47) subject to the rules and provisions of Part 15.6 Vegetation Clearance under the Operative Waikato District Plan (Franklin Section). Tree 8/47 is a single totara tree located at 300A Pukekohe East Road, it is likely to require removal as part of the widening on the southern side of Pukekohe East Road. It is proposed to mitigate the adverse effects through a Tree Management Plan which is proposed as condition on the NoR. The effects of tree loss will be mitigated by planting in the new berms and areas identified in the UDE. Replacement planting will be decided through a planting plan secured via the ULDMP or LMP. It further notes mature and native trees will be retained where possible. No operation effects are anticipated on trees. Ongoing maintenance of street trees adjacent the road corridor is standard and will not generate adverse environmental effects.

Specialist Review

The Councils arborist consultant Mr Saxon has provided an arboriculture review of NoR 8 which is included within **Attachment C**. Mr Saxon notes that given the timeframe of likely construction associated with some NoRs there is the potential for trees to become protected between the time of designation and construction. This could occur through the growth of trees or through changes in adjacent land zoning.

Mr Saxon states there are no arboricultural reasons to oppose the NoRs and that majority of the trees within the proposed NoR boundary are not protected by provisions of the district plans. NoR 8 has a Tree Management Plan condition and the ULDMP condition is considered by Mr Saxon suitable to ensure replanting occurs.

Planning review

Whilst the Assessment of Arboricultural Effects notes Tree 8/47 is subject to Part 15.6 Vegetation Clearance of the Operative District Plan (Franklin Section), in my opinion resource consent is not required for its removal. It is assessed as a permitted activity, as the removal of tree 8/47 complies with rule 15.6.3.1(ix). However, under the Proposed Waikato District Plan (Appeals Version) the removal of Tree 8/47 would require resource consent pursuant to rule ECO-R16 as a restricted discretionary activity.

Submitter 4 raise concerns over the loss of their 10 year old grapefruit trees at 21 Turbott Road. It is noted that the loss of fruit trees and land acquisition is a matter addressed under the Public Works Act process. Fruit trees are also not protected by the WDC district plans.

To my knowledge there is an expectation that if trees are removed this would be mitigated by the replacement of an appropriate number and size of trees i.e. in relation to the removal of tree 8/47. It would be useful to understand how Condition 10 LMP / Condition 24 Tree Management Plan would interface in this regard. In addition, and as noted above, Proposed Condition 10 (Landscape Management Plan) refers to the Urban and Landscape Design Management Plan (ULDMP), however I cannot find any reference to how this is secured through the proposed conditions. It also appears the NoR 8 condition set for AC refers to an ULDMP and Urban Design Evaluation whilst the condition set for Nor 8 WDC refers to a LMP.

I consider that the potential adverse effects on arboriculture can be avoided, remedied, or mitigated, subject to the above.

8.12. Terrestrial Ecological Effects

Requiring Authority AEE

Positive ecological effects are noted in section 8.3 of this report and are not repeated here.

Construction ecological effects

Bats

Section 11.8 of the AEE assesses the potential ecological effects based on the Pukekohe Transport Network – Assessment of Ecological Effects. Vegetation clearance within the jurisdiction of WDC has been assessed in Section 11.11.2.2 of the AEE. The only resource consent trigger is the removal of one Totara tree, no impact management is recommended for this effect.

I note that Figure 6-1 of the Assessment of Ecological Effects has mapped SNA's within 2kms of the routes and determined that none occur within or are directly adjacent to the Pukekohe Transport Network. Part 2: Chapter ECO – Ecosystems and indigenous biodiversity of the Proposed Waikato District Plan (PWDP) identifies SNA's as being mapped to manage indigenous biodiversity rather than natural or visual character.

The AEE notes the ecological value of long tailed bats is very high and that habitats for bats are associated with all NoR's except NoR 6. Bats have the potential to be impacted by lighting required overnight and vegetation removal, and impacts to bat foraging areas within 2kms of the NoRs.

Section 11.8.4 of the AEE notes there are potential operation ecological effects on ecological features within or adjacent to the designation footprints. This is noted as loss of connectivity for indigenous fauna in particular bats, birds, lizards and disturbance and displacement of indigenous fauna and their nests / roosts.

During construction and operation the overall level of effect due to disturbance and displacement to bat roosting areas are assessed for NoR 8 in table below.

	Level of disturbance and displacement to roosts and individual bats (existing) pre mitigation	Mitigation required?	Level of effect post mitigation
Construction effects	Moderate	Yes	Low
Operation effects	Moderate	Yes	Low

As the residual impact is assessed as low post mitigation no further impact management is anticipated.

Birds

The AEE notes there are a number of Threatened and AT-Risk(TAR) bird species and non TAR bird species likely to be present in the project areas. Noise, vibration and lighting disturbance caused by construction and operational activities could potentially displace native birds from suitable nesting and foraging habitat within and adjacent to construction works and also affect connectivity in the broader landscape for the NoR's.

The AEE states TAR and native birds may also be impacted by removal of vegetation protected under the district plan within NoR this includes the following effects:

- Disturbance and displacement to TAR and native birds due to construction activities (noise, light, dust, etc.).
- Loss of foraging habitat;
- Nest loss; and

- Mortality or injury to birds.

The effects on TAR species as a result of NoR 8 are outlined in the table below. With mitigation in place the overall level of effect is very low during construction and low during operation.

	TAR Species	Level of effect (pre - mitigation)	Mitigation required?	Level of effect (post mitigation)
Construction	Australasian bittern, White heron, and Dabchick Banded rail, South Island pied oystercatcher, and Spotless crane	Moderate	Yes	Very low
Operation		Moderate	Yes	Low

Herpetofauna

The AEE states that two TAR species of skinks are likely to occur within the area and the ecological value of both skinks area assessed as high (At Risk-Declining species). The magnitude of effects were assessed as negligible in the Auckland Region. The loss of connectivity through the presence of the road and associated disturbance such as operational noise, vibration, and light could lead to an overall reduction in size and quality of suitable habitat for TAR skinks within the broader landscape.

The effects as a result of the removal of vegetation for NoR 8 are assessed as moderate. The potential effects are outlined as disturbance and displacement due to construction activities and mortality or injury. The resulting effects as a result of removal of vegetation in WDC jurisdiction is assessed as high prior to mitigation. Mitigation is therefore proposed this is discussed in section 11.94 of the AEE and section 8.11 of this report. The residual ecological impact on Herpetofauna is therefore assessed as Low post mitigation. The overall level of effect due to operational disturbance is assessed as low prior to mitigation, therefore, mitigation is not proposed.

Mitigation proposed

Conditions 22 (Pre-Construction Ecological Survey) and 23 (Ecological Management Plan (EMP)) are proposed to manage the construction and operational ecological effects and include the proposed mitigation :

- Pre construction ecological surveys and ecological management plans are proposed prior to construction
- Methods and measures to minimise disturbance to bats which will be integrated with any relevant regional consent conditions
- Methods and measures to minimise adverse effects on Threatened and At Risk-Declining birds
- Methodology and measures for the trapping and relocation of native lizards

Effects Conclusion

The AEE concludes following the implementation of the proposed mitigation measures the residual level of construction and operation effects on terrestrial ecology associated with the construction and operation of all upgraded transport corridors is assessed as low.

Specialist Review

Simon Chapman Councils consultant specialist has reviewed the NoR 8 and provided a response which is included in **Attachment C**.

In terms of the adequacy of the information provided Mr Chapman recommends the Bat Management Plan (BMP) is provided and certified in advance of the surveys commencing due to the requirements of Policy 17 within the NPS IB. Additionally further effects management measures should be considered for the loss of roosting and commuting or foraging habitat in light of the survey results.

Further information is requested in relation to the New Zealand falcon and explanation as to why this species would not be present in the footprint or zone of influence of works. Information is also lacking in relation to native invertebrates and their presence, as no on site based surveys had been undertaken in regards to invertebrates. Mr Chapman makes the conclusion that the proposed conditions for NoR 8 are accepted and adequately manage the potential ecological effects.

Planning Review

None of the submitters raise Ecological Effects as a concern. However, given the comments made by Mr Chapman about the need to address the NPS- IB it would be helpful for the requiring authority to provide a response at the hearing on this especially in relation to the management plans referred to. I also note proposed Conditions 22 and 23 do not refer to Bat Management Plans, Avifauna Management Plans or Lizard Management Plans, however the AEE does. It would be useful for the requiring authority to clarify that there will be management plans as stated in the AEE or something else. It is unclear reading conditions 22 and 23 what the intended outputs are from these conditions i.e., will there be multiple EMPs for the project or one. I consider that the potential adverse effects on ecology can be avoided, remedied, or mitigated, subject to the above, and the proposed conditions as recommended to be amended.

8.13. Effects on the Community

There are no community and recreational facilities noted in Sections 9.13.2 of the AEE, in the description of the receiving environment for NoR 8.

Section 11.12 of the AEE addresses the potential effects from changes to the local social and community facilities on the existing and future communities of Pukekohe, Paerata and Drury West.

Section 11.13 of the AEE considers the specific effects on property and business. Property and land use effects are discussed below in section 8.14 of this report.

The AEE notes a number of positive effects as a result of improved connectivity between key growth areas. The Mill Road and Pukekohe East Road Upgrade provides a connection for communicates between Auckland and Waikato and from SH1 to Pukekohe urban areas for traffic and freight with a major active mode connection, safety improvements are also noted as generating community benefits. The provision of active mode facilities provides transport options.

Construction effects are summarised as:

- Reduction in communities as property as acquired for the NoRs
- Business disruption where they are located along the road corridor
- Restricted traffic movements during construction
- Some businesses will need to move

- Residents may experience traffic disruption due to increased commuting time and disruption to access. Amenity values could also be disrupted during construction as a result of noise and dust.

The AEE states there will be no operational effects on the community as a result of the project as there are numerous positive effects from the projects. There are no specific effects noted for NoR 8.

Measures to mitigate adverse effects are summarised as:

- A Stakeholder Communication and Engagement Management Plan (SCEMP) will be prepared prior to the start of construction to identify how the public and stakeholders (including directly affected and adjacent owners and occupiers of land) will be communicated throughout the proposed construction works.
- Access and trip disruption will be managed by the Construction Traffic Management Plan (CTMP) and SCEMP which are proposed as conditions of consent.
- Effects on amenity values will be managed through the SCEMP, CVNMP and the Construction Environmental Management Plan (CEMP).

The AEE concludes there will be significant positive effects to the community which the project will operate by providing improved connectivity and health and wellbeing. Potential adverse construction effects will be managed through the appropriate management plan and communication will be undertaken with the identified landowners and stakeholders.

Planning assessment

There are no submissions on community effects other than that of the Ministry of Education in which concern about the potential for existing schools, or any future schools developed in this area, to be affected.

The Ministry of Education is seeking to changes to ensure that appropriate conditions are included in the designations to mitigate any adverse effects associated with the construction of the Pukekohe transport network on its schools.

In addition, it would be helpful to hear from the requiring authority on any impacts on the other schools and the changes to conditions requested by the Ministry as noted. At this time I consider that the potential adverse effects on community facilities can be avoided, remedied, or mitigated, but this assessment is subject to the above information being provided.

8.14. Property and land use effects

Section 11.13 of the AEE addresses the potential adverse effects on which are where properties have been reduced in size. Fifteen properties are identified as being affected within Form 18.

Land required for the permanent work will be acquired prior to construction. If only temporary occupation of the land is required, it will be leased. Potential effects from the temporary lease/use of land include disruption to farm activities and businesses, disruptions to access, loss of vegetation, temporary loss of grazing pasture and temporarily affected amenity. Measures proposed to mitigate these effects include the implementation of the SCEMP, CTMP, CNVMP and CEMP prior to the start of construction.

Following the completion of construction, the designation boundary will be reviewed and any land that is not required for the permanent work or for the ongoing operation, maintenance or mitigation of effects of the Project will be reinstated in coordination with directly affected landowners or occupiers. The AEE notes this will include the reinstatement and reintegration of construction areas with the surrounding landform, reinstatement of driveways, accessways, fences and gardens, and integration of batters and cut/fill slopes with the landscape. This will be resolved through the Public Works Act process.

Planning review and submissions

No Council specialist assessment has been sought for property and land use effects. However, I agree with the AEE that there is an overlap between the property and land use effects, but also that the other effects such as transport, noise and vibration and community effects will also play a part in relation to land use effects in terms of the land not directly affected by the NoR.

Potential effects associated with extended lapse periods are generally associated with the lack of uncertainty over:

- When construction will commence
- How long will affected parties be subjected to construction effects and the degree to which they will be affected
- The form of the potential effects of the future operation of the designation.

The effects are typically managed through ongoing communication with the parties involved and as secured through the designation conditions. Where property is acquired for the ongoing operation and maintenance of the project, this is usually done 2-3 years ahead of the main construction. The Public Works Act is the legislative framework under which entitled landowners will receive compensation. This is a non-RMA process i.e. separate process to this one.

As the requiring authority does not own the land that it is seeking to designate, it is required to have particular regard to whether adequate consideration has been given to alternative sites, routes or methods of undertaking the works. The requiring authority has determined through that assessment, that the routes shown as lodged, are the routes which best fits its objectives.

The lapse period sought for all of the NoRs is 20 years. I acknowledge that an extended lapse period is a practical approach as it will provide the required statutory protection of the future transport corridors required to support growth. Notices of requirement for route protection which are seeking extended lapse dates are becoming a common request from requiring authorities.

If the proposed lapse dates were reduced, the requiring authority could request an extension of the lapse period within 3 months of the lapse date under section 184 of the RMA. However, there is no certainty for the requiring authority that an extension would be granted if it could not provide supporting evidence that substantial progress or effort has been made, and is continuing to be made, towards giving effect to the designation.

The key issue for many submitters as expressed in their submissions is concern about the impact on the designation on their property and a number submit the extent of land required is excessive or unnecessary as a result of the proposed design (submitter 2 located at 250 Pukekohe East Road, submitter 4 located at 21 Turbott Road, submitter 5 located at 52B Mill Road, submitter 6 located at 248 Pukekohe East Road, submitter 12 located at 80 Mills Road).

Loss of privacy and loss of property values have also been raised by submitters, specifically 12 located at 80 Mills Road, submitter 6 located at 248 Pukekohe East Road, 7 located at 248 Pukekohe East Road.

Some of the Rural zoned land subject to the NoR is identified as being Highly Productive Land under the transitional definition in the National Policy Statement on Highly Productive Land (October 2022) (NPS-HPL). The effects of the removal of highly productive land are not specifically assessed in the AEE or raised by submitters however. There is an assessment of the relevant NPS-HPL objectives and policies in the AEE where it is noted that the alignment of the designation will not significantly erode or fragment the highly productive land.

The conditions set includes condition 5 that provides for Network Utility Operators with existing infrastructure located within the designation to undertake a range of work

without requiring written consent under section 176 of the RMA, there is no such provision for directly affected landowners who for potentially 20 years will need permission from Waka Kotahi to undertake work on their own land.

It would also be useful to understand if any specific effects on the use of highly productive land both before and during construction have been identified by the requiring authority and if they can be addressed to ensure that the production potential for the land around the NoR and within the NoR and the ongoing viability of any business operation is retained (such as ensuring vehicle access to properties for farming activities during construction and limiting construction impacts during times where there are high levels of farming activity etc.).

In my view there is little information in the AEE which addresses specific property matters i.e. specific mitigation for particular properties and how the requiring authority will communicate with property owners regarding the project now and into the future (i.e. over the next 20 years). It would be useful and, in my view, necessary for the requiring authority to provide land integration plans for the directly affected properties so the landowners have some clarity of what to expect on their property and how it may impact their operation of their sites. At this time, I consider that the potential adverse effects on property and land use can be remedied or mitigated, but this assessment is subject to the above information being provided and potentially changes to the conditions to address how the ongoing use of the directly affected land will be enabled given the long lapse period sought.

8.15. Effects on Network Utility and Other Infrastructure

Requiring Authority AEE

Section 11.14 of the AEE addresses the potential adverse effects on network utilities. Section 10.2.2 of the AEE notes engagement with the network utilities has been through a two monthly forum. It notes that the forum includes representatives from Watercare, Vector, First Gas and Transpower and feedback from network utilities has been considered through alternatives assessment and concept design of the project.

Table 11-7 of the AEE notes the following network utility providers and their assets within NoR 8:

- Watercare Services Limited - watermain, sewermain and pipe assets;
- Firstgas Ltd - Pukekohe to East Tamaki Gas Pipeline
- New Zealand Transport Agency - State Highway 1

The network utilities and their assets located within the WDC portion of NoR include Watercare assets and Firstgas Ltd for the works. Some of the land to be designated is already subject to Firstgas Ltd existing designation. Written consent of Firstgas Ltd is required in order to designate under section 177(1)(a) of the RMA. The AEE notes that consultation has taken place with all the requiring authorities and that written approval will be obtained during the detailed design phase of the project.

The Network Utilities Management Plan (NUMP) is proposed to mitigate adverse effects on network utilities. It will set out a framework for protecting, relocating and working in proximity to existing network utilities. The AEE further notes that it will be prepared in consultation with the relevant network utility operators.

Planning review

No Council specialist assessment has been sought for effects on network utilities and other infrastructure. It is noted that submissions to NoR 8 have been received from the following Requiring Authorities and network utilities:

- Submitter 1 - The Telecommunication companies
- Submitter 3 - Waikato District Council – Roading Team
- Submitter 8 - Firstgas Ltd
- Submitter 13 - Watercare Services Limited
- Submitter 15 - Counties Energy Ltd (CEL)

The Telecommunication companies (submitter No. 1) seek to ensure existing and potential future telecommunications infrastructure located in the project corridors are adequately addressed. They state this is far easier to be planned for now in comparison to retrofitting necessary telecommunications and broadbands. They seek amendments to the NUMP (Condition 25) to ensure there is opportunity to coordinate future or further work during the detailed design of the project. They further note that there are no conditions in relation to the Land Use Integration Process on the Waka Kotahi NoR's compared to AT's. I agree with the relief sought by The Telecommunication companies (submitter No. 1).

The CEL (submitter 15) submission indicates general support for the NoR but raises concerns related the need to access to future and existing assets. The submission notes that the alignment of the high voltage Bombay-Pukekohe (north) 110kV line is shown incorrectly, where it crosses to the north side of Mill Road; and appears to be in area identified for future cut and installation of a culvert, both of which could compromise the safe operation of a critical asset. CEL also note some of their existing assets (overhead and underground) haven't been identified on the drawing set (11kV and 22kV lines etc) CEL seek further consultation and note that detailed planning is required.

Firstgas Ltd (submitter 8) note that they own and operate the 200 and the 400B transmission lines, the main transmissions lines supply Auckland and Northland that are located within the NoR. Firstgas Ltd seek that the gas pipelines along the entire locale where the project intersects with them are demonstrated on the General Arrangement Layout Plans. There is no specific discussion about effects on these utilities or assets in section 11 of the AEE. Firstgas has a designation that runs through both the WDC and AC areas of NoR 8 and approval for works in that area will also be required from Firstgas as the primary designation.

Works within the existing road reserve are controlled under the Utilities Access Act 2010 and associated National Code of Practice for Utility Operators Access to Transport Corridors. The Code of Practice allows utility providers to access the road reserve (excluding motorways) as of right, subject to reasonable conditions imposed from the transport authority. The status of the road is expected to change to state highway and access is subject to the Corridor Access Request process which will be managed by the road controlling authority. It would be helpful to find out from the requiring authority when the road is to be classified as a state highway and Waka Kotahi becomes the Road Controlling Authority as it may mean that there are a range of parties involved in some works in the road until then. However it is noted that Condition 5 as proposed sets out when some such works do not need Waka Kotahi approval under section 176 of the RMA.

Firstgas Ltd further seek that Condition 5(b) specifically constitutes written approval for the works listed in (a)(i)-(iv) post-construction. They further seek that Condition 10 includes specific requirement for consultation with Network Utility Operators in the design and preparation, and any subsequent establishment and/or maintenance works associated with the ULDMP. I agree that the gas pipelines should be shown on the drawings where they are in the NoR footprint or within the proximity to it.

As there is no further discussion on the effects on network utilities, it is not clear if the mitigation proposed in the form of the NUMP (Condition 2) and Condition 5 will be adequate. However, it is noted that the Telecommunication Group and Watercare consider that further work on Condition 5 is needed and it would be useful to hear from the requiring authority in relation to the changes requested.

For the benefit of the submitters and commissioners the relevant Land Use Integration Process condition from the Auckland Transport condition set as submitted are outlined below:

Land use Integration Process (LIP)

The Requiring Authority shall set up a Land use Integration Process for the period between confirmation of the designation and the Start of Construction. The purpose of this process is to encourage and facilitate the integration of master planning and land use development activity on land directly affected or adjacent to the designation. To achieve this purpose:

- a. Within twelve (12) months of the date on which this designation is included in the AUP, the Requiring Authority shall include the contact details of a nominated contact on the project website (or equivalent information source) required to be established by Condition 2(a)(iii).*
- b. The nominated contact shall be the main point of contact for a Developer or Development Agency wanting to work with the Requiring Authority to integrate their development plans or master planning with the designation.*
- c. At any time prior to the Start of Construction, the nominated contact will be available to engage with a Developer or Development Agency for the purpose of:
 - i. responding to requests made to the Requiring Authority for information regarding design details that could assist with land use integration; and*
 - ii. receiving information from a Developer or Development Agency regarding master planning or land development details that could assist with land use integration.**
- d. Information requested or provided under Condition 9(c) above may include but not be limited to the following matters:*
- e. design details including but not limited to:
 - A. boundary treatment (e.g. the use of retaining walls or batter slopes);*
 - B. the horizontal and vertical alignment of the road (levels);*
 - C. potential locations for mid-block crossings; and*
 - D. integration of stormwater infrastructure.**
- iii. a process for the Requiring Authority to undertake a technical review of or provide comments on any master planning or development proposal advanced by the Developer or Development Agency as it relates to integration with the Project; and*
- iv. details of how to apply for written consent from the Requiring Authority for any development proposal that relates to land is within the designation under section 176(1)(b) of the RMA.*
- f. Where information is requested from the Requiring Authority and is available, the nominated contact shall provide the information unless there are reasonable grounds for not providing it.*
- g. The nominated contact shall maintain a record of the engagement between the Requiring Authority and Developers and Development Agencies for the period following the date in which this designation is included in the AUP through to the Start of Construction for a Stage of Work. The record shall include:
 - v. a list of all Developers and Development Agencies who have indicated through the notice of requirement process that they intend to master plan or develop sites along the Project alignment that may require specific integration with the designation;*
 - vi. details of any requests made to the Requiring Authority that could influence detailed design, the results of any engagement and, where such requests that could influence detailed design are declined, the reasons why the requiring authority has declined the requests; and*
 - vii. details of any requests to co-ordinate the forward work programme, where appropriate, with Development Agencies and Network Utility Operators.**
- h. The record shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work*

At this time, I consider that the potential adverse effects on network utilities and other infrastructure can be avoided, remedied or mitigated, but this assessment is subject to the above information being provided and the inclusion of the Landuse Integration Process condition.

8.16. Effects conclusion

In regard to the overall effects of the Project, I consider that subject to the provision of the information requested and further amendments to the conditions recommended above and included in **Attachment D** to this report, the potential adverse effects on the environment from the construction and operation of NoR 8 can be appropriately avoided, remedied or mitigated.

9. NATIONAL POLICY STATEMENTS

Section 171(1)(a)(ii) requires the council to, subject to Part 2, consider the effects on the environment of allowing the notice of requirement, having particular regard to any relevant provisions of a national policy statement.

9.1. National Policy Statement on Urban Development 2020 ('NPS-UD')

The NPS-UD has the primary objective of ensuring that New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future. This also includes, among other things, improving housing affordability by supporting competitive land and development markets and ensuring that urban environments are integrated with infrastructure planning and funding decisions. The NPS-UD also requires that local authorities must be satisfied that additional infrastructure to service the development capacity is provided and likely to be available in addition to being resilient to the current and future effects of climate change.

The requiring authority has assessed the Project against the relevant provisions of the NPS-UD in Table 12-1 of the AEE. In summary, the requiring authority finds that the Project consistent with the objectives and policies by providing for the necessary transport infrastructure to support the development of land and the eventual establishment of the necessary development capacity.

I concur with these conclusions and consider that the NoR will support and enable future growth proposed in the Pukekohe area while also promoting and providing for active modes of transport and public transport. In that regard, I agree that the NoR gives effect to the NPS-UD. In addition, I consider that the conditions, as recommended to be amended, will give effect to the NPS-UD.

9.2. National Policy Statement on Freshwater Management 2020 (NPS-FM)

The NPS - FM endeavours to implement Te Mana o te Wai by prioritising first the health and well-being of water bodies and freshwater ecosystems followed by the health needs of people and then the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

Its objective and policies endeavours to ensure that natural and physical resources are managed in a way that prioritises first, the health and well-being of water bodies and freshwater ecosystems followed by the health needs of people and then the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future. In particular, the NPS-FW seeks to protect natural wetlands, rivers, outstanding waterbodies and habitats of indigenous freshwater species.

It is noted that these provisions will apply at the regional consent stage for consents sought under section 13, 14 and 15 of the RMA.

In the context of route selection and protection under these NoRs the requiring authority has assessed the project against the relevant provisions of the NPS-FW in Table 12-1 of the AEE. Even though the AEE notes that the AEE is focused on district plan matters the requiring authority concludes that the NoR as it contributes to the wider Pukekohe Transport Network contributes to achievement of these objectives and policies by avoiding or minimising adverse effects on water bodies and freshwater ecosystems at this stage (noting regional consents will be obtained in future).

9.3. New Zealand Coastal Policy Statement (NZCPS)

The NZCPS contains objectives and policies relating to the coastal environment. Consideration of the NZCPS has not been undertaken in the AEE specifically. However, the requiring authority's consideration of Part 6 (section 13.1 of the AEE) of the RMA does state:

'The proposed designations will not impact upon any existing public access to streams or the CMA. The Pukekohe Transport Network has the potential to increase access to rivers/streams by providing walking and cycling facilities and integrating with future parks and connections proposed through development.'

The project also includes a range of measures to be included in management plans relating to maintaining water quality in the streams that discharges into the Manukau Harbour (Ngakoroa Stream in relation to this report). These measures can be further developed and adapted at the detailed design and Outline Plan stages.

Overall, I consider that NoR 8 is consistent with the NZCPS subject to the conditions, as recommended to be amended.

9.4. National Policy Statement on Highly Productive Land ('NPS-HPL')

The NPS-HPL came into effects on 17 October 2022 and has the broad objective that:

2.1 Objective

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

The definition of "highly productive land" is as follows:

'highly productive land means land that has been mapped in accordance with clause 3.4 and is included in an operative regional policy statement as required by clause 3.5 (but see clause 3.5(7) for what is treated as highly productive land before the maps are included in an operative regional policy statement and clause 3.5(6) for when land is rezoned and therefore ceases to be highly productive land).'

The NPS-HPL contains 9 policies to implement the objective and these policies include the following relevant policies:

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

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

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

In combination these policies set a high threshold for protection of soil, primarily for the production of food. However, the NPS-HPL also recognises land designated for infrastructure in section 3.9. This section relates to circumstances where the use or development of highly productive land is appropriate and includes the following in section 3.9(2)(h):

(h) it is for an activity by a requiring authority in relation to a designation or notice of requirement under the Act:

Section 3.9(2)(j) also provides:

(j) it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:

(i) the maintenance, operation, upgrade, or expansion of specified infrastructure:

The AEE only lightly touches on this NPS within Table 12-1. The Assessment in Table 12-1 centres on the exemptions in Clause 3.9(2) of the NPS-HPL and concludes that they apply. The assessment also concludes that because the projects (NoR 8) are generally located along the edge of the highly productive land, or will enable the

ongoing use of the land either side of the projects for rural production purposes it contributes to the achievement of the NPS-HPLs objectives and policies. It states that adverse effects of the projects on adjacent highly productive land will be appropriately mitigated prior to construction is required. It also states that upgrades to existing roads will provide for an improved corridor and there is an operational need to upgrade in the proposed location to connect to SH1 with the future urban zone. It further notes the impacts on HPL have been reduced through the use and upgrade of an existing road. The AEE notes a new road or maintenance, operation, upgrade or expansion of specified infrastructure is one of the listed exemptions for specified infrastructure and the presence of specified infrastructure on HPL does not preclude the balance of the HPL being used by land-based primary production.

I agree that NoR 8 falls within the exceptions listed above in (h) and (j) and is therefore consistent with the NPS-HPL. However, in terms of Clause 3.9(3) (b) of the NPS-HPL the territorial authority must take measures that avoids if possible or mitigates actual or potential reverse sensitivity effects on land-based primary production activities from the use avoided or minimised. The effects of the removal of highly productive land are not specifically assessed in the AEE so it is not clear how the impact on highly productive land has been minimised. It would be helpful to receive that information from the requiring authority to confirm that the works are consistent with the NPS-HPL.

9.5. National Policy Statement on Indigenous Biodiversity 2023 (NPS-IB)

The National Policy Statement on Indigenous Biodiversity (NPS-IB) applies to indigenous biodiversity in the terrestrial environment and has just come into force. Clause 1.4 of the NPS-IB notes that it applies to the terrestrial coastal environment in conjunction with the NZCPS and that if there is conflict the NZCPS prevails. Clause 1.4 also notes that if there is a conflict between the provisions of the NPS-IB and the NPS-FM or the Resource Management (National Environmental Standards for Freshwater) Regulations 2020, the latter prevail.

The NPS-IB seeks to maintain indigenous biodiversity across New Zealand so that there is at least no overall loss in indigenous biodiversity. The Policies of NPS-IB seek that a cautionary approach is used when considering effects on indigenous biodiversity both within and beyond Significant Natural Areas (SNAs) and including areas supporting highly mobile fauna. Increased indigenous vegetation cover in urban and non-urban environments is promoted, as is information gathering and monitoring of indigenous biodiversity.

The NPS-IB prioritises the mauri and intrinsic value of indigenous biodiversity and recognises people's connections and relationships with indigenous biodiversity while recognising the relationship between indigenous species, ecosystems, the wider environment, and the community and in particular the bond between tangata whenua and indigenous biodiversity and obligations of care that tangata whenua have as kaitiaki of indigenous biodiversity among other principles.

As noted in Table 12-1 of the AEE the route has avoided high value habitat areas and areas identified by the WDP. Most of the route of NoR 8 has already been modified by the farming activities that have occurred. As stated earlier in this report, there are a number of SNA's identified within the Proposed Waikato District Plan that are in proximity to NoR 8. The application confirms NoR 8 does not intersect with these or directly adjoin them. In the context of route selection and protection under this NoR the requiring authority has assessed the Project against the relevant provisions of the NPS-IB. The requiring authority concludes that the wider Pukekohe Transport Network contributes to achievement of these objectives and policies by avoiding or minimising adverse effects on water bodies and freshwater ecosystems at this stage (noting regional consents will be obtained in future). I agree with this assessment.

9.6. National Policy Statement on Electricity Transmission ('NPS-ET')

The NPSET endeavours to recognise and provide for the significance of the electricity transmission network, by facilitating the operation, maintenance and upgrade of the

network whilst managing adverse effects of the network and managing adverse effects of other activities on the network.

The requiring authority has assessed the Project against the NPS-ET, along with relevant objectives and policies within the WRPS, PWDP and WDP (Franklin Section) in Table 12.1 of the AEE. Although the drawings do not indicate there are any Transpower assets within the vicinity of the NoR 8 affected land parcels and within the jurisdiction of WDC. I also note the NPS-ET only applies to the National Grid and by virtue of Transpower's assets. The drawings note Counties Power high voltage cable intersects with the proposed NoR alignment and Counties Energy have submitted on the NoR. It would be useful for the requiring authority to clarify that there are no Transpower assets within the vicinity of NoR 8 and the reason for including the assessment of the WRPS, PWDP and WDP (Franklin Section) in Table 12.1.

10. REGIONAL POLICY STATEMENT

The Waikato Regional Policy Statement (WRPS) sets the strategic direction for managing the use and development of natural and physical resources throughout Waikato. The following sections of the WRPS are considered relevant to NoR 8:

- Urban growth and development capacity WRPS - UFD-O1, UFD-P2, IM-O1, IM-O2, IMO9, IM-P1
- Enabling infrastructure and transport UFD-O1, UFD-P2
- National Grid - EIT-O1, EIT-P1
- Mana whenua HCV-O1, HCV-P1, HCV-P2, UFD-O1, IM-O7, IM-P3
- Indigenous biodiversity and ecological values - ECO-P1, ECO-P2, CE-P1, CE-P2, LFO1, LF-O3, LF-P3, IM-O6
- Freshwater LF-O1, LF-O3 LF-P1, LF-P3,
- Natural Hazards - LF-O3, HAZ-O1, HAZ-P1, HAZ-P2
- Urban form and quality design - UFD-O1, UFD-P
- Highly productive land - LF-O5, LF-P11

The requiring authority has assessed the Project against the relevant provisions of the WRPS in Section 12 and Table 12-1 of the AEE.

Table 12-1 heading	WRPS Part	Chapter of WRPS
Urban Growth and development capacity	Part 2 – Resource management overview	IM – Integrated Management
	Part 3 – Domains and Topics	UFD – Urban Form and development
Enabling infrastructure and transport	Part 3 – Domains and Topics	UFD – Urban Form and development
National Grid	Part 3 – Domains and Topics	EIT – Energy, infrastructure and transport
Mana whenua	Part 3 – Domains and Topics	HVC – Historical and cultural values
		UFD – Urban Form and development
	Part 2 – Resource management overview	IM – Integrated Management
Indigenous biodiversity and ecological values	Part 3 – Domains and Topics	ECO – Ecosystems and indigenous biodiversity
		CE – Coastal Environment

Table 12-1 heading	WRPS Part	Chapter of WRPS
		LF – Land and freshwater
	Part 2 – Resource management overview	IM – Integrated Management
Freshwater	Part 3 – Domains and Topics	LF – Land and freshwater
Natural Hazards	Part 3 – Domains and Topics	LF – Land and freshwater
		HZ – Hazards and risks
Urban form and quality design	Part 3 – Domains and Topics	UFD – Urban Form and development
Highly productive land	Part 3 – Domains and Topics	LF – Land and freshwater

I generally agree with the requiring authority's assessment under the WRPS provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoR. Although as noted earlier it would be useful for the requiring authority to confirm the applicability of the assessment under the national grid section within Table 12-1 of the AEE, as I could not locate any Transpower assets within proximity to NoR 8.

11. WAIKATO REGIONAL PLAN

The following sections of the Waikato Regional Plan (WRP) are considered relevant to NoR 8:

- Indigenous biodiversity and ecological values - Chapter 4 (River and Lake Bed Module) and Chapter 5 (Land and Soil Module) against the topic (4.2.2 Objective (c), 4.3.2 Objective (b), Policy 1 5.1.3 policy 2 5.3.2 objective (a - e)).
- Freshwater - Chapter 3 (Water Module)(Objective 3.1.2 ,Policy 3.A, Policy 3.2.3).
- Mana Whenua – Chapter 2 (Matters of Significance to Maori) 2.3.2 objective (a) and (b) Chapter 5 (Contaminated Land) 5.3.2 objective (d).

As noted in section 8.9 of this report the project is located in the Waikato River Catchment Area and within two stream catchments, the Ngakoroa Stream and Tūtaenui Stream. The Tūtaenui Stream catchment ultimately flows to the Waikato River, while the Ngakoroa Stream drains to the Manukau Harbour. Between 2016 to 2018 Waikato Regional Council notified and received submissions on Proposed Plan Change 1 to the Waikato Regional Plan. Proposed Plan Change 1 manages point source discharges and non point discharges within the Waikato River catchment and aims to improve the water quality of the Waikato River. The hearing panels recommendation report was notified in April 2020. Several notices of appeal are lodged with the Environment Court. Whilst I recognise the effects of stormwater discharges to streams and works in streams are subject to regional consents, it would be helpful if the relevant objectives and policies of Proposed Plan Change 1 had also been considered in Table 12-1.

The requiring authority has assessed the Project against the relevant provisions of the WRP in Section 12 and Table 12-1 of the AEE. I generally agree with the requiring authority's assessment under the WRP provisions (with the exception of Proposed Plan Change 1) subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoR.

12. PROPOSED WAIKATO DISTRICT PLAN

The Proposed Waikato District Plan – appeals version (PWDP) provisions are addressed in section 12 and Table 12-1 of the AEE (along with the WRPS and WRP provisions discussed above).

The following sections of the PWDP are considered relevant to NoR 8:

- Urban growth and development capacity - 4.1.1 (a), 4.1.2(a), 4.1.4(a), 4.1.8*
- Enabling infrastructure and transport – SD – O5, SD – O7, AINF- O1, AINF - O3, AINF - O8, AINF- P1, AINF-P29, AINF- P7, AINF - P35, AINF - P10, EW – O1
- National Grid - 6.1.6, 6.2.1, 6.2.2, 6.2.3*
- Mana whenua SD – O2, AINF – P18, MV-O1, MV-O2, MV-O3, MV-O4, MVO5, MV-P1, MV-P4, MV-P5
- Indigenous biodiversity and ecological values - SD-O12, SD-P(1)(2)(3)(5), ECO-O2, ECO-P8 (1)(2), NATC-O1 (2), NATC-P(1), (3)
- Natural hazards - SD – O13, NH - O2, NH-P28, EW – O2
- Urban form and quality design TREE – O1, TREE - P1, EW – P2
- Rural Zone GRUZ-O1, GRUZP2, GRUZ-P5,

*These provisions appear to be superseded in the appealed version of the proposed plan.

Table 12-1 heading	PWDP Part (Appeals Version)	Section of PWDP (Appeals Version)
Urban growth and development capacity	Appears not to be located in this document	Appears not to be located within this document
Enabling infrastructure and transport	Part 2: 01 District Wide matters	SD – Strategic Direction
	Part 2: 03 District Wide matters	AINF – All infrastructure
	Part 2: 29 District Wide	EW – Earthworks
National Grid	Not relevant to this NoR as noted earlier. Not relevant to this NoR as noted earlier.	Appears not to be located in this document
Mana Whenua	Part 2: 01 District Wide matters	SD – Strategic Direction
	Part 2: 03 District Wide matters	AINF – All infrastructure
	Part 2: 18 District Wide matters	MV – Maaori values and Maaturanga Maaori
Indigenous biodiversity and ecological values	Part 2: 01 District Wide matters	SD – Strategic Direction
	Part 2: 22 District Wide matters	ECO – Ecosystems and indigenous biodiversity
	Part 2: 23 District Wide matters	NATC – Natural character
Natural hazards	Part 2: 01 District Wide matters	SD – Strategic Direction
	Part 2: 15 District Wide Matters	NH – Natural hazards and climate change

Table 12-1 heading	PWDP Part (Appeals Version)	Section of PWDP (Appeals Version)
	Part 2: 29 District Wide Matters	EW – Earthworks
Urban form and quality design	Part 2: 29 District Wide Matters	EW – Earthworks
	Part 2: 21 District Wide Matters	TREE – Notable trees
Rural Zone	Part 3: 04 Area-specific matters	GRUZ – General rural zone

The objective and policies listed within Table 12-1 for the Urban growth and development capacity and national grid headings within the AEE under the PWDP are not contained within the appeals version of the PWDP (as noted with the asterisk provisions above). They are located within Appendix 4, Chapter 4: Urban Environment, and Chapter 6: Infrastructure and Energy (respectively) Proposed District Plan (Stage 1) (Notified Version) dated 18 July 2018. It would be useful for the requiring authority to clarify this and confirm their applicability to this NoR application. As noted earlier it would be useful for the requiring authority to confirm the applicability of the assessment under the national grid section within Table 12-1 of the AEE.

I also note the provisions within the following chapters have not been assessed or not fully assessed:

- Part 2: District-wide matters / General district-wide matters – CONTAMINATED LAND
- Part 2: District-wide matters / General district-wide matters NOISE
- Part 2: District-wide matters / General district-wide matters – LIGHT - Light
- Part 2: District-wide matters / Energy, infrastructure and transport / AINF – All infrastructure
- Part 2: District-wide matters / Strategic Direction / SD – Strategic directions
- Part 2: District-wide matters / Strategic direction / UFD – Urban form and development
- Part 2: District-wide matters / Hazards and risks / NH – Natural hazards and climate change
- Part 2: District-wide matters / Historical and cultural values / TETW – Te Ture Whaimana – Vision and Strategy
- Part 3: Area-specific matters / Zones / Rural Zones / GRUZ – General rural zone

It would be useful for the requiring authority to provide an assessment against these provisions.

I generally concur with the requiring authority's assessment of the Project against the PWDP Appeals Version provisions (with the exception of the provisions noted above). I consider NoR 8 to be consistent with the PWDP district plan provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoR. Additionally it would be useful to clarify the provisions identified under the Proposed District Plan (Notified Version) noted by the asterisk are not relevant to this NoR, and confirm the relevance of the national grid assessment, and other matters noted above under the PWDP Appeals Version.

13. WAIKATO DISTRICT PLAN OPERATIVE

The Waikato District Plan (Franklin Section) – provisions are addressed in section 12 and Table 12-1 of the AEE.

The following sections of the WDP (Franklin Section) are considered relevant to NoR 8:

- Urban growth and development capacity WDP - 2.10.5, 2.10.6, 9.3.2,
- Enabling infrastructure and transport 9.3.2, 9.3.3 15.1.1.1, 15.1.1.2 , 15.1.1 (1- 4)
- National Grid - 15.1.1.1, 15.1.1.2
- Mana Whenua - 4.1.1, 4.1.1(1), (2), (3), 8.1.1, 15.1.1.2
- Indigenous biodiversity and ecological values - 5.2.1(2) Objective 5.2.2 Policies 2 (a, b) 5.2.3 Objective (1) (2), 5.2.3 Policies (1) (2)
- Natural hazards - 7.2.2(2), 7.2.3(4), (5), (6), (10), (11)
- Urban form and quality design 2.10.6, 9.3.1, 9.3.3,
- Rural Zone - 17A(8), (10),

Table 12-1 heading	WDP Part	Section of WDP
Urban growth and development capacity	Part 2 Managing the Districts Resources	Section 2.10 Auckland Regional Growth and Land Transport and Land use Integration
	Part 9 Transportation	Section 9.3 Objectives, policies and methods
Enabling infrastructure and transport	Part 9 Transportation	Section 9.3 Objectives, policies and methods
	Part 15 Activities throughout the District	Section 15.1 Network and other utilities and essential services
National Grid	Part 15 Activities throughout the District	Section 15.1 Network and other utilities and essential services
Mana Whenua	Part 4 Partnership with Tangata Whenua	Section 4.1 Objective, Policies and Methods
Indigenous biodiversity and ecological values	Part 5 Conservation of Natural Features	Section 5.2 Objectives, Policies and Methods
Natural Hazards	Part 7 Natural Hazards	Section 7.2 Objectives, Policies and Methods
Urban form and quality design	Part 2 Managing the Districts Resources	Section 2.10 Auckland Regional Growth and Land Transport and Land use Integration
	Part 9 Transportation	Section 9.3 Objectives, policies and methods
Rural Zone	Part 17 Rural and Coastal Growth and Sustainable Management Strategy	Section 17A Rural and Coastal Resource management Strategic Objectives

I note NoR 8 is located within the Environment Enhancement Overlay of the operative WDP. This overlay is referenced within the schedules 22A and 22B in relation to Significant Natural Features. There does not appear to be any specific objective or policy requirements for this overlay.

Where works are located within the Waikato River Catchment, which this project is, an assessment is required against the provisions of any Waikato-Tainui Environmental Plan. The plan notes details must be provided of consultation undertaken with iwi and hapu and the outcomes reached. To my knowledge an assessment against the relevant iwi management plans has not been provided as part of the NoR 8 but it would be useful if the requiring authority to provide this even if these operative plan rules are no longer applicable.

As NoR 8 is located within the Waikato River Catchment, Part 6 of the Operative WDP (Franklin Section) is relevant. It would be useful for the requiring authority to provide an assessment against these provisions.

The Waikato-Tainui Raupatu (Waikato River) Settlement Claims Act 2010 is therefore also relevant. The Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 was endorsed with the purpose of implementing co-management of the Waikato River. The overarching purpose of the Act is to restore and protect the health and wellbeing of the Waikato River for future generations. It would be useful for the requiring authority to address this.

As NoR 8 is located within the Central Rural Management Area part 17E.2 of the Operative WDP (Franklin Section) is relevant. It would be useful for the requiring authority to provide an assessment against Part 17E.2.

NoR 8 requires resource consent for the removal of one protected tree (tree 8/47) under the Operative WDP (Franklin Section). Objective and policies within section 15.6 don't appear to be included within Table 12-1 of the AEE. It would be useful for the requiring authority provided an assessment against these.

I generally concur with the requiring authority's assessment of the Project against the operative WDP (Franklin Section) provisions with the exception of the items noted above. I consider NoR 8 to be consistent with the operative WDP (Franklin Section) district plan provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoR.

14. COUNCIL PLAN CHANGES

As Section 9.1.4 of the AEE describes the WDC structure plans they are not repeated here. The AEE as far as I can tell does not list the plan changes initiated by WDC that may be relevant to NoR 8. It would be useful for the applicant to provide an update on any plan changes/variations to the PWDP that may be of relevance to this application at the time of the hearing, given the moving framework of the PWDP and its variations.

15. ALTERNATIVE SITES, ROUTES OR METHODS – SECTION 171(1)(B)

The requiring authority does not have an interest in all the land and the effects of the works are likely to be significant. Therefore, an assessment of alternative sites, routes or methods is required. The requiring authority's assessment of alternatives is set out in Volume 2, Appendix A to the AEE. Section 5.11 of Appendix A to the AEE discuss the nature of the alternative assessment and design refinements that have taken place in relation to NoR 8.

Figure 5-1 of the AEE, outlines the process undertaken through the corridor and route refinement assessment of alternatives.

Based on guidance from caselaw I understand that the issue is whether the requiring authority has adequately considered alternatives, and not whether the 'best' option has been chosen, or that all possible alternatives have been considered. Therefore, the option chosen by the requiring authority is the one that it considers meets the objectives of the requiring authority and the Project. However, the requiring authority does need to ensure that it has considered all reasonable options and has not 'acted arbitrarily or given cursory consideration to the alternatives.

In my opinion, the information supplied demonstrates that the requiring authority has satisfied the requirements of section (171)(1)(b), in that adequate consideration has been given to alternative sites, routes, or methods of undertaking the work.

16. REASONABLE NECESSITY FOR WORK AND DESIGNATION – SECTION 171(1)(C)

The requiring authority has set out its specific project objectives for NoR 8 in the Form 18 documents and in section 6, Table 6.1 of the AEE. These are listed in the AEE as follows:

Provide for an upgrade transport corridor from SH1 (Bombay Interchange) to Pukekohe that:

- a) Improves connectivity*
- b) Is safe*
- c) Provides resilience in the transport network*
- d) Integrates with and supports planned urban growth*
- e) Integrates with and supports the existing and future transport network*
- f) Improves travel choice and contributes to mode shift*

The AEE concludes that the designations are reasonably necessary to achieve the project objectives. I agree with this assessment and conclude that the works and designations are reasonably necessary to achieve the requiring authority's objectives.

17. ANY OTHER MATTER – SECTION 171(1)(D)

Section 171(1)(d) requires the council to have particular regard to any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement. The requiring authority states, in Section 12.1 of the AEE, that it considers that there are other matters under s171(1)(d) that are reasonably necessary to make a recommendation on the NoR. The requiring authority has provided an assessment against a range of other legislation, central government and local government plans, strategies and policies in section 12.1 of the AEE. I note an assessment hasn't been included against the Franklin District Growth Strategy. It would be useful for the requiring authority to provide this. I generally concur with the assessments and conclusions of the AEE on any other matter and the range of other documents listed with the exception of providing an update on the relevant variations or any plan changes to the PWDP and addressing the Franklin District Growth Strategy.

18. DESIGNATION LAPSE PERIOD EXTENSION - SECTION 184(1)(C)

Section 184 of the RMA states that designations lapse within five years, if not given effect to, or an extension has been obtained under section 184(1)(b), or unless the designation in the AUP sets a different lapse period under section 184(1)(c).

The requiring authority has requested a 20 -year lapse period for the NoR. The requiring authority's reasons for this request are stated in section 7 of the AEE.

Section 184 of the Act gives discretion to alter the lapse period for a designation from the default five years. The Environment Court decision in *Beda Family Trust v Transit NZ* A139/04 makes the following statement on the exercise of that discretion in considering a longer lapse period:

The discretion has to be exercised in a principled manner, after considering all of the circumstances of the particular case. There may be circumstances where a longer period than the statutory 5 years is required to secure the route for a major roading project. Such circumstances need to be balanced against the prejudicial effects to directly affected property owners who are required to endure the blighting effects on their properties for an indeterminate period. The exercise of the discretion needs to be underlain by fairness.

Environment Court decisions on disputed designation lapse periods are noted in the following table for reference purposes.

Case	Requested lapse period	Court decision lapse period
Beda Family Trust v Transit NZ	20 years	10 years
Meridian 37 Ltd v Waipa District Council	15 years	5 years
Hernon v Vector Gas Ltd	10 years	5 years
Queenstown Airport Corporation Ltd	10 years	5 years

The RMA does not provide any guidance as to when it is appropriate to extend a lapse period, however, there is clear discretion to extend lapse periods beyond the default period when confirming a designation. The appropriateness of extending the lapse period beyond the 5 years set as the default must depend on the specific circumstances. The relevant factors need to be balanced.

A 20 year lapse is sought by Waka Kotahi and AT for all of the NoR required to deliver the Pukekohe Transport Network. The need for this in relation to all of the NoRs is explained on the basis that the period allows for the uncertainty in relation to urbanisation and funding timeframes and is necessary because:

- It provides statutory protection of the land required for transport infrastructure to support future growth in a manner that recognises the uncertainty associated with the timing of that growth.
- It supports efficient land use and transport integration by enabling the efficient delivery of transport infrastructure at a time and in a way that is integrated with future urbanisation.
- It provides each Requiring Authority time to obtain funding, purchase the land and design the projects; and obtain the necessary resource consents and other statutory approvals.
- It provides property owners, businesses and the community certainty on where transport routes will be located (i.e., within the designation boundaries).
- It is also noted in the AEE that a lapse period is a limit and not a target and that longer lapse periods are not uncommon for large infrastructure projects.

The fact that the majority of the Pukekohe Transport Network is within the FUZ is also noted in the AEE as essentially a mitigation of any potential blight effect resulting from the extended lapse period as the zone is a transitional zone that anticipates urbanisation and there is already uncertainty. The fact that the network is unlikely to be implemented until urbanisation is (at least) confirmed is also noted. It is not clear

how this is directly relevant for the section of NoR 8 located in the Waikato so it would be useful if the requiring authority could provide a more focused reasoning and an explanation how the impact of the requested 20 year lapse period could be mitigated if it was in place. Subject to the response and more details on the sequencing / staging of the project and potential changes to the designation conditions I am generally in support of the lapse period sought.

19. PART 2 OF THE RESOURCE MANAGEMENT ACT 1991

The purpose of the RMA is set out in section 5(1) which is:

to promote the sustainable management of natural and physical resources.

Sustainable management is defined in section 5(2) as:

...managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while –

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

An assessment under section 5 of RMA is provided in section 13.4 of the AEE. I generally agree with the assessment provided subject to the recommended new/amended conditions and the further information sought in this report.

Section 6 of the RMA sets out the matters of national importance which must be recognised and provided for. An assessment of all of the NoRs required to deliver the Pukekohe Transport Network is addressed in section 13.1 and Table 13.1, of the AEE. The table notes the Pukekohe East tuff ring, although this is not scheduled within the PWDP and one pre-1900 site recorded south of the proposed designation (R12/1208 -Bombay Flour Mill or Pilgrims Mill). It notes the assessment of alternatives process has minimised the effects on the Pukekohe East tuff ring. It notes opportunities to further recognise the ONF can be identified through the Cultural Advisory Report, ULDM, Landscape Management Plan and Cultural Monitoring Plan for NoR 8 in particular related to land in both WDC and AC. In relation to R12/1208 -Bombay Flour Mill or Pilgrims Mill an archaeological authority will be sought and an accidental discovery protocol will also be established to mitigate any potential adverse effects. I generally agree with this assessment.

Section 7 of the RMA sets out other matters which shall be given particular regard to. An assessment of all of the NoRs required to deliver the Pukekohe Transport Network is addressed in section 13.2 and Table 13.2 of the AEE. I generally agree with this assessment.

Section 8 of the RMA requires the principles of the Treaty of Waitangi to be taken into account. An assessment is contained in section 13.3 of the AEE. I generally agree with this assessment.

20. CONCLUSIONS

The requiring authority has lodged NoR8 under section 168 of the RMA for the Mill Road and Pukekohe East Road Upgrade to both WDC and AC and there are submissions to both NoRs from the same submitters.

I consider that subject to the provision of the requested information set out in this report that it is recommended to the requiring authority that NoR 8 should be confirmed subject to conditions and with modifications, for the following reasons:

- the notices of requirement and associated works are reasonably necessary for achieving the objectives of the requiring authority.
- adequate consideration has been given to alternative sites, routes or methods of undertaking the work identified in the notices of requirement.
- the notices of requirement are generally consistent with the relevant AUP provisions.
- the notices of requirement are generally in accordance with Part 2 of the RMA and; and relevant national environmental standards and national policy statements.
- restrictions, by way of conditions, imposed on the designation can avoid, remedy or mitigate any potential adverse environmental effects.

21. RECOMMENDATION AND CONDITIONS

21.1. Recommendation

Subject to new or contrary evidence being presented at the hearing, it is recommended that the notices of requirement be confirmed by the requiring authority, subject to the amended and additional conditions, set out in **Attachment D** to this report.

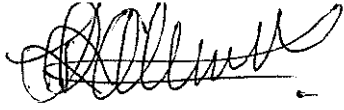
That pursuant to section 171(3) of the RMA the reasons for the recommendation are as follows:

- The notice of requirement is consistent with Part 2 of the RMA in that it enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety.
- The notice(s) of requirement are consistent with and give effect to the relevant national environmental standards, national policy statements and the WRPS, WRP, PWDP and WDP.
- In terms of section 171(1)(b) of the RMA, adequate consideration has been given to alternative sites, routes or methods for undertaking the work.
- In terms of 171(1)(c) of the RMA, the notice(s) of requirement is reasonably necessary to achieve the requiring authority's objectives.
- Restrictions, by way of conditions attached to the notice(s) of requirement have been recommended to avoid, remedy or mitigate adverse environmental effects associated with the works.

21.2. Conditions

The conditions set recommended by the reporting planner for NoR 8 are set out in **Attachment D** to this report. It is noted that there will be a need to ensure some level of consistency in relation to the conditions for the future implementation of the designations on both sides of Mill Road as the spilt jurisdictions could result in confusion and potential for errors.

Reporting Planner:



Louise Allwood
Consultant Planner

Dated: 15 December 2023

Peer Reviewed By:



Karen Bell
Consultant Planner

Dated: 15 December 2023

Approved By:



Kelly Cattermole
Consents Team Leader

Dated: 15 December 2023

ATTACHMENT A
DESIGNATION PLANS

LEGEND GENERAL

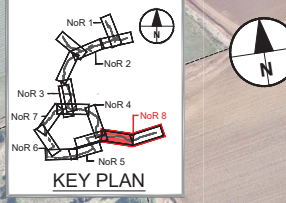
- CONTROL LINE AND CHAINAGE
- EXISTING PROPERTY BOUNDARY
- EXISTING DESIGNATION BOUNDARY
- AUCKLAND / WAIKATO BOUNDARY
- PROPOSED DESIGNATION BOUNDARY (AUCKLAND COUNCIL)
- PROPOSED DESIGNATION BOUNDARY (WAIKATO DISTRICT COUNCIL)
- PROPOSED ROAD CORRIDOR
- PROPOSED FOOTPATH
- PROPOSED CYCLEWAY
- PROPOSED BERM
- PROPOSED FLUSH MEDIAN
- RAISED MEDIAN OR TRAFFIC ISLAND
- FALL BATTER
- OUT BATTER

LEGEND EXISTING UTILITIES

- STORMWATER
- WATERMAIN
- COURTESY POWER MEDIUM VOLTAGE CABLE
- COURTESY POWER HIGH VOLTAGE CABLE
- FIRST GAS TRANSMISSION LINES
- SPARK FIBRE OPTIC
- TRANSPOWER OVERHEAD LINES
- TRANSPOWER PYLON

LEGEND STORMWATER

- PROPOSED STORMWATER TREATMENT / ATTENUATION DEVICE
- EXISTING STORMWATER CULVERT
- PROPOSED STORMWATER CULVERT
- PROPOSED STORMWATER PIPE
- PROPOSED SURFACE FLOW CONVEYANCE



REV	DESCRIPTION	DATE	BY	CHK
1	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	2023		
2	DRAFT ISSUE FOR APPROVAL	2023		
3	DRAFT ISSUE FOR REVIEW	2023		

DATE	BY	CHK	DATE	BY	CHK
2023	NA	NA	2023	V. DELA TORRE	
2023			2023	J. DELA TORRE	
2023			2023	S. KUMAR	
2023			2023	H. HICKS	
2023			2023	B. BUSNARDO	

TE TUPU NGĀTAHI
Supporting Growth

WAKA KOTAHI
NZ TRANSPORT
AGENCY

Project: **SUPPORTING GROWTH PROGRAMME**
PUKEKOHE

Drawing Title: **GENERAL ARRANGEMENT LAYOUT PLAN**
MILL ROAD AND PUKEKOHE EAST ROAD UPGRADE - NoR 8 - SHEET 1 OF 2

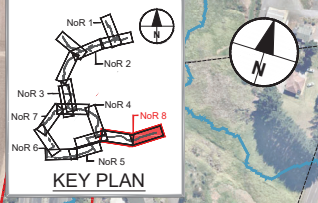
NOT FOR CONSTRUCTION

DRAWING STATUS		LODGEMENT	
DATE	BY	DATE	BY
JUL 2023		JUL 2023	
1:500	A1	1:1000	A3
GENERAL		GENERAL	

Drawing No: SGA-DRG-STH-002-GE-8000



LEGEND GENERAL		LEGEND EXISTING UTILITIES	
---	CONTROL LINE AND CHANGE	SW	STORMWATER
---	EXISTING PROPERTY BOUNDARY	W	WATERMAIN
---	EXISTING DESIGNATION BOUNDARY	CP	COUNTIES POWER
---	EXISTING WAIKATO DISTRICT COUNCIL DESIGNATION BOUNDARY	MC	MEDIUM VOLTAGE CABLE
---	AUCKLAND / WAIKATO BOUNDARY	HP	HIGH VOLTAGE CABLE
---	PROPOSED DESIGNATION BOUNDARY (AUCKLAND COUNCIL)	FG	FIRST GAS TRANSMISSION LINES
---	PROPOSED DESIGNATION BOUNDARY (WAIKATO DISTRICT COUNCIL)	FO	SPARK FIBRE OPTIC
---	PROPOSED ROAD CORRIDOR	TO	TRANSPOWER OVERHEAD LINES
---	PROPOSED FOOTPATH	TP	TRANSPOWER PYLON
---	PROPOSED CYCLEWAY		
---	PROPOSED BERM		
---	PROPOSED FLUSH MEDIAN, RAISED MEDIAN OR TRAFFIC ISLAND		
---	FILL BATTER		
---	CUT BATTER		
LEGEND STORMWATER			
---	PROPOSED STORMWATER TREATMENT / ATTENUATION DEVICE		
---	EXISTING STORMWATER CULVERT		
---	PROPOSED STORMWATER CULVERT		
---	PROPOSED STORMWATER PIPE		
---	PROPOSED SURFACE FLOW CONVEYANCE		



NO.	REVISIONS	DATE	BY	CHKD	APPD
1	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	JUL 2023	J. DELA TORRE		
2	DRAFT ISSUE FOR APPROVAL	JUL 2023	J. DELA TORRE		
3	DRAFT ISSUE FOR REVIEW	JUL 2023	S. KUMAR		
4		JUL 2023	H. HICKS		
5		JUL 2023	B. BUSNARDO		



Project: **SUPPORTING GROWTH PROGRAMME**
PUKEKOHE
 Drawing Title: **GENERAL ARRANGEMENT LAYOUT PLAN**
MILL ROAD AND PUKEKOHE EAST ROAD UPGRADE - NoR 8 - SHEET 2 OF 2

DRAWING STATUS		LODGEMENT	
Drawing Date: JUL 2023		JUL 2023	
A1 Scale: 1:500	A3 Scale: 1:1000		
Discipline: GENERAL			
Drawing No: SGA-DRG-STH-002-GE-8100		Revision: C	

ATTACHMENT B
SUBMISSIONS

Jessica Thomas

From: Jessica Thomas
Sent: Wednesday, 15 November 2023 10:15 am
To: Jessica Thomas
Subject: #1 FW: Pukekohe to Drury Transport Package NoR Submission
Attachments: Submission by Telco companies on NoRs for Pukekohe to Drury NoR.pdf

From: Info <info@waidc.govt.nz>
Sent: Friday, November 10, 2023 1:17 PM
To: Records 4U <Records.4U@waidc.govt.nz>
Subject: Fwd: Pukekohe to Drury Transport Package NoR Submission

Kia Ora,

We have received the following customer enquiry below.

Please respond to the customer or advise if this email should be directed to an alternative department.

Ngaa mihi,
Erin Taoho
Customer Delivery Team | Contact Centre

From: deepali@incite.co.nz
Sent: Friday, November 10, 2023 12:03 PM
To: unitaryplan@aucklandcouncil.govt.nz, info@waidc.govt.nz
Cc: submissions@supportinggrowth.nz, karen.bell@stantec.com
Subject: Pukekohe to Drury Transport Package NoR Submission

Please find attached a submission on all the Pukekohe to Drury Transport package NoRs (1-8) on behalf of Chorus, Connexa, Spark, One NZ, and FortySouth (The Telecommunication companies).

Please confirm receipt of this submission.

Thank you.

Deepali Solanki
Resource Management Consultant



PO Box 3082, Auckland 1140
Phone (09) 369 1465
Mobile 021 028 35929
Web
www.incite.co.nz | Email
deepali@incite.co.nz

This e-mail and any attachment(s) contains information that is both confidential and possibly legally privileged. No reader may make use of its content unless use is approved by Incite.

Form 21

Submission on requirements for designations

To: Auckland Council
Private Bag 92300
Auckland 1142
unitaryplan@aucklandcouncil.govt.nz

Waikato District Council
Private Bag 544
Ngaruawahia
3742
info@waidc.govt.nz

Name of submitter: Aotearoa Towers Group (ATG)
Trading as FortySouth
Private Bag 92161
Auckland 1142

Chorus New Zealand Limited (Chorus)
PO Box 632
Wellington

Connexa Limited (Connexa)
167 Victoria St West
Auckland

One New Zealand (One NZ) (formally Vodafone New Zealand Ltd)
Private Bag 92161
Auckland 1142

Spark New Zealand Trading Limited (Spark)
Private Bag 92028
Auckland 1010

These parties are making a joint submission and for the purposes of this submission are referred to collectively as the **Telecommunications Submitters**.

The Proposal:

This is a submission on the following notices of requirement by Auckland Transport and Waka Kotahi NZ Transport Agency for transport projects in Pukekohe, Paerata and Drury in South Auckland:

- Pukekohe Transport Plan NoR 1: Drury West Arterial (Auckland Transport)
- Pukekohe Transport Plan NoR 2: Drury – Pukekohe Link (Waka Kotahi NZ Transport Agency)
- Pukekohe Transport Plan NoR 3: Paerata Connection (Auckland Transport)
- Pukekohe Transport Plan NoR 4: Pukekohe North-East Arterial (Auckland Transport)
- Pukekohe Transport Plan NoR 5: Pukekohe South-East Arterial (Auckland Transport)
- Pukekohe Transport Plan NoR 6: Pukekohe South-West Upgrade (Auckland Transport)
- Pukekohe Transport Plan NoR 7: Pukekohe North-West Arterial (Auckland Transport)
- Pukekohe Transport Plan NoR 8: Mill Road and Pukekohe East Road Upgrade (Waka Kotahi NZ Transport Agency) (Auckland Council and Waikato District Council)

The Telecommunications Submitters are not trade competitors for the purposes of section 308B of the Resource Management Act 1991.

The specific parts of the notice of requirement that this submission relates to are:

The conditions of the designations that relate to Network Utility Operators and the Land Use Integration Process (LIP).

The Telecommunications Submitters' submission is that:

The Telecommunications Submitters have no position on the overall Pukekohe to Drury package of transport projects but seek to ensure that existing and potential future telecommunications infrastructure in the project corridors are adequately addressed.

The Telecommunications Submitters **oppose** the proposed designations unless the matters outlined in this submission are satisfactorily addressed.

The organisations collectively deliver and manage the majority of New Zealand's fixed line/fibre and wireless phone and broadband services in New Zealand. The network utility operators in the telecommunications sector deliver critical lifeline utility services (as per Schedule 1 to the Civil Defence Emergency Management Act 2002) including infrastructure to support emergency services calls. It is also crucial for supporting social and economic wellbeing and measures to reduce travel demand. It provides opportunities for work from home/remote work solutions through fast internet connections by fibre and/or wireless means which promotes a lower carbon economy.

The equipment used to deliver this is often located in road corridors which act as infrastructure corridors as well as just transport corridors. The works enabled by the proposed designations will affect existing infrastructure that will need to be protected and/or relocated as part of the proposed works. The design and construction of the works should take into account any opportunities for new infrastructure to be installed which is preferable than trying to retrofit necessary telecommunications/ broadband infrastructure later due to disruptions and/ or incompatibility with project design.

Existing Infrastructure

A summary of existing infrastructure located in the project footprints is as follows and is outlined in more details viewable in **Appendix A**:

- FortySouth Facility: Pole located at the Belgium Road Intersection in NoR 5 (supporting One NZ network).
- FortySouth Facility: Pole located at 122 Princes St W in NoR 6 (supporting One NZ network).
- Connexa Facility: Found at Belgium Road Intersection in NoR 5 (supporting Spark network).
- Connexa Facility: 59 Ward Street in NoR 6 (Supporting 2degrees network).
- Connexa Facility: Pole on Puni Road in NoR 6 (Supporting Spark network).
- Chorus has extensive fibre and copper lines networks throughout the project area.
- Mobile operators are progressively rolling out roadside equipment and fibre routes in Auckland roads which may be within project corridors when works proceed.

Future Infrastructure Requirements

Network utility operators need to integrate necessary services into infrastructure projects such as transport projects. This is especially significant for future development with the introduction of advanced technology such as 5G infrastructure, which will be crucial to transport infrastructure. It is most efficient to coordinate any such services with the design and construction of a project, rather than trying to retrofit

them at a later date. This process does not always run smoothly. To provide a previous example, Spark had substantial issues trying to negotiate with the Public Private Partnership (PPP) operator of the Transmission Gully project in the Wellington Region to install services to provide telecommunications coverage. This process proved to be very difficult as there was no requirement to consult and work with relevant network utility operators in the designation conditions, and post completion of the project design and PPP contracting, it proved to be very challenging to try to incorporate necessary telecommunications infrastructure into the design of this project. Connexa is already planning for potentially up to three additional mobile sites along the proposed designation corridors.

Spark achieved a more satisfactory outcome through participation as a submitter in the Auckland East West Link and Warkworth to Wellsford (W2W) project designation conditions where there was a specific obligation for the Requiring Authority to consult with network utility operators as part of the detailed design phase of the project to identify opportunities to enable the development of new network utility including telecommunications infrastructure where practicable to do so¹. While the Telecommunication Submitters are not asking for the exact same outcomes of these examples, it demonstrates mutual benefits with ease of collaboration, communication and cohesive infrastructure development.

This is reflected in more recent times in two separate occasions earlier this year where Auckland Transport and Waka Kotahi agreed to amend their proposed Network Utility Management Plan (NUMP) conditions to involve network utility operators during the design phase, as well as the inclusion of Land Integration Process (LIP) conditions on Auckland Transport designations. Satisfactory conditions in this regard have been agreed with the requiring authorities in the Airport to Botany and North West Transport Projects (aside to an equivalent approach to the LIP condition for Waka Kotahi designations). However, those agreed amendments to the NUMP condition have not been carried through to the Pukekohe to Drury NoRs.

All NoRs include a NUMP condition in the general conditions (26 for Auckland Transport and 25 for Waka Kotahi), which is not the same as the previously and recently agreed upon NUMP condition wording for the other abovementioned projects. The NUMP conditions used in the Pukekohe to Drury Project NoRs do not include the updated clause “(d) *the development of the NUMP shall consider opportunities to coordinate future work programmes with other network utility operator(s) **during detailed design** where practicable.*”

¹ East West Link Condition NU2, W2W Condition 24A

Whilst there is no direct obligation on the requiring authority to accommodate such works/opportunities, it is reasonable for there to be provisions to ensure the matter is properly considered during the design phase through consultation with network utility operators as it sets appropriate expectations and ensures these opportunities are properly explored. This enables proper consideration of making provision for communications infrastructure that support the function of the roads and/or serves adjacent growth. This should be a consideration distinct from protecting or relocating existing network utilities affected by the project which has previously been the focus of conditions to manage network utilities.

Whilst the LIP condition on Auckland Transport 's proposed designation now matches changes agreed on the other projects, there is still no equipment process for the proposed Waka Kotahi designations in this project to ensure the various telecommunications network providers are properly identified and engaged at relevant project stages.

Consultation with Telecommunications Network Utility Operators

Key to the outcomes the Telecommunications Submitters are seeking is to ensure they are adequately consulted by the requiring authorities over effects on their existing infrastructure, as well as being provided the opportunity to discuss any future requirements so this can be considered in the project design.

The Assessment of Environmental Effects (AEE) for each notice sets out the relevant utility providers who have assets within and around the proposed designations and is listed in the Network Utility Effects section. However, none of the Telecommunication Submitters are listed within the affected Utility Providers despite having existing infrastructure within and around the proposed designated boundaries. Therefore, it is a concern they will not be consulted as part of the NUMP development for each stage.

Spark and One NZ operate mobile phone/wireless broadband networks that are often located on facilities located in or adjacent to roads, while Chorus operate fixed line assets in roads including fibre. In addition, Spark has sold its fixed mobile asset infrastructure (e.g. their poles) to Connexa who are also acquiring the fixed assets of 2degrees, and similarly One NZ has sold its fixed mobile assets to Aotearoa Towers Group (trading as FortySouth). Accordingly, the operating landscape for telecommunications companies and who may be affected by these projects has become quite complex. Given this complexity, an advice note to the NUMP condition for the Waka Kotahi designations is proposed to provide more clarity on which telecommunications/broadband operators may be affected and to enable an engagement process to be established as the projects advance. This is not required for the Auckland Transport conditions given the LIP condition.

Land Use Integration Process (LIP)

Auckland Transport included a satisfactory LIP condition within their NoR's which are listed below. This reflected their previous requested changes to clause (f) and (f)(iii) and agreed upon for the Airport to Botany and Northwest Projects NoRs.

However, the following NoR's lodged by Waka Kotahi did not include LIP conditions:

- Pukekohe Transport Plan: Drury – Pukekohe Link (Waka Kotahi NZ Transport)
- Pukekohe Transport Plan: Mill Road and Pukekohe East Road Upgrade (Waka Kotahi NZ Transport) (Auckland Council and Waikato District Council)

The exclusion of LIP conditions creates a potential lack of integration and dialogue between the project teams and existing infrastructure providers such as the Telecommunications Submitters. This may compromise effective collaboration, cohesiveness and proper exploration of opportunities with regard to future infrastructure requirements being integrated into these projects. The Telecommunication Submitters are seeking relief in the form of satisfactory LIP conditions (equivalent to the Auckland Transport conditions) to be included within the two Waka Kotahi NoRs, or an alternative condition of like effect in regard to addressing the issues raised by the Telecommunications Submitters, or an advice note to the NUMP condition to clearly identify the current major network providers operating fibre and mobile phone/wireless broadband networks.

The Telecommunications Submitters seeks the following decision from the Requiring Authorities:

Amend the NUMP condition for each notice of requirement, as follows:

Network Utility Management Plan (NUMP)

(a) A NUMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the NUMP is to set out a framework for protecting, relocating and working in proximity to existing network utilities. The NUMP shall include methods to:

(i) provide access for maintenance at all reasonable times, or emergency works at all times during construction activities;

(ii) protect and where necessary, relocate existing network utilities;

- (iii) manage the effects of dust and any other material potentially resulting from construction activities and able to cause material damage, beyond normal wear and tear to overhead transmission lines in the Project area; and*
- (iv) demonstrate compliance with relevant standards and Codes of Practice including, where relevant, the NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances 2001; AS/NZS 4853:2012 Electrical Hazards on Metallic Pipelines; and AS/NZS 2885 Pipelines – Gas and Liquid Petroleum.*
- (c) The NUMP shall be prepared in consultation with the relevant Network Utility Operator(s) who have existing assets that are directly affected by the Project.*
- (d) The development of the NUMP shall consider opportunities to coordinate future work programmes with other Network Utility Operator(s) **during detailed design** where practicable.*
- (e) The NUMP shall describe how any comments from the Network Utility Operator in relation to its assets have been addressed.*
- (f) Any comments received from the Network Utility Operator shall be considered when finalising the NUMP.*
- (g) Any amendments to the NUMP related to the assets of a Network Utility Operator shall be prepared in consultation with that asset owner*

Add an advice note to the NUMP condition for the Waka Kotahi designations unless a Land Integration Process (LIP) condition or similar is added in the alternative:

Advice Note:

For the purposes of this condition, relevant telecommunications network utility operators include companies operating both fixed line and wireless services. As at the date of designation these include Aotearoa Towers Group (FortySouth), Chorus New Zealand Limited, Connexa Limited, One New Zealand Limited, Spark New Zealand Trading Limited, Two Degrees Mobile Limited (and any subsequent entity for these network utility operators).

Add a LIP condition equivalent to that proposed for the Auckland Transport designations, or any alternative mechanism ensuring there is a process for the project teams for the Waka Kotahi designations to properly identify and engage with relevant telecommunication network utility operators as part of project design.

The Telecommunications Submitters do wish to be heard in support of its submission.

If others make a similar submission, the Telecommunications Submitters will consider making a joint case with them at the hearing.



**Signature of submitter
(Chris Horne, authorised agent for the Telecommunications Submitters)**

Date: 10 November 2023

Address for service of submitter:

Chris Horne

Incite

PO Box 3082

Auckland

Telephone: 0274 794 980

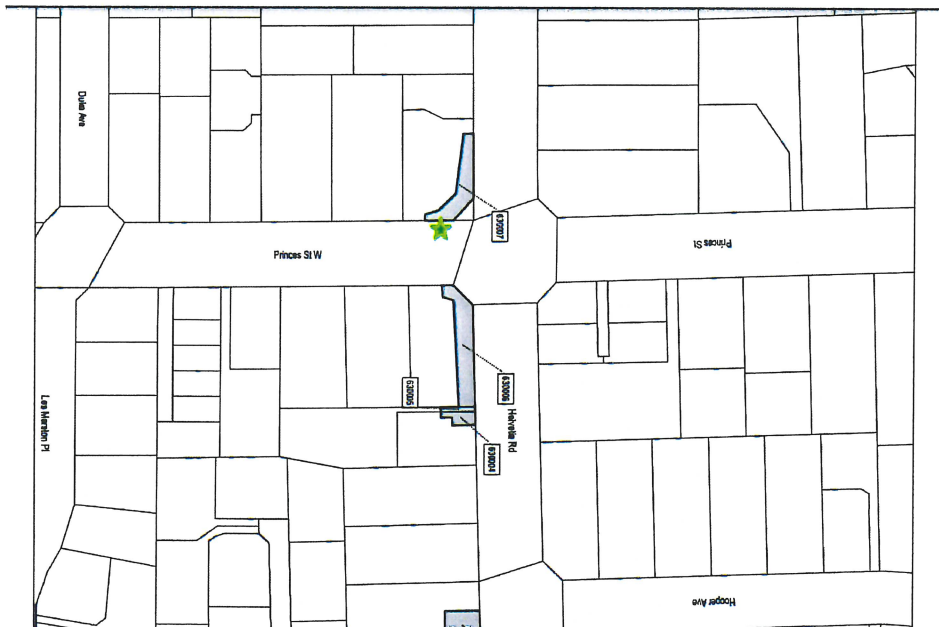
E-mail: chris@incite.co.nz

Appendix A

Impacted Telecommunication Facilities

NoR 6 - Pukekohe South-West Upgrade (Auckland Transport)

- Pole located at 122 Princes St W in NoR 6 (supporting One NZ network)



Connexa

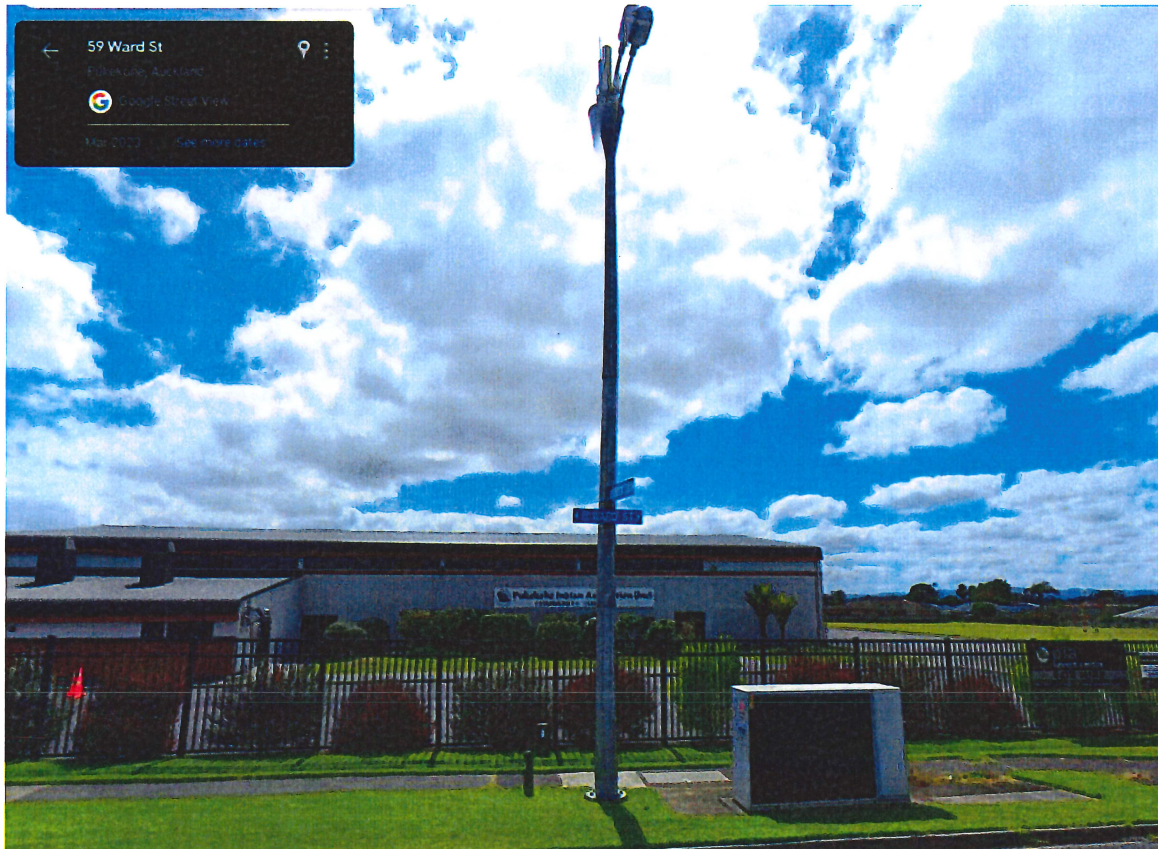
NoR 5 - Pukekohe South-East Arterial (Auckland Transport)

- Pole located at the Belgium Road Intersection in NoR 5 (supporting Spark network)



NoR 6 - Pukekohe South-West Upgrade (Auckland Transport)

- 59 Ward Street in NoR 6 (Supporting 2Degrees network)



NoR 6 - Pukekohe South-West Upgrade (Auckland Transport)

- Pole on Puni Road in NoR 6 (Supporting Spark network)



Connexa Indicative Future Site Requirements



The yellow transmission pole symbols are indicative future Connexa sites. The proposed new locations are:

- Runciman South
- Paerata
- Bombay West

From: "Submissions@Waidc.govt.nz" <Submissions@Waidc.govt.nz>
Sent: Sun, 12 Nov 2023 05:55:49 +1300
To: "alexandrawhitley@outlook.com" <alexandrawhitley@outlook.com>
Cc: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Subject: #2 Consultation Submitted
Attachments: OLS_DES0006-24_11354HABOL3.pdf

You don't often get email from submissions@waidc.govt.nz. [Learn why this is important](#)

Thank you for your submission – we will contact you again after the closing of submissions.

Please do not reply to this email as it is automatically generated

Submission Form

Submission on an application concerning Resource consent that is subject to limited notification by consent authority

Sections 95b & 96 of the Resource Management Act 1991.



Application Number: DES0006-24
Consent Sought:
Proposal: The proposed work is for the construction, operation, maintenance and improvement of a state highway and cycleway and / or shared path, and associated infrastructure on Mill Road, Bombay and Pukekohe East Road, Pukekohe. The proposed work includes:
Applicant: Waka Kotahi NZ Transport Agency
Applicant contact details: Level 5, 203 Queens Street Auckland 1010
Attention: Waka Kotahi NZ Transport Agency, submissions@supportinggrowth.nz
Submissions Close: 13-11-2023

First name: Alexandra
Last name: Whitley

Withhold my details

On behalf of:
250 Pukekohe East Road

Postal address:
28 Matipo drive Tuakau
Suburb: Tuakau
City:
Country: New Zealand
Postcode: 2121

Email:
alexandrawhitley@outlook.com

Daytime Phone:

I am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991.

I am directly affected by an effect of the subject matter of the submission that:

- adversely affects the environment, and
- does not relate to the trade competition or the effects of trade competition.

If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991

Yes Would you like to present your submission in person at a hearing?

Yes Pursuant to Section 100a of the Resource Management Act 1991 I request that you delegate your functions, powers and duties required to hear and decide to the 1 or more hearings Commissioners who are not members of the local authority.

The specific parts of the application that my submission relates to are:

- 250 Pukekohe East Road land designation

My submission is **oppose**

The reasons for my views are

We are the owners of 250 Pukekohe East Road. We are touching base in regard to the Mill Road and Pukekohe East Road Upgrade and we would like to open the lines of communication about the project and how it effects 250 Pukekohe East Road.

We are not against the plans of widening the road as it is for the best of the wider community, we do however believe there is a better way of achieving it with needing to designate less of our land. Being in the civil and earthworks industry ourselves we understand the reason for needing so much of our land is to fill to hold up the edge of the road.

Our solution would be to grant us consent to fill the gully up to your proposed road level which will cut down on your project costs and also be needing to acquire less of our land. It would be beneficial for the both os us to meet some of your planning team on site and talk through some options.

I seek the following decision from Waikato District Council: **Decline**

Give precise details, including any parts of the application you wish to have amended and the general nature of any

Reduce the area of designated land on 250 pukeohe east road.

allow consent to fill gully

conditions sought.allow re alighmnet of already granted signage consent

From: "Submissions@Waidc.govt.nz" <Submissions@Waidc.govt.nz>
Sent: Mon, 13 Nov 2023 15:28:20 +1300
To: "Peter Henderson" <Peter.Henderson@waidc.govt.nz>
Cc: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Subject: #3 Consultation Submitted
Attachments: OLS_DES0006-24_113455PH35V.pdf

You don't often get email from submissions@waidc.govt.nz. [Learn why this is important](#)

Thank you for your submission – we will contact you again after the closing of submissions.

Please do not reply to this email as it is automatically generated

Submission Form



Submission on an application concerning Resource consent that is subject to limited notification by consent authority

Sections 95b & 96 of the Resource Management Act 1991.

Application Number: DES0006-24
Consent Sought:
Proposal: The proposed work is for the construction, operation, maintenance and improvement of a state highway and cycleway and / or shared path, and associated infrastructure on Mill Road, Bombay and Pukekohe East Road, Pukekohe. The proposed work includes:
Applicant: Waka Kotahi NZ Transport Agency
Applicant contact details: Level 5, 203 Queens Street Auckland 1010
Attention: Waka Kotahi NZ Transport Agency, submissions@supportinggrowth.nz
Submissions Close: 13-11-2023

First name: Peter
Last name: Henderson

Withhold my details

Organisation:
Waikato District Council

On behalf of: Roading Team

Postal address: Private Bag 544,
Suburb: Ngaruawahia
City: Waikato
Country: New Zealand
Postcode: 3742

Email:
peter.henderson@waidc.govt.nz

Daytime Phone: 0278345410

I am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991.

I am not directly affected by an effect of the subject matter of the submission that:
a. adversely affects the environment, and
b. does not relate to the trade competition or the effects of trade competition.

If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991

I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Yes Pursuant to Section 100a of the Resource Management Act 1991 I request that you delegate your functions, powers and duties required to hear and decide to the 1 or more hearings Commissioners who are not members of the local authority.

The specific parts of the application that my submission relates to are:
Transportation upgrades that support improved safety and connectivity for Waikato District Council residents and other users of Pukekohe East Road, Mills Road and Harrisville Road.

My submission is **I support**

The reasons for my views are

The proposal, as presented in the application documentation, significantly improves safety and connectivity for Waikato District Council residents and other users of Harrisville, Mill and Pukekohe East Roads.

I seek the following decision from Waikato District Council: **Approve**

Give precise details, including any parts of the application you wish to have amended and the general nature of any conditions sought.

Support the application as presented and recommend it be approved. I would also request that priority be given to constructing the intersection RAB treatment at Mill/Harrisville/Pukekohe East Roads.

From: "Andrew Roose" <andrew.roose@nzsafetyblackwoods.co.nz>
Sent: Mon, 13 Nov 2023 16:27:28 +1300
To: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Cc: "'Roose Family'" <Roosefamily@xtra.co.nz>
Subject: #4 Submission Form SG Ref Number 551168
Attachments: Submission Form 131123.pdf

You don't often get email from andrew.roose@nzsafetyblackwoods.co.nz. [Learn why this is important](#)

Hi Submissions Team

Please confirm receipt of submission.

Thanks
Andrew Roose
(0275) 634 635

Submission form

(Form I3)

Submission on a notice of requirement that is subject to public notification by consent authority
Sections 95a, 168 & 169 of the Resource Management Act 1991

SUBMISSIONS MUST BE RECEIVED BY WAIKATO DISTRICT COUNCIL NO LATER THAN MIDNIGHT ON MONDAY, 13 NOVEMBER 2023

To: Waikato District Council

Name of submitter (full name) ANDREW TORRENS + KATHRYN ANN ROOSE

This is a submission on an application from Waka Kotahi New Zealand Agency for a new designation over Mill Road, Bombay and Pukekohe East Road, Pukekohe in the Waikato District Council

* I am am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991

* Select one

~~† I am am not # directly affected by an effect of the subject matter of the submission that~~

~~(a) adversely affects the environment; and~~

~~(b) does not relate to trade competition or the effects of trade competition~~

~~† Delete this paragraph if you are not a trade competitor~~

Select one

The specific parts of the application that my submission relates to are:

Give details (attach separate sheets if necessary):

21 Turbott Road, Pukekohe, Title NAG3D/643,
St Reference No 551168

I support ^{no}oppose am neutral to the part/s named above.

Give details:

The reasons for my views are... We did not receive the initial communication in May but only 23rd October and have not had enough time to fully consider the proposal or our options. I am not sure how my neighbours feel about this.

I seek the following decision from Waikato District Council: Approve Decline

Give precise details, including any parts of the application you wish to have amended and the general nature of any conditions sought.

* You seem to want to take a lot of land approx 4500m² including my 10 year old grapefruit trees predominantly for earthworks + a footpath, seems a hell of a lot.
* Are there details of the planting etc
~~* Also we would like~~
* Hopefully there won't be any big concrete walls like the motorway

I wish to be heard in support of my submission

Yes No

If others make a similar submission, I will consider presenting a joint case with them at the hearing

Yes No

Pursuant to section 100A of the Resource Management Act I request that you delegate your functions, powers and duties required to hear and decide the application to one or more hearings commissioners who are not members of the local authority

Yes No

If you make a request under section 100A of the Resource Management Act, you must do so no later than 5 working days after the close of submissions and you may be liable to meet or contribute to the costs of the hearings commissioner or commissioners.

Signature of submitter of person authorized to sign on behalf of the submitter

Cuthan

Date 13/11/23

A signature is not required if you make your submission by electronic means

Address 21 Turbott Road, Pukekohe Postcode 2677

Email roosefamily@xtra-co.nz Phone (0275) 634 635

Contact person's name (name and designation if applicable) Andrew Roose

This is the person and the address to which all communications from the Council about the submission will be sent

Note to Submitter

The closing date for serving submissions on the consent authority is the 20th working day after the date on which public or limited notification is given. If the application is subject to limited notification, the consent authority may adopt an earlier closing date for submissions once the consent authority receives responses from all affected persons

You must serve a copy of your submission on the applicant whose address for service is Waka Kotahi NZ Transport Agency, Level 5, 203 Queens Street Auckland 1010 or submissions@supportinggrowth.nz as soon as reasonably practicable after you have served your submission to Waikato District Council

If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991

Written Submission

Postal Address Waikato District Council, Private Bag 544, Ngaruawahia 3742
Telephone 0800 492 452

Email Submission

Consent.submissions@waidc.govt.nz

The information you have provided on this form is required so that your submission can be processed under the RMA, and your name and address will be publicly available. The information will be stored on a public register and held by the Council, and may also be made available to the public on the Council's website. In addition, any on-going communications between you and Council will be held at Council's offices and may also be accessed upon request by a third party. Access to this information is administered in accordance with the Local Government Official Information and Meetings Act 1987 and the Privacy Act 1993. If you have any concerns about this, please discuss with a Council Planner prior to lodging your submission. If you would like to request access to, or correction of your details, please contact the Council.

From: "David" <lawrie@ps.gen.nz>
Sent: Mon, 13 Nov 2023 19:38:26 +1300
To: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Subject: #5 DES0006/24
Attachments: WDC submission Mill Road.pdf

You don't often get email from lawrie@ps.gen.nz. [Learn why this is important](#)

Please find attached our submission to the designation of the upgrading of Mill Road, Pukekohe-Bombay.

Thanks

David and Lynne Lawrie
Pukekohe East
New Zealand

Submission form

(Form I3)

Submission on a notice of requirement that is subject to public notification by consent authority
Sections 95a, 168 & 169 of the Resource Management Act 1991

SUBMISSIONS MUST BE RECEIVED BY WAIKATO DISTRICT COUNCIL NO LATER THAN MIDNIGHT ON MONDAY, 13 NOVEMBER 2023

To: Waikato District Council

Name of submitter (full name) DAVID ALEXANDER + LYNDIE LOBRINE LAWRIE

This is a submission on an application from Waka Kotahi New Zealand Agency for a new designation over Mill Road, Bombay and Pukekohe East Road, Pukekohe in the Waikato District Council

* I am am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991
 * Select one

† I am am not # directly affected by an effect of the subject matter of the submission that
 (a) adversely affects the environment; and
 (b) ~~does not relate to trade competition or the effects of trade competition~~

† Delete this paragraph if you are not a trade competitor
 # Select one

The specific parts of the application that my submission relates to are:
 Give details (attach separate sheets if necessary):

- THE INTENTION TO INSTALL A FOOTPATH AND TWO (2) CYCLE LANES ON THE SOUTH SIDE OF THE WIDENED ROAD
 - FOR THE VOLUME OF FOOT TRAFFIC + CYCLE TRAFFIC THIS IS TOTALLY EXCESSIVE WHEN A SINGLE SHARED PATH COULD ACCOMMODATE ALL THE MOVEMENTS. (SIMILAR TO THE TAKANINI PATH)

I support oppose am neutral to the part/s named above.
 Give details:

The reasons for my views are... THAT HAVING THREE (3) SEPARATE PATHS REQUIRES EXTRA WIDTH THAT AFFECTS ALL PROPERTY OWNERS ON THE SOUTH SIDE OF THE DESIGNATED CORRIDOR.

I seek the following decision from Waikato District Council: Approve Decline

Give precise details, including any parts of the application you wish to have amended and the general nature of any conditions sought.

..... THE DESIGN NEEDS TO BE MODIFIED TO
..... REDUCE THE TOTAL WIDTH OF THE DESIGNATION

Number of additional sheets attached


I wish to be heard in support of my submission Yes No

If others make a similar submission, I will consider presenting a joint case with them at the hearing Yes No

Pursuant to section 100A of the Resource Management Act I request that you delegate your functions, powers and duties required to hear and decide the application to one or more hearings commissioners who are not members of the local authority Yes No

If you make a request under section 100A of the Resource Management Act, you must do so no later than 5 working days after the close of submissions and you may be liable to meet or contribute to the costs of the hearings commissioner or commissioners.

Signature of submitter or person authorized to sign on behalf of the submitter

 Date 13/11/23
A signature is not required if you make your submission by electronic means

Address 52B MILL ROAD, RD2, POKEKOHIE Postcode 2677

Email lawrie@ps.gen.nz Phone 021 656369

Contact person's name (name and designation if applicable) David Lawrie
This is the person and the address to which all communications from the Council about the submission will be sent

Note to Submitter

The closing date for serving submissions on the consent authority is the 20th working day after the date on which public or limited notification is given. If the application is subject to limited notification, the consent authority may adopt an earlier closing date for submissions once the consent authority receives responses from all affected persons

You must serve a copy of your submission on the applicant whose address for service is Waka Kotahi NZ Transport Agency, Level 5, 203 Queens Street Auckland 1010 or submissions@supportinggrowth.nz as soon as reasonably practicable after you have served your submission to Waikato District Council

If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991

Written Submission

Postal Address Waikato District Council, Private Bag 544, Ngaruawahia 3742
Telephone 0800 492 452

Email Submission

Consent.submissions@waidc.govt.nz

The information you have provided on this form is required so that your submission can be processed under the RMA, and your name and address will be publicly available. The information will be stored on a public register and held by the Council, and may also be made available to the public on the Council's website. In addition, any on-going communications between you and Council will be held at Council's offices and may also be accessed upon request by a third party. Access to this information is administered in accordance with the Local Government Official Information and Meetings Act 1987 and the Privacy Act 1993. If you have any concerns about this, please discuss with a Council Planner prior to lodging your submission. If you would like to request access to, or correction of your details, please contact the Council.

From: "David Neumann" <davidcneumann@gmail.com>
Sent: Mon, 13 Nov 2023 20:18:02 +1300
To: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Cc: "submissions@supportinggrowth.nz" <submissions@supportinggrowth.nz>
Subject: #6 DES0006/24 Submission
Attachments: CCF_000274.pdf

You don't often get email from davidcneumann@gmail.com. [Learn why this is important](#)

Hi there,

Please see attached my submission.
Any problems please let me know.

Thanks David Neumann
0211803081

Submission form

(Form 13)

Submission on a notice of requirement that is subject to public notification by consent authority
Sections 95a, 168 & 169 of the Resource Management Act 1991

SUBMISSIONS MUST BE RECEIVED BY WAIKATO DISTRICT COUNCIL NO LATER THAN MIDNIGHT ON MONDAY, 13 NOVEMBER 2023

To: Waikato District Council

Name of submitter (full name) *David Christopher Neumann*

This is a submission on an application from Waka Kotahi New Zealand Agency for a new designation over Mill Road, Bombay and Pukekohe East Road, Pukekohe in the Waikato District Council

* I am am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991

* Select one

† I am ~~am not~~ # directly affected by an effect of the subject matter of the submission that

- (a) adversely affects the environment; and
- (b) ~~does not relate to trade competition or the effects of trade competition~~

† Delete this paragraph if you are not a trade competitor

Select one

The specific parts of the application that my submission relates to are:

Give details (attach separate sheets if necessary):

No 8 - Mill Rd and Pukekohe East Rd, Upgrade
Property - 248 Pukekohe East Rd

I support oppose am neutral to the part/s named above.

Give details:

The reasons for my views are..... *Safety, security, privacy, and noise*
are adversely affected. The site coverage would
also be affected by removing the front area of
the property.

I seek the following decision from Waikato District Council:

Approve

Decline

Give precise details, including any parts of the application you wish to have amended and the general nature of any conditions sought.

.....
.....
.....
.....
.....

Number of additional sheets attached

I wish to be heard in support of my submission

Yes

No

If others make a similar submission, I will consider presenting a joint case with them at the hearing

Yes

No

Pursuant to section 100A of the Resource Management Act I request that you delegate your functions, powers and duties required to hear and decide the application to one or more hearings commissioners who are not members of the local authority

Yes

No

If you make a request under section 100A of the Resource Management Act, you must do so no later than 5 working days after the close of submissions and you may be liable to meet or contribute to the costs of the hearings commissioner or commissioners.

Signature of submitter of person authorized to sign on behalf of the submitter

Date

12/11/23

A signature is not required if you make your submission by electronic means

Address

268 Mtie Rd, Whakapara

Postcode

0182

Email

dauidneymann@gmail.com

Phone

021180501

Contact person's name (name and designation if applicable)

This is the person and the address to which all communications from the Council about the submission will be sent

Note to Submitter

The closing date for serving submissions on the consent authority is the 20th working day after the date on which public or limited notification is given. If the application is subject to limited notification, the consent authority may adopt an earlier closing date for submissions once the consent authority receives responses from all affected persons

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If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991

Written Submission

Postal Address Waikato District Council, Private Bag 544, Ngaruawahia 3742

Telephone 0800 492 452

Email Submission

Consent.submissions@waidc.govt.nz

The information you have provided on this form is required so that your submission can be processed under the RMA, and your name and address will be publicly available. The information will be stored on a public register and held by the Council, and may also be made available to the public on the Council's website. In addition, any on-going communications between you and Council will be held at Council's offices and may also be accessed upon request by a third party. Access to this information is administered in accordance with the Local Government Official Information and Meetings Act 1987 and the Privacy Act 1993. If you have any concerns about this, please discuss with a Council Planner prior to lodging your submission. If you would like to request access to, or correction of your details, please contact the Council.

From: "Ashlee Crane" <ashleecrane@hotmail.com>
Sent: Mon, 13 Nov 2023 20:20:07 +1300
To: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Cc: "submissions@supportinggrowth.nz" <submissions@supportinggrowth.nz>
Subject: #7 DES0006/24 Submission
Attachments: CCF_000272.pdf

You don't often get email from ashleecrane@hotmail.com. [Learn why this is important](#)

Hi there,

Please see attached my submission.
Any problems please let me know.

Thanks Ashlee Crane
02102535203

Submission form

(Form I3)

Submission on a notice of requirement that is subject to public notification by consent authority
Sections 95a, 168 & 169 of the Resource Management Act 1991

SUBMISSIONS MUST BE RECEIVED BY WAIKATO DISTRICT COUNCIL NO LATER THAN MIDNIGHT ON MONDAY, 13 NOVEMBER 2023

To: Waikato District Council

Name of submitter (full name) *Ashlee Helen Crane*

This is a submission on an application from Waka Kotahi New Zealand Agency for a new designation over Mill Road, Bombay and Pukekohe East Road, Pukekohe in the Waikato District Council

*I am am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991

* Select one

† I am am not # directly affected by an effect of the subject matter of the submission that

- (a) adversely affects the environment; and
- (b) ~~does not relate to trade competition or the effects of trade competition~~

† Delete this paragraph if you are not a trade competitor

Select one

The specific parts of the application that my submission relates to are:

Give details (attach separate sheets if necessary):

No R8 - Mill Road and Pukekohe East Rd.
Property 248 Pukekohe East Rd, Pukekohe

.....

.....

.....

.....

I support oppose am neutral to the part/s named above.

Give details:

The reasons for my views are..... *Privacy is directly affected due to the proposed new designation. The front bedroom and main living room is in close proximity to the public footpath, cycleway and road. The current roadside area has been used to safely turn around when entering and exiting the property via vehicle. The security of the property is adversely affected due to the public having opportunities when passing by.*

I seek the following decision from Waikato District Council:

Approve

Decline

Give precise details, including any parts of the application you wish to have amended and the general nature of any conditions sought.

.....
.....
.....
.....
.....

Number of additional sheets attached

..... 0

I wish to be heard in support of my submission

Yes

No

If others make a similar submission, I will consider presenting a joint case with them at the hearing

Yes

No

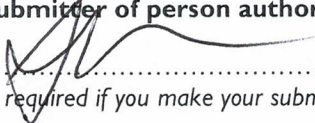
Pursuant to section 100A of the Resource Management Act I request that you delegate your functions, powers and duties required to hear and decide the application to one or more hearings commissioners who are not members of the local authority

Yes

No

If you make a request under section 100A of the Resource Management Act, you must do so no later than 5 working days after the close of submissions and you may be liable to meet or contribute to the costs of the hearings commissioner or commissioners.

Signature of submitter or person authorized to sign on behalf of the submitter



Date

12/11/2023

A signature is not required if you make your submission by electronic means

Address

268 Mine Rd, Whakapara

Postcode

0182

Email

ashlee.crane@hotmail.com

Phone

02102535203

Contact person's name (name and designation if applicable)

This is the person and the address to which all communications from the Council about the submission will be sent

Note to Submitter

The closing date for serving submissions on the consent authority is the 20th working day after the date on which public or limited notification is given. If the application is subject to limited notification, the consent authority may adopt an earlier closing date for submissions once the consent authority receives responses from all affected persons

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If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991

Written Submission

Postal Address Waikato District Council, Private Bag 544, Ngaruawahia 3742

Telephone 0800 492 452

Email Submission

Consent.submissions@waidc.govt.nz

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From: "Submissions@Waidc.govt.nz" <Submissions@Waidc.govt.nz>
Sent: Mon, 13 Nov 2023 23:27:27 +1300
To: "pam.unkovich@firstgas.co.nz" <pam.unkovich@firstgas.co.nz>
Cc: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Subject: #8 Consultation Submitted
Attachments: OLS_DES0006-24_11365A2BVBM.pdf

You don't often get email from submissions@waidc.govt.nz. [Learn why this is important](#)

Thank you for your submission – we will contact you again after the closing of submissions.

Please do not reply to this email as it is automatically generated

Submission Form

Submission on an application concerning Resource consent that is subject to limited notification by consent authority

Sections 95b & 96 of the Resource Management Act 1991.



Application Number: DES0006-24
Consent Sought:
Proposal: The proposed work is for the construction, operation, maintenance and improvement of a state highway and cycleway and / or shared path, and associated infrastructure on Mill Road, Bombay and Pukekohe East Road, Pukekohe. The proposed work includes:
Applicant: Waka Kotahi NZ Transport Agency
Applicant contact details: Level 5, 203 Queens Street Auckland 1010
Attention: Waka Kotahi NZ Transport Agency, submissions@supportinggrowth.nz
Submissions Close: 13-11-2023

First name: Pamela
Last name: Unkovich

Withhold my details

Organisation: Firstgas Ltd
On behalf of: Firstgas Ltd
Postal address: Private Bag 2020
Suburb:
City: New Plymouth
Country: New Zealand
Postcode: 4340
Email: pam.unkovich@firstgas.co.nz
Daytime Phone: 0272370944

I am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991.

I am not directly affected by an effect of the subject matter of the submission that:
a. adversely affects the environment, and
b. does not relate to the trade competition or the effects of trade competition.

If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991



Yes Would you like to present your submission in person at a hearing?

Yes Pursuant to Section 100a of the Resource Management Act 1991 I request that you delegate your functions, powers and duties required to hear and decide to the 1 or more hearings Commissioners who are not members of the local authority.

The specific parts of the application that my submission relates to are:
Location of project in respect of Firstgas transmission pipelines. Please see attached submission.

My submission is **am neutral to the part/s named above.**
The reasons for my views arePlease see attached submission.

I seek the following decision from Waikato District Council:
Give precise details, including any parts of the application you wish to have amended and the general nature of any conditions sought.Neutral position, seek some minor amendments to plans and proposed conditions.

Name
Firstgas Submission NoR 8 Waikato DC.pdf 
Appendix 1 - NoR 8.pdf 

13 November 2023

Waikato District Council
C/o Karen Bell
Via email: karen.bell@stantec.com

Tēnā Koe

Notice of Requirement (NoR) – Pukekohe: Mill Road & Pukekohe East Road Upgrade (Waka Kotahi NZTA) – NoR 8

Thank you for the opportunity to make a submission on the Notice of Requirement for an upgrade of Mill Road (Bombay) in east for additional vehicle lanes and a shared path and an upgrade of Pukekohe East Road, Pukekohe in the west for a shared path.

1. Background

Firstgas owns and operates approximately 2500km of high-pressure natural gas transmission pipelines throughout the North Island and is also a Requiring Authority under the Resource Management Act 1991 ('RMA'). Firstgas' ownership includes the ancillary above and below ground infrastructure required to operate the gas network. Collectively this system is known as the Gas Transmission Network.

In addition to the Gas Transmission Network, Firstgas also operates more than 4,800kms of gas distribution networks across the North Island,

Within the NoR area for the additional vehicle lanes and shared paths, Firstgas owns and operates the 200 and the 400B transmission lines, the main transmissions lines supply Auckland and Northland. These pipelines are critical for consistent provision of energy to numerous businesses, industries, community services such as hospitals, and residences.

Firstgas' assets in the area are illustrated in **Figure 1-1** below and included as Appendix 1 to this submission.



Figure 1-1: Firstgas Ltd pipelines and above-ground assets in the area subject to the NoR

Firstgas' gas network is regionally and nationally significant infrastructure in that it delivers significant benefits to people and communities social and economic well-being, as well as providing for their health and safety.

Firstgas is required to ensure the protection and integrity of the pipeline is maintained to ensure the safety of the public, property and the environment. Pipelines are required to meet the safety and operational requirements of the Health and Safety in Employment (Pipelines) Regulations 1999 and the operating code Standard AS2885 Pipelines – Gas and Liquid Petroleum (AS2885).

Third party interference is one of the main risks to the safety and integrity of the underground pipelines. Activities which may affect the Gas Transmission Network need to take into account the location and protection requirements of the pipelines and other infrastructure. Activities in the vicinity of the Gas Transmission Network need to be carried out in a way which does not compromise the safe and efficient operation of the network, including the ability to legally and physically access the network with the necessary machinery to undertake works.

Additionally, changes to pipelines, particularly the main transmission lines, requires careful management and planning due to the safety, economic and environmental considerations required for planning and execution of any realignment, upgrading or recoating.

We note that the NoR proposes construction works over the existing pipelines, including potential additional lanes and/or shared pathway. We raise concerns that the lodged plans do not provide clear indication of pipeline locations on the southern side of Mill Road within either Sheet 1 or Sheet 2 of the *General Arrangement Layout Plan*, as lodged with Waikato District Council, see Figures 1-2 and 1-3 below.

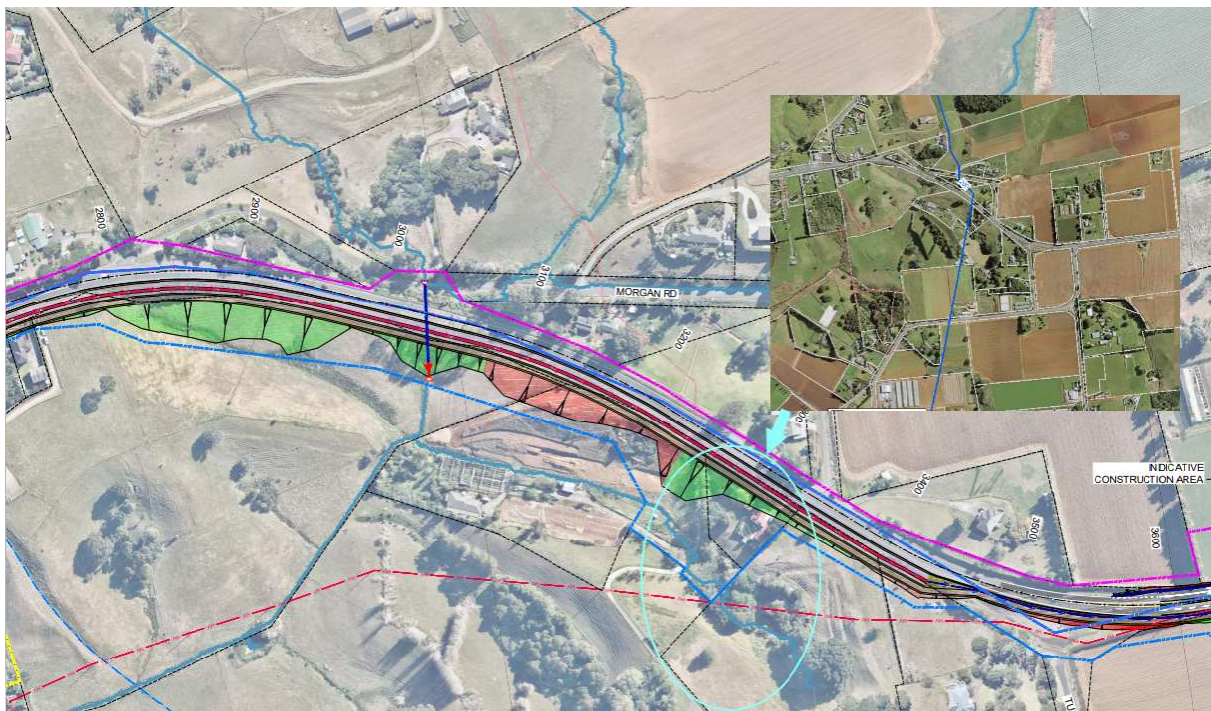


Figure 1-2: Snip from Sheet 1 of 2 *General Arrangement Layout Plan* with insert showing location of 200 pipeline not shown on plan.

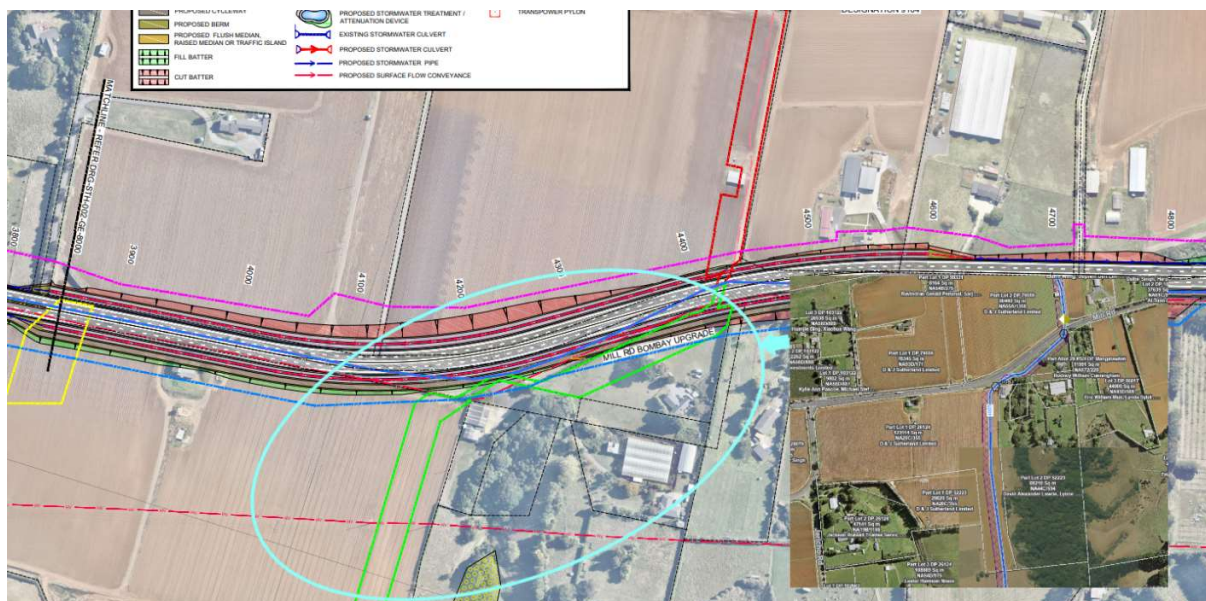


Figure 1-3: Snip from Sheet 2 of 2 *General Arrangement Layout Plan* with insert showing location of 200 pipeline not shown on plan although the Designation area is shown.

We note that the Assessment of Environmental Effects (AEE) lodged with the application acknowledges that the project intersects with the First Gas designation 9104 – Pukekohe to East Tamaki Gas Pipeline and lists First Gas as a stakeholder in respect of ongoing Infrastructure Interface meetings. We note that the AEE is silent on the intersection of the project with the 200-transmission pipeline. Our concerns on the lack of visibility of the transmission pipelines on plans, even at this early planning stage, poses risks in advancement of engineering designs without due consideration of the safety requirements of the pipelines. This is demonstrated by the indicative placement of fill batter on the pipeline, which poses safety risks for safe pipeline operations.

Condition 5 of the conditions proposed for the NoR relates to Network Utility Operators (Section 176 Approval), stating –

(a) Prior to the start of Construction Works, Network Utility Operators with existing infrastructure located within the designation will not require written consent under section 176 of the RMA for the following activities:

- (i) operation, maintenance and urgent repair works;*
- (ii) minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations;*
- (iii) minor works such as new service connections; and*
- (iv) the upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility.*

(b) To the extent that a record of written approval is required for the activities listed above, this condition shall constitute written approval.

It is unclear if (b) provides for the condition to act as written approval post-construction, or if Condition 5, in its entirety, is limited to only the period prior to start of Construction Works.

Condition 10 of the conditions proposed for the NoR, requires the preparation of an Urban and Landscape Design Management Plan (ULDMP). While there is invitation for ‘key stakeholders identified through Condition 8(b)(i) to participate in the development at least six (6) months prior to the start of detailed design for a Stage of Work, we consider that specific reference to a requirement to consult closely with Network Utility Operators as part of the ULDMP process, is necessary to

emphasis the safety requirement for planting and landscaping around gas transmission pipelines.
planting.

Realignment of pipelines and ancillary structures/components, is a major undertaking for the organisation, requiring a long lead-in and planning timeframe. Firstgas Ltd appreciates the engagement with Waka Kotahi NZTA through the current processes but has concerns that the project has the potential to impact negatively upon a safe and continuous gas supply to Auckland and Northland consumers through designs that may not consider the pipelines from the initial concept.

2. Relief Sought

Firstgas Ltd seek that Sheets 1 and 2 of the lodged plan, *General Arrangement Layout Plan* show the gas pipelines along the entire locale where the project intersects with them.

Firstgas Ltd seek that Condition 5 (b) specifically constitutes written approval for the works listed in (a) (i) – (iv) post-construction.

Firstgas Ltd seek that Condition 10 includes specific requirement for consultation with Network Utility Operators in the design and preparation, and any subsequent establishment and/or maintenance works associated with the ULDMP.

2. Summary

Firstgas Ltd takes a neutral stance in respect of the merits, or otherwise, of the NoR, with our submission foci seeking that the pipeline safety and ongoing operation and provision surety of supply for consumers be foremost in the project design and construction.

Please feel free to contact me should you wish to discuss this submission further. Firstgas Ltd would welcome an opportunity to speak further to this submission, should this be made available.

Yours faithfully



Pamela (Pam) Unkovich
Senior Land and Planning Advisor
Mob 027 237 0944

Appendix 1: Aerial of First Gas Transmission Pipelines in NoR 8 area

From: "Eric Muir" <ewm37s@gmail.com>
Sent: Mon, 13 Nov 2023 23:44:20 +1300
To: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Subject: #9 Submission Form
Attachments: Mill Road 269.jpg, Mill Road 270.jpg

You don't often get email from ewm37s@gmail.com. [Learn why this is important](#)

Please find attached submission form for #DES0006/24



For internal use only

ECM Application # DES0006/24
ECM
SUBMISSION #.....
CUSTOMER #

Submission form

(Form I3)

Submission on a notice of requirement that is subject to public notification by consent authority
Sections 95a, 168 & 169 of the Resource Management Act 1991

SUBMISSIONS MUST BE RECEIVED BY WAIKATO DISTRICT COUNCIL NO LATER THAN MIDNIGHT ON MONDAY, 13 NOVEMBER 2023

To: Waikato District Council

Name of submitter (full name) Eric Muir

This is a submission on an application from Waka Kotahi New Zealand Agency for a new designation over Mill Road, Bombay and Pukekohe East Road, Pukekohe in the Waikato District Council

*I am am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991

* Select one

† I am am not # directly affected by an effect of the subject matter of the submission that

(a) adversely affects the environment; and

(b) does not relate to trade competition or the effects of trade competition

† Delete this paragraph if you are not a trade competitor

Select one

The specific parts of the application that my submission relates to are:

Give details (attach separate sheets if necessary):

MILL ROAD BOMBAY

I support oppose am neutral to the part/s named above.

Give details:

The reasons for my views are.....
THE WALKING AND CYCLING FACILITIES NEED TO BE AMALGAMATED AND PLACED ON THE NORTH SIDE.

I seek the following decision from Waikato District Council: Approve Decline

Give precise details, including any parts of the application you wish to have amended and the general nature of any conditions sought.

.....
.....
.....
.....
.....

Number of additional sheets attached

I wish to be heard in support of my submission Yes No

If others make a similar submission, I will consider presenting a joint case with them at the hearing Yes No

Pursuant to section 100A of the Resource Management Act I request that you delegate your functions, powers and duties required to hear and decide the application to one or more hearings commissioners who are not members of the local authority Yes No

If you make a request under section 100A of the Resource Management Act, you must do so no later than 5 working days after the close of submissions and you may be liable to meet or contribute to the costs of the hearings commissioner or commissioners.

Signature of submitter of person authorized to sign on behalf of the submitter

..... *EW M... 37* Date *12-11-2023*

A signature is not required if you make your submission by electronic means

Address *86 MILL ROAD* Postcode *2677*

Email *ewm37s@gmail.com* Phone *021 327 3359*

Contact person's name (name and designation if applicable) *GMC*

This is the person and the address to which all communications from the Council about the submission will be sent

Note to Submitter

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You must serve a copy of your submission on the applicant whose address for service is Waka Kotahi NZ Transport Agency, Level 5, 203 Queens Street Auckland 1010 or submissions@supportinggrowth.nz as soon as reasonably practicable after you have served your submission to Waikato District Council

If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991

Written Submission Postal Address Waikato District Council, Private Bag 544, Ngaruawahia 3742 Telephone 0800 492 452	Email Submission Consent.submissions@waikato.govt.nz	The information you have provided on this form is required so that your submission can be processed under the RMA, and your name and address will be publicly available. The information will be stored on a public register and held by the Council, and may also be made available to the public on the Council's website. In addition, any on-going communications between you and Council will be held at Council's offices and may also be accessed upon request by a third party. Access to this information is administered in accordance with the Local Government Official Information and Meetings Act 1987 and the Privacy Act 1993. If you have any concerns about this, please discuss with a Council Planner prior to lodging your submission. If you would like to request access to, or correction of your details, please contact the Council.
---	---	---

From: "Lynda" <lynda.nz@gmail.com>
Sent: Mon, 13 Nov 2023 23:51:34 +1300
To: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Subject: #10 Submission
Attachments: 86 Mill Road submission p2.jpg, 86 Mill Road submission p1.jpg

You don't often get email from lynda.nz@gmail.com. [Learn why this is important](#)

Please find attached submission for ECM Application # DES0006/24

I seek the following decision from Waikato District Council: Approve Decline

Give precise details, including any parts of the application you wish to have amended and the general nature of any conditions sought.

.....
.....
.....
.....

Number of additional sheets attached

0

I wish to be heard in support of my submission

Yes No

If others make a similar submission, I will consider presenting a joint case with them at the hearing

Yes No

Pursuant to section 100A of the Resource Management Act I request that you delegate your functions, powers and duties required to hear and decide the application to one or more hearings commissioners who are not members of the local authority

Yes No

If you make a request under section 100A of the Resource Management Act, you must do so no later than 5 working days after the close of submissions and you may be liable to meet or contribute to the costs of the hearings commissioner or commissioners.

Signature of submitter of person authorized to sign on behalf of the submitter

Date 13.11.2023

A signature is not required if you make your submission by electronic means

Address 86 Mill Road, RD2, Pukekohe Postcode 2677

Email lynda.nz@gmail.com Phone 021 327 355

Contact person's name (name and designation if applicable) Lynda Muir

This is the person and the address to which all communications from the Council about the submission will be sent

Note to Submitter

The closing date for serving submissions on the consent authority is the 20th working day after the date on which public or limited notification is given. If the application is subject to limited notification, the consent authority may adopt an earlier closing date for submissions once the consent authority receives responses from all affected persons

You must serve a copy of your submission on the applicant whose address for service is Waka Kotahi NZ Transport Agency, Level 5, 203 Queens Street Auckland 1010 or submissions@supportinggrowth.nz as soon as reasonably practicable after you have served your submission to Waikato District Council

If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991

Written Submission

Postal Address Waikato District Council, Private Bag 544, Ngaruawahia 3742

Telephone 0800 492 452

Email Submission

Consent.submissions@waic.govt.nz

The information you have provided on this form is required so that your submission can be processed under the RMA, and your name and address will be publicly available. The information will be stored on a public register and held by the Council, and may also be made available to the public on the Council's website. In addition, any on-going communications between you and Council will be held at Council's offices and may also be accessed upon request by a third party. Access to this information is administered in accordance with the Local Government Official Information and Meetings Act 1987 and the Privacy Act 1993. If you have any concerns about this, please discuss with a Council Planner prior to lodging your submission. If you would like to request access to, or correction of your details, please contact the Council.

Page 2.



For internal use only

ECM Application # DES0006/24

ECM

SUBMISSION #.....

CUSTOMER #

Submission form

(Form I3)

Submission on a notice of requirement that is subject to public notification by consent authority
Sections 95a, 168 & 169 of the Resource Management Act 1991

SUBMISSIONS MUST BE RECEIVED BY WAIKATO DISTRICT COUNCIL NO LATER THAN MIDNIGHT ON MONDAY, 13 NOVEMBER 2023

To: Waikato District Council

Name of submitter (full name) Lynda Muir

This is a submission on an application from Waka Kotahi New Zealand Agency for a new designation over Mill Road, Bombay and Pukekohe East Road, Pukekohe in the Waikato District Council

*I am am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991

* Select one

† I am am not # directly affected by an effect of the subject matter of the submission that

- (a) adversely affects the environment; and
- (b) does not relate to trade competition or the effects of trade competition

†Delete this paragraph if you are not a trade competitor

Select one

The specific parts of the application that my submission relates to are:

Give details (attach separate sheets if necessary):

Mill Road, Bombay

I support oppose am neutral to the part/s named above.

Give details:

The reasons for my views are.....

It would be more appropriate to locate the cycle & foot paths on the north side of the upgraded roadway.

From: "Submissions@Waidc.govt.nz" <Submissions@Waidc.govt.nz>
Sent: Tue, 14 Nov 2023 09:18:54 +1300
To: "amorris@heritage.org.nz" <amorris@heritage.org.nz>
Cc: "Consent Submissions" <consent.submissions@waidc.govt.nz>
Subject: #11 - LATE Consultation Submitted
Attachments: OLS_DES0006-24_11342BRG1UL.pdf

Thank you for your submission – we will contact you again after the closing of submissions.

Please do not reply to this email as it is automatically generated

Submission Form



Submission on an application concerning Resource consent that is subject to limited notification by consent authority

Sections 95b & 96 of the Resource Management Act 1991.

Application Number: DES0006-24
Consent Sought:
Proposal: The proposed work is for the construction, operation, maintenance and improvement of a state highway and cycleway and / or shared path, and associated infrastructure on Mill Road, Bombay and Pukekohe East Road, Pukekohe. The proposed work includes:
Applicant: Waka Kotahi NZ Transport Agency
Applicant contact details: Level 5, 203 Queens Street Auckland 1010
Attention: Waka Kotahi NZ Transport Agency, submissions@supportinggrowth.nz
Submissions Close: 13-11-2023

First name: Alice
Last name: Morris

Withhold my details

Organisation:
Heritage New Zealand Pouhere Taonga
Postal address: PO Box 105-291
Suburb: Auckland 1143
City: Auckland
Country: New Zealand
Postcode: 1143
Email: amorris@heritage.org.nz
Daytime Phone: 0276840833

I am not a trade competitor for the purpose of Section 308B of the Resource Management Act 1991.

I am not directly affected by an effect of the subject matter of the submission that:
a. adversely affects the environment, and
b. does not relate to the trade competition or the effects of trade competition.

If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991

Yes Would you like to present your submission in person at a hearing?

Yes Pursuant to Section 100a of the Resource Management Act 1991 I request that you delegate your functions, powers and duties required to hear and decide to the 1 or more hearings Commissioners who are not members of the local authority.

The specific parts of the application that my submission relates to are:
please see attached

My submission is **I support**
The reasons for my views are please see attached

I seek the following decision from Waikato District Council: **Approve**
Give precise details, including any parts of the application you wish to have amended and the general nature of any conditions sought. Please see attached

Name
Pukekohe (WD) NOR 8 - HNZPT Submission - 13 Nov 2023.pdf



13 November 2023

File ref: Pukekohe NoR 8 (WD)

Waikato District Council
Online Submission Form

Dear Sir/Madam

SUBMISSION ON THE NOTICE OF REQUIREMENT FOR THE PUKEKOHE TRANSPORT NETWORK - NOR 8 (WD) - MILL ROAD AND PUKEKOHE EAST ROAD UPGRADE (DES0006/24), BY THE REQUIRING AUTHORITY: WAKA KOTAHI NZ TRANSPORT AGENCY

To: Waikato District Council

Name of submitter: Heritage New Zealand Pouhere Taonga

1. Heritage New Zealand Pouhere Taonga (HNZPT) is an autonomous Crown Entity with statutory responsibility under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) for the identification, protection, preservation, and conservation of New Zealand's historical and cultural heritage. Heritage New Zealand is New Zealand's lead agency for heritage protection.
2. HNZPT could not gain an advantage in trade competition through this submission.
3. The focus for HNZPT is for the identification, protection, preservation, and conservation of historic heritage (HNZPTA) and advocate that historic heritage is fully considered in accordance with section 6(f) of the Resource Management Act 1991 (RMA).
4. The requirement for an Archaeological Authority to be obtained in accordance with the HNZPTA does not mitigate the effects of the NoR identified under the RMA. It is a separate statutory obligation before any physical works can be undertaken that may affect an archaeological site as defined under the HNZPTA. While obtaining an Archaeological Authority does not mitigate the effects on wider historic heritage values by the NoRs, it does ensure pre-1900 archaeological values associated with area of project works including unrecorded sites are fully assessed and formally documented through appropriate archaeological monitoring, investigation, and reporting. The Act does not however apply to buildings or structures that are post 1900 (unless they are declared under the HNZPTA) or to certain activities that may affect a pre-1900 building unless the building (or a pre-1900 component of) is to be demolished.
5. NoR 8 – Mill Road and Pukekohe East Road Upgrade, designates land within both Auckland and Waikato along Mill Road. HNZPT supports the purpose of planning for a well-functioning urban environment through the protection of integrated transport networks to support the expected future growth needs.



The specific parts of the Notice of Requirement that Heritage New Zealand’s submission relates to are:

6. HNZPT’s focus is to ensure the protection of historic heritage, and mitigation to manage any adverse effects resulting from the physical construction of the Network through the Outline Plan of Works process in the future.
7. HNZPT has reviewed the September 2023 ‘Pukekohe Transport Network Assessment of Effects on Historic Heritage’ prepared for the suite of NoRs for the Pukekohe Transport Network. In particular, noting the reference to the recorded archaeological site known as the Bombay Flour Mill/Pilgrims Mill (NZAA R12/1208).¹, and the recommendations within this report for the preparation of a Historic Heritage Management Plan (‘HHMP’) before construction of NoR 8 commences.
8. HNZPT has also reviewed Te Tupa Ngatahi’s recommended wording of draft Condition 21 HHMP, in particular the reference to obtaining an Archaeological Authority under the HNZPTA in point 21(b)(iii), and the use of the term ‘unexpected’ in point (b)(IX)C.

Heritage New Zealand Pouhere Taonga supports the Notice of Requirement (NoR 8).

The reasons for Heritage New Zealand’s position are as follows:

9. The consideration, management, and mitigation of effects from the purpose of the designation on the historic heritage values of the place are required to ensure effects are appropriately mitigated.
10. The recommendations set out in September 2023 ‘Pukekohe Transport Network Assessment of Effects on Historic Heritage’ and the suite of conditions set out in the ‘Waka Kotahi Condition Set – Mill Road and Pukekohe East Road Upgrade’ are appropriate.
11. HNZPT is supportive of the intended mechanisms through a HHMP condition to ensure the protection of historic heritage, and mitigation to manage any adverse effects resulting from the physical construction of the Network through the Outline Plan of Works process in the future.

Heritage New Zealand seeks the following decision from Council:

12. The approval of NoR 8 (WD) - Mill Road and Pukekohe East Road Upgrade (DES0006/24).

Heritage New Zealand wishes to be heard in support of their submission.

¹ Assessment of Effects on Historic Heritage, paragraphs 5.3.4 and 5.3.5



HERITAGE NEW ZEALAND
POUHERE TAONGA

If others make a similar submission, HNZPT will consider presenting a joint case with them at a hearing.

Yours sincerely

BHParslow

Director Northern Region

Address for service: Alice Morris
amorris@heritage.org.nz
PO Box 105 291
Auckland City 1143

Cc: Waka Kotahi NZ Transport Agency, submissions@supportinggrowth.nz

From: NoticeOfRequirementOnlineSubmissionForm@donotreply.aucklandcouncil.govt.nz
To: [Unitary Plan](#)
Subject: [ID:953] Notice of Requirement online submission - Rodney Cunningham
Date: Monday, 13 November 2023 1:16:06 pm

The following customer has submitted a Notice of Requirement online submission.

Contact details

Full name of submitter: Rodney Cunningham

Organisation name:

Full name of your agent: Rod Cunningham

Email address: rodcunninghamnz@gmail.com

Contact phone number: +64226990744

Postal address:
399 Drury Hills Rd
Drury
Auckland 2577

Submission details

Name of requiring authority: Waka Kotahi NZ Transport Agency

The designation or alteration: Pukekohe : NOR 8 Mill Road and Pukekohe East Road Upgrade

The specific provisions that my submission relates to are:

Do you support or oppose the Notice of Requirement? I or we oppose the Notice of Requirement.

The reason for my or our views are:

Negative impacts on our property 80 Mill Rd Bombay. Notable immediate impacts include but are not limited to: 1. access to the property - proposed left turn only impacts on access, stated extra length of travel time caused by needing to travel between new roundabouts of estimated 3-4 minutes does not include congestion time - experience of living in the area for 30 years (our family more than 100 years) shows regular congestion which will be exacerbated by changes hence the estimated extra travel time is grossly under estimated. This has negative impact on quality of life and value of the property. 2. increased noise impacts of increased traffic 3. increased dust impact from increased traffic 4. increased visual pollution impacts of increased traffic and road widening 5. increased exposure to walking and cycling traffic so causing larger risk of theft and property damage. 6. impact on animal and stock well being from increased traffic noise 7. increased vibration impact from increased traffic volumes and size of vehicles 8. impact on value of the property due to access being made much more difficult and removal of land from the title 9. the property water supply is located in the proposed NOR area so impacts the property 10. the walking and cycling paths are on the southern side of the roadway - this causes increased access issues for the property - we have not seen any proposals for how this will be dealt with so adequate access can be provided for our vehicles to get in and out of the driveway whilst contending with on coming vehicle traffic and well as walking and cycling traffic. 11. a median barrier is proposed in between opposing road lanes - this creates access issues 12. increased stormwater run off into our property

I or we seek the following recommendation or decision from Auckland Council:

The shared path or walking and cycling path is located on the northern side of the roadway (currently shown as on the southern side of the roadway). This will allow better access for walking and cycling traffic as better links to current and future developed land and less need to cross Mill Road. Also better visibility when the road / paths meets the Tuff Ring (further to the west)- as I see the current proposal the walking/cycling path is on the southern side if it were to be on the northern side then those using the walking/cycling path will have excellent views into the Tuff Ring (if its on

the southern side then those views are much diminished). With the Tuff Ring being such an impressive visual feature it can be better utilised and exposed by a northern pathway, so many more people can enjoy the visual benefits and it can be made a destination pathway for tourism rather than just a walk/cycle access. Impacts on the Tuff Ring and construction will be minimal and aesthetic benefits much greater. That some form of "U Turning lane/access" is provided for vehicles effected by the left turn only property access - with the introduction of the two new roundabouts (Harrisville Rd and eastern end of Mill Rd by motorway interchange). That there is a traffic management system put in place that allows for free flowing 180 degree turns at the roundabouts (like dedicated lanes) so residents (and others) can more easily make the extra distance (and travel time potentially impacted by congestion) around the roundabouts so they can gain what would have been the right hand turn access into their properties.

Submission date: 13 November 2023

Attend a hearing

Do you wish to be heard in support of your submission? Yes

Would you consider presenting a joint case at a hearing if others have made a similar submission?
Yes

Declaration

I accept and agree that:

- by taking part in this public submission process that my submission (including personal details, names and addresses) will be made public,
- I or we must serve a copy of the submission on the person who gave the notice of requirement as soon as reasonably practicable after submitting to Auckland Council.

Submission on Eight Notices of Requirement for the Pukekohe Package lodged by Waka Kotahi NZ Transport Agency and Auckland Transport as requiring authorities under the Resource Management Act 1991

TO: Attn: Planning Technician Auckland Council Level 24, 135 Albert Street Private Bag 92300 Auckland 1142

SUBMISSION ON: Notices of Requirement ("**NoRs**") for the Pukekohe Package and Local Arterials

FROM: Watercare Services Limited ("**Watercare**")

ADDRESS FOR SERVICE: Mark Bishop
Regulatory & Policy Manager
Watercare Services Ltd
Private Bag 92 521
Wellesley Street
AUCKLAND 1141
Phone: 022 010 6301
Email: Mark.Bishop@water.co.nz

DATE: 13 November 2023

1. INTRODUCTION

- 1.1 Watercare is pleased to have the opportunity to make a submission on the eight NoRs for the Pukekohe and Local Networks lodged by Waka Kotahi NZ Transport Agency ("**Waka Kotahi**") and Auckland Transport as requiring authorities under the Resource Management Act 1991 ("**RMA**") in Auckland.
- 1.2 Watercare neither supports nor opposes the NoRs (ie it is neutral as to whether the NoRs are confirmed or not). Watercare seeks to ensure that any decisions made to confirm the NoRs responds to the issues raised in this submission and avoids, remedies or mitigates potential adverse effects on Watercare's ability to provide water and wastewater services now and in the future. Watercare is interested in all of the eight NoRs.
- 1.3 Watercare could not gain an advantage in trade competition through this submission.

2. WATERCARE – OUR PURPOSE AND MISSION

- 2.1 Watercare is New Zealand's largest provider of water and wastewater services. We are a substantive council-controlled organisation under the Local Government Act 2002 ("**LGA**") and are wholly owned by Auckland Council ("**Council**"). Watercare has a significant role in helping Auckland Council achieve its vision for the city. Our services are vital for life, keep people safe and help communities to flourish.
- 2.2 Watercare provides integrated water and wastewater services to approximately 1.7 million people in the Auckland region. Over the next 30 years, this could increase by another 720,000 people, potentially requiring another 313,000 dwellings along with associated water and wastewater infrastructure. The rate and speed of Auckland's population growth puts pressure on our communities, our environment, and our housing and infrastructure networks. It also means increasing demand for space, infrastructure, and services necessary to support this level of growth.
- 2.3 Under both the LGA and the Local Government (Auckland Council) Act 2009, Watercare has certain obligations. For example, Watercare must achieve its shareholder's objectives as specified in our statement of intent, be a good employer, and exhibit a sense of social and environmental responsibility.¹
- 2.4 Watercare must also give effect to relevant aspects of the Council's Long-Term Plan, and act consistently with other plans and strategies of the Council, including the Auckland Unitary Plan (Operative in Part) and the Auckland Future Development Strategy.
- 2.5 Watercare is also required to manage our operations efficiently with a view to keeping overall costs of water supply and wastewater services to our customers (collectively) at minimum levels, consistent with effective conduct of the undertakings and maintenance of long-term integrity of our assets.²

3. PLANNED AND EXISTING WATERCARE ASSETS

- 3.1 Some of the NoRs interact with existing Watercare water and wastewater assets. The Assessment of Effects on the Environment for the NoRs states that Watercare assets are within the project areas for NoR 1,2 and 5-8.³
- 3.2 Some of the project areas for the NoRs are within areas where Watercare has planned for future infrastructure development. Water and wastewater infrastructure to be developed within the areas covered by the NoRs broadly falls in two categories; developer-led infrastructure to service growth at a local network level, and Watercare-led infrastructure to service growth at a bulk level.
- 3.3 Watercare may have some awareness of developer-led infrastructure projects within the covered areas, but it is important to clarify that Watercare is not responsible for and does not have direct control over these projects until they are finished and officially vested. It is also worth noting that Watercare has limited insight into the details of developer-led infrastructure projects, however as previously noted, wishes to remain involved in future engagement to ensure alignment between infrastructure providers.

¹ LGA, s 59.

² Local Government (Auckland Council) Act 2009, s 57.

³ Assessment of Effects on the Environment for the NoRs (dated September 2023) at Table 11-7.

3.4 Specific commentary regarding known projects within Watercare’s Asset Management Plan to service growth at a bulk level is outlined below. Solutions and alignments/locations are subject to change as we learn more, progress our projects and the area develops. There is also potential for new needs to surface, necessitating further bulk infrastructure. Ongoing engagement is critical to maintain alignment.

(a) **NoR Pukekohe: Drury West Arterial⁴ ("NoR 1") (Auckland Transport)**

- The current concept for Watercare’s Wesley/Paerata Watermain has it travelling west along Karaka Rd from Runciman Rd. The alignment is yet to be finalised but there is a high likelihood it will intersect with NoR 1.

(b) **NoR Pukekohe: Drury – Pukekohe Link⁵ ("NoR 2") (Waka Kotahi)**

- The current concept for Watercare’s Wesley/Paerata Watermain has it travelling west along Karaka Rd from Runciman Rd. The alignment is yet to be finalised but there is a high likelihood it will intersect with NoR 2.
- Watercare plans to install a new wastewater pump station in Paerata which will convey flows to Pukekohe via a rising main, which is also yet to be built. It is assumed the rising main will be installed along Paerata Rd however this is yet to be finalised so there is potential for it to intersect with NoR 2.

(c) **NoR Pukekohe: Paerata Connections⁶ ("NoR 3") (Auckland Transport)**

- Watercare plans to install a new wastewater pump station in Paerata which will convey flows to Pukekohe via a rising main, which is also yet to be built. It is assumed the rising main will be installed along Paerata Rd and while it is yet to be finalised, there is high likelihood it will intersect with NoR 3.

(d) **NoR Pukekohe: Pukekohe North-East Arterial⁷ ("NoR 4") (Auckland Transport)**

- Watercare plans to install a new wastewater pump station in Paerata which will convey flows to Pukekohe via a rising main, which is also yet to be built. It is assumed the rising main will be installed along Paerata Rd and while it is yet to be finalised, there is high likelihood it will intersect with NoR 4.

(e) **NoR Pukekohe: Pukekohe South-East Arterial⁸ ("NoR 5") (Auckland Transport)**

⁴ A new transport corridor with active mode facilities in Drury West, extending south from the intersection of State Highway 22 and Jesmond Road to the edge of the Future Urban Zone near Runciman Road, Drury

⁵ A new state highway including a shared path from Great South Road, Drury in the northeast, connecting State Highway 22 in the west, and the area in the vicinity of Sim Road/Cape Hill Road, Pukekohe in the south.

⁶ Two new transport corridors including active mode facilities. One between the two extents of Sim Road, Paerata across the North Island Main Trunk Rail Line. The second between Paerata Rail Station and Sim Road, Paerata.

⁷ A new transport corridor including active mode facilities between State Highway 22, Paerata on the north west and Pukekohe East Road, Pukekohe in the south east.

⁸ Upgrade part of Pukekohe East Road and Golding Road, and a new connection from Golding Road to Svendsen Road, Pukekohe across Station Road and the North Island Main Trunk Rail Line - including active mode facilities.

- Watercare is working through detailed design of a new Bulk Supply Point (Pukekohe East BSP) at 88 Pukekohe Rd, which is within NoR 5.
- Watercare plans to install a new wastewater rising main, which would run south down Station Rd before heading west under the NIMT and along Svendson Rd. Parts of this will fall within NoR 5.

(f) **NoR Pukekohe: Pukekohe South-West Upgrade⁹ ("NoR 6") (Auckland Transport)**

- The current concept for Watercare's Waikato 2 Watermain has it travelling north up Queen St before heading west and northwest along Harris St and Helvetia Rd. Work is planned to commence shortly to identify the preferred route and work through a NoR process for the watermain. There is a likelihood it will fall within NoR 6.

(g) **NoR Pukekohe: Pukekohe North-West Upgrade¹⁰ ("NoR 7") (Auckland Transport)**

- Watercare is installing a new wastewater pump station in Paerata which will convey flows to Pukekohe via a rising main, which is also yet to be built. It is assumed the rising main will be installed along Paerata Rd however this is yet to be finalised so there is potential for it to intersect with NoR 7.
- The current concept for Watercare's Waikato 2 Watermain has it travelling north up Queen St before heading west and northwest along Harris St and Helvetia Rd. Work is planned to commence shortly to identify the preferred route and work through a NoR process for the watermain. There is a likelihood it will fall within NoR 7.

(h) **NoR Pukekohe: Mill Road and Pukekohe East Road Upgrade¹¹ (NoR 8) (Waka Kotahi)**

- Watercare has no planned projects at this time that intersect with NoR 8, although may have future developments where requirements change due to growth.

4. SUBMISSION POINTS AND RELIEF SOUGHT

4.1 This is a submission on the eight NoRs (summarised above) that were lodged on 2 October 2023 and publicly notified on 13 October 2023.

4.2 As noted previously, Watercare neither supports or opposes these NoRs (ie it is neutral as to whether the NoRs are confirmed or not). Watercare seeks to ensure that any decisions made on the NoRs responds to the issues raised in this submission and avoids, remedies,

⁹ Upgrade specific intersections and regrade specific driveways on Nelson Street, Ward Street, West Street and Helvetia Road for active mode facilities.

¹⁰ Upgrade Helvetia Road, Pukekohe in the south-west and a new corridor from Helvetia Road to SH22 Paerata in the north-east including active mode facilities.

¹¹ Upgrade of Mill Road (Bombay) in the east for additional vehicle lanes and a shared path and an upgrade of Pukekohe East Road, Pukekohe in the west for a shared path.

or mitigates potential adverse effects on Watercare's ability to provide water and wastewater services now and in the future.

Early engagement

- 4.3 Watercare seeks to ensure that there is a live and continual process planned forward to recognise that asset management and construction plans are constantly updating and changing.
- 4.4 Watercare acknowledges the proactive approach to engagement shown by the requiring authorities to date. Watercare has been in discussions with the Supporting Growth Alliance, and has had discussions through the preceding 'future urban land use strategy' project work. Watercare has also had independent engagement with Waka Kotahi and Auckland Transport during the development of these NoR's.
- 4.5 Watercare supports in depth collaboration and consultation (including information, data sharing and identification of opportunistic works) across infrastructure providers on the development (or redevelopment) of urban environments and wishes to ensure that there is ongoing and timely engagement and collaboration as the projects develop.
- 4.6 As noted, Watercare seeks early engagement from the requiring authorities for future planning and construction works including engagement prior to detailed design and during implementation of construction works. Early and fulsome engagement with Watercare, along with other infrastructure providers, can enable opportunities to plan and future proof the delivery of assets to provide for well-functioning urban environments. For Watercare, this includes applying for, in a timely manner, "Works Over" Approvals, in compliance with Watercare's "*Water Supply and Wastewater Network Bylaw 2015*" (updated 2021).
- 4.7 In addition, the NoRs interact with existing water and wastewater services. Watercare seeks to ensure the NoRs do not impact its wastewater and water services in the NoR project areas now and into the future (these assets, and planned projects are detailed in paragraph [3.4] above). Watercare wishes to ensure it maintains access to its assets 24 hours a day, 7 days a week for maintenance, safety and efficient operation of its services and that it is consulted on any works undertaken by the requiring authorities that may impact Watercare's services.

Specific amendments to conditions

- 4.8 Watercare has filed evidence, and attended, recent NoR hearings for other Supporting Growth Alliance projects (the North West Strategic Network, and the Airport to Botany Bus Rapid Transit Project). The conditions proposed for the NoRs by the requiring authorities for these NoRs are similar to those which have been proposed at the recent North West Strategic Network hearing (in rebuttal evidence).
- 4.9 Watercare supports the intention of conditions proposed by the requiring authorities which seek to ensure that there is engagement with relevant stakeholders during the development of the eight NoRs (ie the conditions which require a Network Utility Management Plan ("**NUMP**"), Stakeholders Communication and Engagement Management Plan ("**SCEMP**"), and Land use Integration Process ("**LIP**")).
- 4.10 That said, Watercare considers further amendments to the conditions are required to address matters raised in this submission, so that the conditions for the eight NoRs

adequately provide for engagement with network utilities, in particular during the feasibility and detailed design stage.

- 4.11 Watercare seeks that a new condition requiring the preparation of a "Network Utility Strategic Outcomes Plan" be added to all eight NoRs to futureproof assets in consultation with network utility operators such as Watercare:

Network Utility Strategic Outcomes Plan (NUSOP)

- (a) A NUSOP shall be prepared in the project feasibility stage or as early as practicable.
- (b) The objective of the NUSOP is to set out a strategic framework for asset resilience that includes consideration of growth, corridor protection, and asset renewals over time.
- (c) The NUSOP shall:
 - i. consider expected asset life of existing assets;
 - ii. consider expected asset capacity increases or changes; and
 - iii. demonstrate how city and national strategic plans are considered.
- (d) The NUSOP shall be prepared in consultation with the relevant Network Utility Operator(s) who have existing assets that are directly affected by the Project, including Watercare.
- (e) The NUSOP shall describe how strategic plans from the Network Utility Operators in relation to its assets have been addressed.
- (f) Any comments received from the Network Utility Operator shall be considered when finalising the NUSOP.
- (g) Any amendments to the NUSOP related to the assets of a Network Utility Operator shall be prepared in consultation with that asset owner.

- 4.12 If the above condition is not included in the NoRs, Watercare seeks the following amendments (shown in underline) to the NUMP condition for all eight of the NoRs:

- (a) A NUMP shall be prepared after consultation with Network Utility Operator(s) including during the feasibility and detailed design phases, and prior to the lodgement of an Outline Plan of Works for a stage of construction ~~Start of Construction for a Stage of Work~~.
- ...
- (c) The NUMP shall be prepared in consultation with the relevant Network Utility Operator(s) who have existing assets that are directly affected by the Project and shall include any s177 consents required for works affecting prior Designations and Watercare "Works Over Approvals".
- ...
- (h) The Requiring Authority shall consult with Network Utility Operators during the feasibility and detailed design phases to identify opportunities to enable, or not preclude, the development of new network utility facilities including access to power, water services and ducting within the Project, where practicable to do so. The consultation undertaken, opportunities considered, and whether or not they

have been incorporated into the detailed design, shall be summarised in the Outline Plan or Plans prepared for the Project.

4.13 Watercare also seeks that the LIP condition is included in all of the NoRs (including the NoRs lodged by Waka Kotahi), as opposed to only being included in the Auckland Transport NoRs as is currently proposed.

5. RECOMMENDATION SOUGHT

5.1 Watercare seeks that Auckland Council recommends:

- (a) amendments to the conditions of the NoRs, as set out above in its submission (and any other conditions), to ensure any adverse effects on Watercare's assets and operations are avoided, remedied or mitigated and to address the concerns set out above; and
- (b) such further other relief or other consequential amendments as considered appropriate and necessary to address the concerns set out above.

5.2 Watercare wishes to be heard in support of this submission.

5.3 If others make a similar submission, consideration would be given to presenting a joint case with them at any hearing.



Steve Webster
Chief Infrastructure Officer
Watercare Services Limited

Form 21

Submission on a requirement for a designation or an alteration to a designation subject to full or limited notification under Section 168A, 169, 181, 189A, 190 and 195A of the Resource Management Act 1991

Date: 13 November 2023

To: Te Tupu Ngātahi – Supporting Growth Alliance

Name of Submitter: Te Tāhuhu o te Mātauranga | Ministry of Education

Address for Service: Woods
8 Nugent Street
Grafton, Auckland

Attention: Emma Howie, General Manager – Planning & Urban Design

Phone: 027 572 2220

Email: emma.howie@woods.co.nz

Submission on eight Notices of Requirement for Te Tupu Ngātahi Supporting Growth for the Pukekohe Transport Network

SUMMARY

- 1) The Ministry of Education (“**the Ministry**”) is the Government’s lead advisor on the New Zealand education system, shaping direction for education agencies and providers and contributing to the Government’s goals for education.
- 2) Te Tupu Ngātahi Supporting Growth Alliance (“**Te Tupu Ngātahi**”) has lodged eight Notices of Requirement (“**NoR**”) for the Pukekohe within the Pukekohe, Paerata and Drury West areas:
 - NoR 1 – Pukekohe: Drury West Arterial
 - NoR 2 – Pukekohe: Drury – Pukekohe Link
 - NoR 3 – Pukekohe: Paerata Connections
 - NoR 4 - Pukekohe: Pukekohe North-East Arterial
 - NoR 5 - Pukekohe: Pukekohe South-East Arterial
 - NoR 6 - Pukekohe: Pukekohe South-West Upgrade
 - NoR 7 - Pukekohe: Pukekohe North-West Upgrade
 - NoR 8 - Pukekohe: Mill Road and Pukekohe East Road Upgrade
- 3) This submission relates to all eight NoRs lodged by Te Tupu Ngātahi.
- 4) There are a number of existing schools in proximity to the NoRs. There is potential for these schools, or any future schools developed in this area, to be affected by traffic, noise and other nuisance effects arising from future construction works of this transportation network. The Ministry is seeking to ensure that appropriate conditions are included in the designations to mitigate any adverse effects associated with the construction of the Pukekohe transport network.

-
- 5) The Ministry supports the provision of active transport modes (walking and cycling) as proposed through the Pukekohe Transport Network.
 - 6) Overall, the Ministry's submission is neutral on the NoRs subject to the following request for changes being made to the conditions including:
 - Updating acronym/terms and conditions within the Designations to be consistent with other conditions Te Tupu Ngātahi have agreed to on other NoRs through the Supporting Growth Programme;
 - Amendments to the Stakeholder Communication and Engagement Management Plan ("**SCEMP**") to include reference to schools within proximity to the Pukekohe Transport Network; and
 - Amendments to the Construction Traffic Management Plan ("**CTMP**"), to avoid using any roads around schools during the AM and PM peak periods.
 - 7) The Ministry wishes to be heard in support of its submission.

OVERVIEW OF THE MINISTRY'S RESPONSIBILITIES & LAND INTERESTS

- 8) The Ministry is the Government's lead advisor on the New Zealand education system. The Education and Training Act 2020 sets out the obligations and responsibilities of the Ministry. The Ministry have responsibility for the education outcomes of students across the full spectrum of the education sector, including pre-school, primary and secondary levels.
- 9) The Ministry assesses population changes, school roll fluctuations and other trends and challenges impacting on education provision at all levels of the education network to identify changing needs within the network so the Ministry can respond effectively.
- 10) The Minister of Education is a Requiring Authority under the Resource Management Act 1991 ("**RMA**") and has over 400 education purposes designations in the Auckland Unitary Plan: Operative in Part ("**AUP:OP**").
- 11) The Ministry has responsibility for all education property owned by the Crown. This involves managing the existing property portfolio, upgrading and improving the portfolio, purchasing and constructing new property to meet increased demand, identifying and disposing of surplus State school sector property and managing teacher and caretaker housing.
- 12) The Ministry is therefore a considerable stakeholder and social infrastructure provider in terms of activities that may impact existing and future educational facilities and assets in the Auckland region.
- 13) The Ministry has multiple education sites within the Pukekohe, Paerata and Drury West area including Karaka School, Wesley Primary School, Wesley College, Paerata School, Pukekohe East School, Pukekohe North School, Tamaoho School, Pukekohe Intermediate School, Pukekohe High School, Valley School, and Pukekohe Hill School.
- 14) The location of each NoR in relation to the Ministry's existing assets is shown in Figure 1.

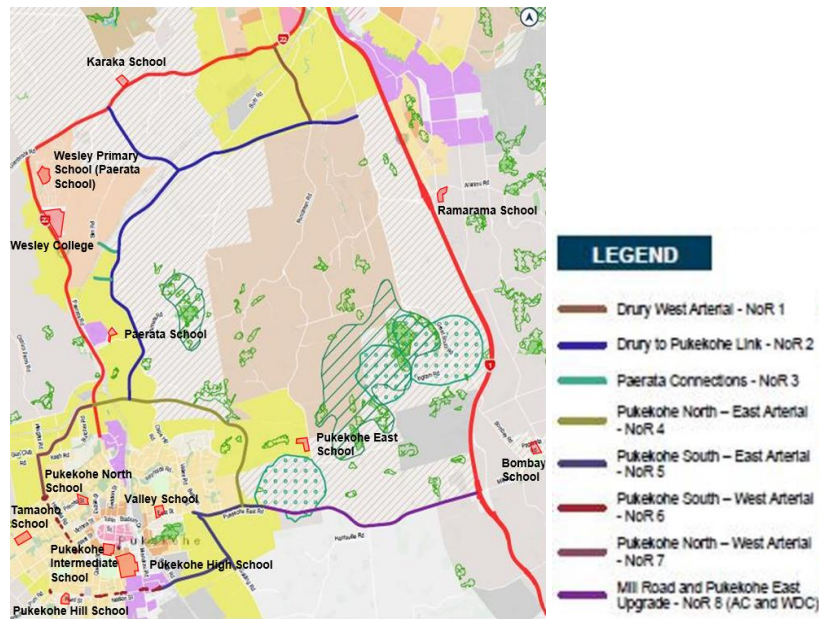


Figure 1: Project Overview – Location of Eight NoRs (identified in the legend) in relation to the Ministry of Education’s School Network (outlined in red)

MINISTRY OF EDUCATION’S SUBMISSION

- 15) Under the RMA, decision makers must have regard to the health and safety of people and communities. Furthermore, there is a duty to avoid, remedy or mitigate actual and potential adverse effects on the environment.
- 16) The eight NoRs to designate land for future strategic transport corridors in Pukekohe, Paerata, and Drury West areas, enable the future construction, operation, maintenance of transport infrastructure to support anticipated growth within Auckland’s future urban zoned area over the next 10 – 30 years. The project supports improved walking and cycling, public transport, and general traffic connections. The key reasons for this investment are to improve safety, better integrate transport and land use, improving accessibility, transport resilience, and promoting travel choice.
- 17) The Ministry broadly supports the Project aim to plan transport investment in Auckland’s future urban zoned areas. The project will improve active mode facilities, enhancing the safety of students walking and cycling to and from school.
- 18) The Ministry supports the provision of shared pathways, bi-directional cycle ways, upgrading of intersections, that will provide safe access to the current and future wider school network. Encouraging mode shift will provide significant health benefits for students and staff, reducing traffic generation at pick up and drop off times. Schools should be well serviced by safe and accessible pedestrian and cycling links as well as public transportation facilities, and it is considered that the proposed upgrades will provide adequate cycling and walking infrastructure to the surrounding area.
- 19) The Pukekohe project is a large programme of works. The quantum of construction required to deliver the projects will likely have temporary adverse effects on the surrounding environment. There are several schools in proximity to the NoRs. There is potential for these schools to be affected by traffic, noise and other nuisance effects arising from future construction works. The construction timing and staffing is yet to be determined, so there is uncertainty regarding the construction methodology, including the routes for construction vehicles and the location of construction laydown areas.

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- 20) The Ministry seeks to appropriately address and manage construction related effects and the ongoing potential effects the project may have on the operation and management of the schools for NoRs 2, 4, 5, 6, 7 and 8. Additionally, as the project is planned for works over the next 10 to 30 years, the Ministry is also submitting on NoRs 1 and 3 in the event any new schools are developed in the project area.
- 21) The key issues that the Ministry has concerns about in relation to the NoRs include construction traffic effects and stakeholder engagement which are outlined below. Consequential changes are also sought to the acronyms/terms and conditions of the NoRs for consistency with other Te Tupu Ngātahi designations. The requested changes are included in **Appendix 1** to this submission.

Construction traffic effects

- 22) The surrounding schools (and any future schools) will potentially be affected by an increased volume of heavy vehicles to access the construction area of the NoRs. This is a traffic safety concern for students walking and cycling to school at peak pick up and drop off times.
- 23) Condition [17] requires the preparation of a CTMP prior to the start of construction. The Ministry supports the inclusion of this condition but requests that specific reference is made to education facilities to address the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours (for example on roads servicing educational facilities during pick up and drop off times) to manage vehicular and pedestrian traffic near educational facilities or to manage traffic congestion.
- 24) Amendments made to conditions are requested to ensure consistency with the changes made to the Te Tupu Ngātahi Warkworth NoR conditions as included in the Strategic Planning & Conditions Rebuttal Evidence prior to the Council hearing¹ and to conditions agreed through the Te Tupu Ngātahi Airport to Botany Bus Rapid Transit Project NoRs².

Stakeholder engagement

- 25) The Ministry supports the establishment of SCEMP as proposed condition [8]. The Ministry considers that they are a key stakeholder in this Project, and specific engagement is required to manage construction effects on the schools. Amendments made to conditions are requested to identify schools within proximity to the project and to ensure consistency with the changes made to the Te Tupu Ngātahi Warkworth NoR conditions as included in the Strategic Planning & Conditions Rebuttal Evidence prior to the Council hearing.

RELIEF SOUGHT

- 26) In principle, based on the above, the Ministry supports the proposed walking and cycling facilities proposed in each NoR application providing improved active mode connectivity is essential to provide existing and future communities with a sustainable means of accessing education facilities in Pukekohe, Paerata, and Drury West.
- 27) To ensure effects associated with the NoRs on the Ministry are appropriately managed, it is requested that appropriate conditions are imposed on the designations in accordance with the RMA. It is requested that amendments to conditions as set out in **Appendix 1** are adopted by Te Tupu Ngātahi. The amendments sought include:
- a) Amendment to the acronym/terms to be consistent with other Te Tupu Ngātahi designations to include a definition of 'educational facilities' and 'stakeholders';
 - b) Inclusion of the Ministry and schools in the SCEMP; and
 - c) Inclusion of the Ministry and schools as stakeholder in the CTMP.

¹ In the Matter of Notices of Requirement for designations by Auckland Transport collectively known as the Warkworth Package - Chris Scafton Statement of Rebuttal Evidence on behalf of Auckland Transport – Strategic Planning and Conditions dated 26 October 2023.

² In the Matter of Notices of Requirement for designations by Auckland Transport collectively known as the Airport to Botany Bus Rapid Transit Project – Requiring Authority Primary Evidence Appendix B -ref: EV148B RA.

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- 28) Overall, the submission is neutral subject to the above changes being made to the designation conditions.
 - 29) Such other consequential amendments to the NoRs may be necessary to give effect to the relief sought through this submission.
 - 30) The Ministry wishes to be heard in support of its feedback.

APPENDIX 1: AMENDMENTS SOUGHT TO CONDITIONS

Amendments are sought to the proposed abbreviations and definitions along with conditions to be included in all of the NoRs (NoR 1 – 8). Changes to these provisions sought by the Ministry are noted below.

PROPOSED ABBREVIATIONS AND DEFINITIONS

Acronym/terms for all Te Tupu Ngātahi Pukekohe Transport Network designations changes sought to conditions identified as - <u>Underlined</u> and strikethrough		
Acronym/Term	Definition	Submission Comment
<u>Educational Facilities</u>	<p>Facility used for education to secondary level.</p> <p><u>Includes:</u></p> <ul style="list-style-type: none"> ▪ <u>Schools and outdoor education facilities; and</u> ▪ <u>Accommodation, administrative, cultural, religious, health, retail, and communal facilities accessory to the above.</u> <p><u>Excludes:</u></p> <ul style="list-style-type: none"> ▪ <u>Care centres; and</u> ▪ <u>Tertiary education facilities</u> 	<p>Inclusion requested</p> <p>The requested term and definition are consistent with the changes made to the Te Tupu Ngātahi Warkworth NoR conditions as included in the Strategic Planning & Conditions Rebuttal Evidence prior to the Council hearing³.</p>
<u>Stakeholders</u>	<p><u>Stakeholders to be identified in accordance with Condition [x], which may include as appropriate:</u></p> <ol style="list-style-type: none"> a) <u>Adjacent owners and occupiers;</u> b) <u>Adjacent business owners and occupiers;</u> c) <u>Central and local government bodies;</u> d) <u>Community groups;</u> e) <u>Developers;</u> f) <u>Development agencies;</u> g) <u>Educational facilities; and</u> h) <u>Network utility operators.</u> 	<p>Inclusion requested</p> <p>The requested term and definition are consistent with the changes made to the Te Tupu Ngātahi Warkworth NoR conditions as included in the Strategic Planning & Conditions Rebuttal Evidence prior to the Council hearing.</p>

³ In the Matter of Notices of requirement for designations by Auckland Transport collectively known as the Warkworth Package - Chris Scrafton Statement of Rebuttal Evidence on behalf of Auckland Transport – Strategic Planning and Conditions dated 26 October 2023.

PROPOSED CONDITIONS

Proposed conditions as per other Te Tupu Ngātahi designations		
<u>Underlined and strikethrough</u> – changes proposed for all NoRs		
No.	Condition	Submission Comment
General Conditions		
[x]	<p>Stakeholder Communication and Engagement</p> <p>(a) <u>At least 6 months prior to the start of detailed design for a Stage of Work, the Requiring Authority shall identify:</u></p> <p>(i) <u>A list of Stakeholders;</u></p> <p>(ii) <u>A list of properties within the designation which the Requiring Authority does not own or have occupation rights to; and</u></p> <p>(iii) <u>Methods to engage with Stakeholders and the owners and occupiers of properties identified in (a)(i) – (ii) above.</u></p> <p>(b) <u>A record of (a) shall be submitted within an Outline Plan for relevant Stage of Work.</u></p>	<p>Inclusion requested</p> <p>The condition is requested to ensure consistency with the changes made to the Te Tupu Ngātahi Warkworth NoR conditions as included in the Strategic Planning & Conditions Rebuttal Evidence prior to the Council hearing.</p>
Pre-construction Conditions		
8	<p>Stakeholder Communication and Engagement Management Plan (SCEMP)</p> <p>(a) A SCEMP shall be prepared in consultation with Stakeholders, community groups and organisations prior to the Start of Construction any Outline Plan being submitted.</p> <p>(b) The objective of the SCEMP is to identify how the public Stakeholders (including directly affected and adjacent owners and occupiers of land) will be engaged with prior to and throughout the Construction Works. To achieve the objective of the SCEMP shall include:</p> <p>(i) <u>a list of stakeholders;</u></p> <p>(ii) <u>a list of properties within the designation which the Requiring Authority does not own or have occupation rights to;</u></p> <p>(iii) <u>methods to engage with Stakeholders and the owners of properties identified in (b)(ii) above;</u></p> <p>(i) At least 18 months prior to any Outline Plan being submitted, the Requiring Authority shall identify:</p> <p>A. The properties whose owners will be engaged with;</p> <p>B. A list of key stakeholders, community groups, organisations and business who will be engaged with;</p> <p>C. Methods and timing to engage with landowners and occupiers whose access is directly affected</p> <p>(ii) The SCEMP shall include:</p> <p>A. Detailed of (b)(i)A to C;</p> <p>(iv) The contact details for the Project Liaison Person. These details shall be on the Project website, or equivalent virtual information source, and prominently displayed at the main entrance(s) to the site(s);</p>	<p>Amendment requested</p> <p>Amendments are requested to ensure consistency with the changes made to the Te Tupu Ngātahi Warkworth NoR conditions as included in the Strategic Planning & Conditions Rebuttal Evidence prior to the Council hearing.</p> <p>A list of schools to be engaged with has also been included in the condition as they are located in proximity to the Pukekohe Project and may be subject to construction traffic effects associated with the works.</p>

	<p>(v) The procedures for ensuring that there is a contact person available for the duration of Construction Works, for public enquiries or complaints about the Construction Works;</p> <p>(vi) Methods for engaging with Mana Whenua, to be developed in consultation with Mana Whenua;</p> <p>(vii) <u>Methods and timing to engage with landowners and occupiers whose access is directly affected;</u></p> <p>(viii) <u>Methods for engaging with the Ministry of Education (MoE), surrounding schools (including Karaka School, Wesley Primary School, Wesley College, Paerata School, Pukekohe East School, Pukekohe North School, Tamaoho School, Pukekohe Intermediate School, Pukekohe High School, Valley School, and Pukekohe Hill School), and any future schools. The MoE and Schools must be contacted ten days prior to the start of any construction within 500 metres of the school boundary. Contact details of the construction manager must be shared with the Ministry of Education, Schools, and future schools (should the school have any safety concerns during construction).</u></p> <p>(ix) Methods to communicate key project milestones and the proposed hours of construction activities including outside of normal working hours and on weekends and public holidays, to the parties identified in (b)(i) and (ii) above; and</p> <p>(x) Linkages and cross references to communication and engagement methods set out in other conditions and management plans where relevant.</p> <p>(c) Any SCEMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.</p>	
Construction Conditions		
17	<p>Construction Traffic Management Plan (CTMP)</p> <p>(a) A CTMP shall be prepared prior to the Start of Construction for a Stage of Work. The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects.</p> <p>To achieve this objective, the CTMP shall include:</p> <p>(i) methods to manage the effects of temporary traffic management activities on traffic;</p> <p>(ii) measures to ensure the safety of all transport users;</p> <p>(iii) the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours (<u>for example on roads servicing educational facilities during pick up and drop off times</u>) to manage vehicular and pedestrian traffic near <u>educational facilities</u> schools or to manage traffic congestion;</p> <p>(iv) site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;</p>	<p>Amendment requested</p> <p>Amendments are requested to ensure consistency with the changes made to the Te Tupu Ngātahi Warkworth NoR conditions as included in the Strategic Planning & Conditions Rebuttal Evidence prior to the Council hearing.</p> <p>Additionally, wording has also been amended to reflect changes made to the Te Tupu Ngātahi Airport to Botany Bus Rapid Transport conditions as included in the Primary Evidence prior to the Council hearing⁴.</p>

⁴ In the Matter of Notices of Requirement for designations by Auckland Transport collectively known as the Airport to Botany Bus Rapid Transit Project – Requiring Authority Primary Evidence Appendix B -ref: EV148B RA.

	<ul style="list-style-type: none"> (v) identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, <u>including public transport service, including pedestrians and cyclists, on existing roads;</u> (vi) methods to maintain vehicle access to <u>and within</u> property and/or private roads <u>for all transport modes</u> where practicable, or to provide alternative access arrangements when it will not be; (vii) the management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads; (viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/public/stakeholders/emergency services); (ix) <u>auditing, monitoring and reporting requirements relating to traffic management activities shall be undertaken in accordance with the New Zealand Guide to Temporary Traffic Management or any subsequent version;</u> (x) <u>details of minimum network performance parameters during the construction phase, including any measures to monitor compliance with the performance parameters; and</u> (xi) <u>details of any measures proposed to be implemented in the event thresholds identified in (x) being exceeded;</u> 	
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13 November 2023

By email to: unitaryplan@aucklandcouncil.govt.nz

Submission on Pukekohe Notices of Requirement 1-8

1 Introduction

- 1.1 Counties Energy thanks you for the opportunity to provide a submission concerning the Pukekohe Notices of Requirement 1 to 8. This submission applies to all Notices of requirement. Specific comments concerning individual NoRs are made in addition to the general comment where required.

2 About Counties Energy

- 2.1 Counties Energy Limited (CEL) is an electricity operator under the Electricity Act, a network operator under the Telecommunications Act, and a network utility operator under the Resource Management Act. CEL is a requiring authority in respect of its electricity network. The Civil Defence and Emergency Management Act also cites electricity distribution as a lifeline utility.
- 2.2 CEL owns, manages and operates an electricity distribution network supplying nearly 45,000 homes, farms and businesses in the southern Auckland, northern Waikato and Hauraki District areas. Electricity is an essential infrastructure that enables development to occur. Much of the network supplying CEL's customers is overhead in the rural areas, with a mix of overhead and underground assets in the urban areas, particularly in the eastern part of the network which has and continues to experience high levels of growth.
- 2.3 CEL receives power from the national grid at Bombay and Glenbrook Grid Exit points, from where it is conveyed at either 110kV or 33kV (high voltage) to nine substations before being converted to either 22kV or 11kV (medium voltage) to be distributed via overhead lines, underground cables, transformers and associated equipment so it can be used by the customer, whether at 400V (low voltage) or at medium voltages for larger businesses.
- 2.4 Future proofing and protection of existing assets is key to meeting the needs of the communities and businesses CEL serves in light of pressures from urban growth. CEL sees NoRs 1-8 as providing



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Reimagined

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potential network utility corridors and therefore opportunities for extension of its distribution network between substations and to accommodate the future demands of urban expansion in and around the Drury and Pukekohe area.

3 Submission Points

3.1 CEL is generally supportive of the alignment of the new roads indicated by the Proposed Designation Boundaries indicated on drawings SGA-DRG-STH-002-1000, 2000, 2100, 2200, 2300, 2400, 3000, 4000, 4100, 5000, 5100, 6000, 6100, 7000, 8000 and 8100.

3.2 The proposed NoR alignments offer opportunity for extension of the distribution network.

3.3 However, we note the following omissions across all the afore mentioned drawings:

Existing overhead infrastructure in existing road corridors and proposed designations

Medium voltage (11kV and 22kV) lines and low voltage lines

Fibre cable

Pole locations in urban areas where footpaths and cycleway upgrades occupy the back berm

Existing underground infrastructure in existing road corridors and proposed designations

Fibre

Low voltage cables

Equipment associated with underground electricity reticulation located in the berm e.g., pad mounted transformers, switchgear, link boxes and network pillars

3.4 CEL will require further consultation and detailed planning concerning parts of NoRs 1-8 which may impact the location and safe operation of the assets listed under paragraph 3.3.

3.5 CEL will also require further consultation and detailed planning where it is proposed to cut or fill in the vicinity of existing overhead or underground assets in order to maintain compliance with NZECP34:2001 New Zealand Electrical Code of Compliance for Electrical Safe Distances, and to maintain optimum operation and safety around equipment associated with underground electricity distribution and fibre cables.

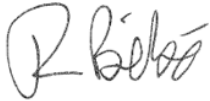
3.6 NoR 5, Drawing 5000 indicates the construction of a bridge over the rail corridor at Station Road, Pukekohe. This will impact the Pukekohe-Tuakau 110kV line which conveys electricity between the two zone substations. Early consultation and detailed planning will be required concerning works in the vicinity of this section of crucial infrastructure.

3.7 NoR 5, Drawing 5000 indicates alignment of a new road with associated cut and fill along the alignment of a section of the existing Bombay-Pukekohe 110kV line which is built within an easement between Station Road and Golding Road. Further detailed consultation will be required concerning the road design and construction round this line.

3.8 NoR 8, Drawing 8100, Mill Road. The alignment of the high voltage Bombay-Pukekohe (north) 110kV line is incorrect, where it crosses to the north side of Mill Road; and appears to be in area identified for future cut and installation of a culvert, both of which could compromise the safe operation of a critical asset. Further consultation and detailed planning is required.

CEL requests that Auckland Transport and Waka Kotahi respectively give consideration to the points raised above. We welcome the opportunity to discuss these matters further.

Yours faithfully

A handwritten signature in black ink, appearing to read 'R Bilbé', written in a cursive style.

Rachel Bilbé
Land and Easement Specialist

rachel.bilbe@countiesenergy.co.nz

027 622 5612

13 November 2023

Auckland Council
AUCKLAND

Sent via e-mail: unitaryplan@aucklandcouncil.govt.nz

Dear Sir/Madam

NOTICES OF REQUIREMENT 1 THROUGH 8 - PUKEKOHE

The Campaign for Better Transport Incorporated (**CBT**) wish to put forward our submission in relation to the following Notices of Requirement:

- Pukekohe: Drury West Arterial (NoR 1)
- Pukekohe: Drury – Pukekohe Link (NoR 2)
- Pukekohe: Paerata Connections (NoR 3)
- Pukekohe: Pukekohe North-East Arterial (NoR 4)
- Pukekohe: Pukekohe South-East Arterial (NoR 5)
- Pukekohe: Pukekohe South-West Upgrade (NoR 6)
- Pukekohe: Pukekohe North-West Upgrade (NoR 7)
- Pukekohe: Mill Road and Pukekohe East Road Upgrade (NoR 8)

Background

The CBT is always cautious when it comes to the construction of roading projects, and our default position would be one of opposition unless a solid case existed for the construction of the specific project involved.

The CBT is also mindful that in the relevant area:

- The railway line to Pukekohe is being electrified, with suburban service expected to be restored in next year. Assuming the initial timetable is consistent with service provided before the line closed for electrification works in 2022, this would mean a twenty-minute frequency between Pukekohe and the Auckland Central Business District during peak and a thirty-minute frequency during off-peak.
- Existing road infrastructure is unlikely to be fit for purpose in the coming decades. There needs to be separation between arterial routes and non-arterial routes and having non-arterial uses on an arterial route is not desirable from either a transport or an urban design perspective.

We make brief comments below, first in the general sense and then in relation to specific projects.

Cycle Infrastructure

We are heartened to see that cycle infrastructure is forming a significant component of the proposed routes, including the Drury-Pukekohe Link, and fully support this component of the proposals.

Twenty Year Lifespan

We note the resource consent has a lifetime of twenty years, which we agree with. The lifespan ensures the corridor is preserved and not developed on, but also means the impacts of rail electrification can be observed prior to construction work being undertaken.

Should the rail electrification have a material impact on traffic levels along the existing routes far and beyond that anticipated, then we would hope that the specifics of these projects are reconsidered in light of the changed facts.

Drury-Pukekohe Link (Pukekohe Expressway)

We are neutral when it comes to the Pukekohe Expressway. The construction of this road would enable the existing State Highway 22 to be downgraded to a non-arterial route and used accordingly (the best example might be the relationship between Great South Road and the Southern Motorway, with the former being used for local purposes and the latter being used as the major through route). The choice of route along the outskirts of the planned urban area is useful – this ensures no division of the urban area by a major road.

Mill Road

We are in favour of the planned upgrade to Mill Road. This road forms the primary link between Pukekohe, the Southern Motorway and the Waikato Expressway and is likely to continue doing so even once the new Pukekohe Expressway has been opened. We also note the road is currently hazardous, having had its speed limit decreased from 100km/h to 80km/h to reflect the dangerous conditions posed by this road. We anticipate the upgrades would ensure the road would become fit for purpose and improve safety outcomes.

A case could be made for the third and fourth lanes proposed to have some sort of restriction on them similar to such lanes along State Highway 20B (Puhinui Road). This might for instance take the form of a transit and heavy goods lane. We are mindful the road is in a primarily rural area and so demand flows are different to that within an urban area where bus lanes and the like would be more appropriate.

Pukekohe North-West Arterial and North-East Arterial

We are neutral when it comes to these roads. We see the value of these roads as providing a connection between the upgraded Mill Road and the routes heading to points west of Pukekohe (for example Waiuku) without road traffic needing to go through Pukekohe residential and commercial streets. We hope the opportunity would be taken to change the nature of some roads through Pukekohe to make them friendly toward other uses (for example, decreasing the speed limit of some roads through the Pukekohe village)

Pukekohe South-East Arterial and South-West Upgrade

We are neutral when it comes to these roads. We see the value of the South-East Arterial as providing a connection between the upgraded Mill Road and the routes heading to Tuakau and the northern Waikato without road traffic needing to go through Pukekohe residential and commercial streets (in particular, the King Street/Massey Avenue/Manukau Road/East Street roundabout).



Campaign For Better Transport

If Auckland Council have any further queries, please contact us at committee@bettertransport.org.nz. We will be pleased to comment further if requested.

Yours faithfully

The Campaign for Better Transport Incorporated

Jodi Johnston (Mr.)
Convenor

ATTACHMENT C
TECHNICAL REPORT REVIEWS

Memo

To: Karen Bell, Stantec

CC: Joe McDougall, Central and South Planning, Plans and Place, Auckland Council
Ana Maria d'Aubert, Consents Manager, Waikato District Council

Date: 14 December 2023

Reference: SGA Pukekohe Arterials NoRs – Urban Design and Landscape Review

1 Introduction

- 1.1 I have undertaken a review of the Pukekohe Arterials NoRs 1 – 8, on behalf of Auckland Council and Waikato District Council (in relation to NoR 8 only), in relation to the urban design and landscape assessments lodged with the NoR.
- 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 twenty 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 28 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. I have also reviewed a broad range of transport related notices of requirement.
- 1.5 I regularly assist councils with policy and district plan development in relation to growth management, urban design, landscape, character and amenity matters. This includes reviewing proposed NoRs. By way of example, between 2019 and 2021 I assisted Auckland Council with a review of the package of NoRs proposed by the Supporting Growth Alliance (the "SGA") relating to Drury arterials.

- 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:
- Urban Design Evaluation (September 2023) (“UDE”);
 - Landscape and Visual Effects Assessment (September 2023) (“LVEA”);
 - The proposed conditions for each NoR (as notified);
 - Submissions.
- 1.8 My review has also been informed by reference to: the AEE; the general arrangement layout plan for each NoR; and the Assessment of Operational Noise Effects . I note that the NoR is not limited to the design outcomes depicted in the general layout plans. However, these are helpful to understand the rationale for the NoR alignments and the extent of the corridors proposed.
- 1.9 I attended a project briefing and project-wide site visit on the 29th June 2023 prior to lodgement of the NoRs.

2 Technical Reports Overview

- 2.1 As set out in the Assessment of Environmental Effects (“AEE”), the NoRs seek to provide route protection for the transport network in and around Pukekohe. The need for these NoRs is driven by the rate and scale of committed development in the area, including the planned release of land for urban development by Auckland Council and the pressure from developers to accelerate urban growth.¹
- 2.2 Relevant to a consideration of urban design and landscape effects is the extended lapse timeframe of 20 years being sought for all the NoRs. The approach taken to the assessments provided to support the NoRs reflects the potentially long timeframe to implement the transport networks in environments that are likely to change significantly.
- 2.3 Within the Pukekohe Transport Network area there are a range of zones, which will influence the likely future environment relevant to the assessments. As set out in the AEE, where transport infrastructure is within Future Urban zones (“FUZ”), it is likely the construction of the infrastructure will occur ahead of, or in parallel to, the urbanisation of these areas. Accordingly, when considering the environment within which the effects of the construction and operation of the transport infrastructure is likely to occur, it is

¹ Section 3.4, p. 19, AEE

important to consider the likely future environment for specific NoR areas.² Where relevant, the urban land use patterns outlined in Auckland Council’s Structure Plans for the Pukekohe and Drury growth areas have been considered. The likely future environment assessments have also been guided by overlays within the Auckland Unitary Plan(Operative in Part) (“AUP:OP”) which identify features considered to be of high natural, cultural or heritage value.

Urban Design Evaluation

- 2.4 The UDE report sets out a clear and detailed analysis that, in my opinion, follows an appropriate methodology.
- 2.5 Section 1 of the report clearly identifies the purpose and scope of the assessment. Section 3 provides an overview of the proposed transport network covered by the 8 NoRs and largely summarises detail set out in the AEE.
- 2.6 Section 3 describes relevant documents that have informed the indicative design for the proposed transport network and the resulting NoRs. This includes:
- An evaluation against the SGA programme wide Te Tupu Ngātahi Design Framework (“Design Framework”);
 - The National Policy Statement on Urban Development 2020 (“NPS:UD”);
 - Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021;
 - At a local level, the AUP and the Waikato Regional Policy Statement (NoR 8 only), the operative Waikato District Plan (Franklin Section) (NoR 8 only) and the proposed Waikato District Plan (NoR 8 only).
- 2.7 Section 4 describes the existing and likely future environments for each of the NoRs using the approach set out in the AEE and described above.
- 2.8 Section 5 describes the methodology used for the evaluation, using the Design Framework as a way to structure the evaluation. Importantly, this section notes that the assessment goes beyond an assessment of effects, as required for the NoR process and identifies opportunities (that may be delivered by other parties) to achieve better urban outcomes relating to the transport network. The purpose of this is to identify where better transport and land use integration can be facilitated, resulting in better urban environments for future communities.

² Section 8.4, p.38, AEE

- 2.9 Section 6 sets out an assessment of urban design matters that are common to all the NoRs. This is followed by an assessment specific to each of the NoRs in Section 7.
- 2.10 Section 8 provides a summary of the assessment and recommendations of matters that should be addressed in an Urban and Landscape Design Management Plan (“ULDMP”) to be required for each of the NoRs through conditions but does not provide any comment about the content of the conditions proposed for each NoR.
- 2.11 The report is accompanied by two appendices. The first, Appendix A sets out in the Principles set out in the Design Framework. The second, Appendix B, contains maps for each of the NoRs spatially identifying the outcomes and opportunities identified in the assessment.

Landscape and Visual Effects Assessment

- 2.12 The LVEA also provides a clear and detailed analysis. In my opinion, the assessment methodology is consistent with the guidance provided in Tuia Pito Ora New Zealand Institute of Landscape Architects’ ‘Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines (2022) (“Te Tangi a te Manu”).
- 2.13 The Introduction section of the report (Section 1) sets out the purpose and structure of the report. In a similar vein to the UDE, Section 2 provides an overview of the proposed NoRs based on the description provided in the AEE.
- 2.14 Section 3 sets out the methodology used for the assessment and identifies the reference to various statutory and non-statutory documents in carrying out the assessment. The rating scale used both the assessment of landscape character effects and visual effects is consistent with that recommended in Te Tangi a te Manu. The assessment is divided into effects experienced at the construction phase and effects experienced at the operational phase (including proposed landscape mitigation measures). As the NoRs are for route protection and a long lapse time is proposed, it is difficult to determine the actual physical change that will occur both within the receiving environment and as a result of the construction of the transport network at the time of implementations. Assumptions made in the assessment are set out in Section 3.7. In relation to the timing of development and the character of the surrounding receiving environment, the assessment makes the assumption that the delivery of the transport network upgrades will likely occur at a similar time to development of the FUZ. Therefore, for NoRs that pass through FUZ zoned land, the assessment is made on the basis that the construction phase will occur in the existing environment (generally rural and urban fringe) and the operational phase will occur in the future urban environment. For those areas already urbanise or are planned to be in live urban zones, construction and operational phases are assessed as being in an urban environment. For areas with a rural zoning, construction and operation phases are assessed as being in a rural environment.

- 2.15 A description of the existing and future environment proximate to each of the NoRs is set out in Section 4. The descriptions are supported by a series of maps depicting the NoR boundaries overlaid on aerial photographs annotated with the AUP and WDP (for NoR 8) zones and relevant overlays. Photographs are also used to support the descriptions provided.
- 2.16 Section 5 identifies positive effects associated with and common to all the NoRs. Table 5-1 summarises which parts of each NoR relate to the different environments described above.
- 2.17 Section 6 contains the main assessment. It firstly provides a brief bullet point assessment of the types of effects common to all NoRs. These are addressed in more detail in relation to each of the proposed 8 NoRs. As noted above, for each NoR the assessment is divided into construction phase effects and operational phase effects, with an assessment of landscape character effects and visual effects provided for each. Each part of the assessment is summarised with a rating and included in a effects rating table.
- 2.18 Section 7 sets out recommendations to ensure adverse landscape effects are avoided, remedied or mitigated (general to all NoRs). These are organised in relation to construction effects and operational effects. The report recommends that the points are captured in a condition and used to inform the preparation of an ULDMP or Landscape Management Plan as the detailed design of the alignment is progressed. But it does not go on to provide any comment about the content of the conditions proposed for each NoR. In the following section I set out my review of the condition and make recommendations for amendments.

3 Key Issues - general

- 3.1 As noted above, I generally consider the NoRs are supported by robust urban design and landscape analysis. Section 6.1 of the UDA sets out an assessment of urban design matters common to all NoRs. Section 6.1 and 6.2 of the LVEA sets out a landscape assessment of construction effects and operational effects that relate to all NoRs. Having reviewed these and the matters raised in submissions, I consider there are a limited number of general issues that require further consideration.

Extent of Designation and Integration with Adjacent Land-use

- 3.2 The NoRs provide route protection for the intended upgrading of the arterial network. Actual works may not occur for some considerable time, with a 20-year lapse period being sought. While indicative designs have been prepared to inform the NoRs and the accompanying assessments of effects, they do not necessarily represent the final

design solution. The extent of the NoR boundaries enables flexibility to accommodate the outcomes sought for the road corridors and to accommodate the construction process. Condition 3 for each of the proposed designations requires the extent of the designation to be reviewed following completion of construction to identify areas no longer required for the on-going operation, maintenance, or mitigation of effects of the Project.

- 3.3 Given the extended timeframe for completion of works within the NoRs, this could present issues around the timing of development of adjacent land and achieving good integration between the upgraded streets provided for by the designations and adjacent properties. Ideally, construction of the new or upgraded streets would precede or at least be designed prior to urbanisation of surrounding land. However, as noted in the AEE, it is likely that urban development will occur adjacent to the proposed designations before the Project is implemented.³ This may result in a poor interface and integration between the urban environment and the adjacent street environment. I note that development is not precluded within the designation area with written approval from the requiring authority. However, as some uncertainty would remain regarding the area required for the street corridor and its final form, particularly ground levels, there remains a risk that poor integration could result. It is recommended that for each NoR the designation should occupy the minimum space necessary to accommodate the intended street corridor and to provide adequate space for ancillary construction areas.
- 3.4 Condition 10 for all the AT NoRs sets out requirements for a Land Use Integration Process (LIP). In my opinion this will go a considerable way to facilitating good communication between the requiring authority and surrounding land-owners as an appropriate mechanisms to enhance integration between projects. I note that a similar condition is not proposed for for the Waka Kotahi NoRs (2 and 8). The process required by this condition would also be beneficial in relation to these corridors (as discussed in the following section) and I recommend a LIP condition should be included.
- 3.5 Depending on the timing of the development of adjacent land, there is a risk of residual land following construction of the road corridor (such as areas required for construction layovers) will create redundant land parcels with limited scope to integrate well with surrounding areas. It would be helpful for the LIP to foreshadow the creation of these areas to facilitate suitable integration with adjacent development plans.
- 3.6 I note that the UDE recommends that “if practicable, opportunities should be explored at future detailed design stages to redefine and integrate residual land along the corridor frontage with the expected future land use function, for example the integration of works into the surrounding landscape and urban context”. I agree that this is an important consideration at the detailed design phase of the projects.

³ Section 11.13, p. 161, AEE

Land Modification and Integration with Surrounding Environment

- 3.7 In order to contribute to the functionality and character of the surrounding environment, the way landform modification required for the proposed transport network integrates with its surrounding context will be important. The UDE notes that “where new corridors are proposed, there are opportunities to further refine and minimise earthworks required as part of the future design stages”. It also recommends vertical integration adjacent to stream crossings and bridging structure to allow an appropriate transition and interface to adjacent built form where corridors are located in existing or future urban areas.⁴
- 3.8 I note that in urban environments, while the creation of extensive earth batters may be the most straight forward and cost-effective way to tie into existing land contours in the surrounding environment, they may frustrate the ability to achieve well-functioning urban environments through higher intensity of activity and the creation of positive interfaces between land-use and adjacent streets. The UDE makes a number of recommendations to consider different ways of achieving level changes at the detailed design phase in various locations for the various NoRs. I agree that the way levels transition should be suitable to the land-use pattern for the surrounding environment.
- 3.9 The LVEA also identifies that integration of development patterns (including topography and earthworks) will result in effects on landscape character⁵. In my opinion, landscape features such as streams and volcanic features exhibit particular sensitivity to change in surrounding landform. Careful consideration should be given to the detailed design of the transport corridors and the way changes in level are achieved in relation to these features.

Effects Resulting from Noise Mitigation Measures

- 3.10 The Assessment of Operational Noise Effects accompanying the NoRs has identified the likely need for noise mitigation beyond the use of low noise road surfaces for NoRs 2 and 8. Mitigation may include noise walls up to 2m high. The LVEA does not include any assessment of the potential landscape character and visual amenity effects resulting from such mitigation. While the proposed ULDMP requirements (Condition 10 for NoR 2 and 8) includes Clause (g)(D) “architectural and landscape treatment of noise barriers”, further analysis of the landscape effects resulting from such structures should be set out in evidence.

⁴ Point 1.3, p. 20, Urban Design Evaluation

⁵ Section 6.1, p. 62, Landscape and Visual Effects Assessment

Condition requiring Urban and Landscape Design Management Plan (ULDMP)

- 3.11 Each of the NoRs include a condition (Condition 11 for NoRs 1, 3, 4, 5, 6 and 7, and Condition 10 for NoR 2 and 8) that requires the preparation of a ULDMP prior to the start of construction for a stage of work.
- 3.12 The requirements of these conditions do not convey the specificity of recommendations made in both the UDE and the LVEA. It would be helpful for the witnesses to further explain how their recommendations are to be addressed. Given the route protection purpose of the NoRs for upgrading work that may not occur for some considerable time, I consider the generic nature of the conditions requiring the preparation of ULDMPs is generally appropriate. While not ‘place specific’, in my opinion, the requirements of the ULDMP are detailed and will enable relevant urban design and landscape considerations to be suitably addressed. However, I suggest a number of additions to address recommendations set out in the UDE⁶. In my opinion, sub-clause (f) could be helpfully expanded to add under (i):
- (ia) resolves any potential conflict between placemaking aspirations within local communities and the scale and operation of the Project.*
- (ib) enables buildings and spaces to positively address and integrate with the corridor.*
- 3.13 Appendix B of the UDE contains a series of Outcomes and Opportunities plans. These are helpful to spatially identify the recommendations made in the report. The plans also clearly identify and differentiate between recommended outcomes for the Project and associated opportunities that are not required to mitigate identified effects and may be implemented by other parties. I acknowledged that the construction within the designations may not occur for some time and there may be changes in the surrounding context. However, I consider these plans are very informative and, in my opinion, it would be helpful to reference these plans in the ULDMP condition. This could be achieved by amending sub clause (g) as follows:
- (g) With reference to the Outcomes and Opportunities plans included in Appendix B of the Urban Design Evaluation for the Notice of Requirement (September 2023), the ULDMP(s) shall include:.....
- 3.14 Section 7 of the LVEA sets out a number of recommendations in order to avoid, remedy or mitigate adverse landscape effects associated with the construction and operational phases of the Projects. In my opinion, the recommendation regarding the location and

⁶ Point 3.3, p. 23 Urban Design Evaluation

design of construction facilities is appropriate and should be captured in the ULDMP requirements⁷. Therefore, I recommend that sub-clause (f) is expanded to add:

Accommodates site compounds, construction yards, storage of construction machinery and any overburden in areas that are visually discrete (avoiding hilltops and ridgelines where practicable). As a minimum screening of these elements is required during the construction period.

4 NoR Specific Issues

- 4.1 In addition to the issues that are common to all NoRs discussed in Section 3, the following identifies issues specific to each NoR, having reviewed the UDE and LVEA. Comment is also provided on points raised in submissions.

NoR 1 – Drury West Arterial

- 4.2 Facilitating an active interface from adjacent land to the corridor is identified in the UDE as a key issue for resolution at the future design stages, together with refinement of the intersection design and scale⁸. I note that the extent of the designation boundary and the likely need for batter slopes (as depicted in the general arrangement layout plan) will present challenges to achieving this outcome, particularly adjacent to the ramping required to bridge the railway line and the extent and configuration of land proposed to tie into the Runciman Road roundabout.
- 4.3 As noted in the LVEA, the proposed alignment crosses multiple intermittent and permanent streams. The general arrangement plan indicates three bridge crossings. In my opinion, the requirements of the UDLMP are suitably robust to ensure the natural character values of the stream environments are maintained through the design of bridge structures and enhanced through mitigation planting. I agree with the assessment of landscape character and visual effects set out in relation to both the construction phase and the operational phase.

Submissions

- 4.4 I note that the corridor crosses the NIMT rail line and overlaps with the associated designation. The submission by KiwiRail supports the conditions relating to the requirements for the preparation of an UDLMP.

⁷ Section 7.1, p. 104, Landscape and Visual Effects Assessment

1.1 ⁸ Section 3.3, p. 29, Urban Design Evaluation

- 4.5 The submission by the McKean Family Trust raises concerns about the landscape and visual effects during construction and after development experienced from their property at 826 Runciman Road. Dense planting around the perimeter of this property will screen views toward the eastern extent of this road corridor where it ties in with the existing Runciman Road alignment. When considered in combination with the property's separation I consider adverse visual effects in relation to this NoR will be very low.

NoR 2 – Drury Pukekohe Link

- 4.6 NoR 2 is a Waka Kotahi designation. It is the longest and probably the most complex of the 8 designations, comprising four distinct segments that pass through a range of contexts. This is clearly described in both the UDE and the LVEA. The proposed designation will enable both upgrading of existing roads and new road alignments.
- 4.7 The proposed designation boundary is wide enough to provide flexibility to accommodate considerable earthworks. In particular, for Segment 1 (Drury South Connection) a large area of earthworks may be required in the vicinity of Ngakoroa Stream and at the intersections with Runciman Road and Burt Road. In my opinion, the requirements for the UDLMP are adequate to ensure a suitable design response is achieved. Given the likely continued rural zoning of the adjacent land to the South I consider the final road design will not create integration issues for future development of this land. As land to the north is zoned Future Urban between Burt Road and Runciman Road, particular care will be required to ensure a suitable interface is achieved.
- 4.8 For Segment 2 (SH22 Connection) a very wide corridor is proposed in the vicinity of Oira Creek and the crossing of the NIMT rail line to enable construction areas to be accommodated. The space within the designation will also provide space to enable mitigation works in relation to the Oira Creek environment. Given the likely continued rural zoning of the corridor and surrounding land, the extent of the designation corridor will not create issues around integrating with future adjacent land-use.
- 4.9 Similarly, Segment 3 (Drury – Paerata Link), passes through land that will likely remain in rural use. Largely running adjacent to and parallel with the NIMT rail line designation the final street design may result in redundant land between the two corridors. Further consideration should be given to how this land would be accessed and used.
- 4.10 Segment 4 (Paerata Arterial) will create the edge to the future urban environment immediately to the west. The northern portion of the designation will involve upgrading of existing streets with the southern portion comprising a new road alignment. At the northern end of the designation plans are well advanced for a new railway station (the Paerata Station) with likely future zoning accommodating urban intensity housing (THAB zone) immediately around this and transitioning to lower density housing (MHU). For this segment, ensuring an appropriate urban interface will be critical when

the road corridor is designed. The extent of the designation corridor, and requirements for extensive cut and fill, will present challenges to achieving a positive street interface. Further comment is made in response to submissions below.

Submissions

- 4.11 In addition to concerns raised about NoR 1, the submission by the McKean Family Trust raises concerns about the landscape and visual effects during construction and after development experienced from their property at 826 Runciman Road in relation to NoR2 (Segment 1). It would be helpful for the requiring authority landscape expert to provide an analysis of the visual effects experienced from this property in evidence.
- 4.12 A number of submissions question the route alignment in relation to the underlying topography and the resulting effects on existing properties, identifying loss of vegetation and light effects in the rural environment. These matters are addressed in both the UDE and LVEA. Additional analysis in relation to various submitter properties should be addressed in evidence.
- 4.13 The submission by KiwiRail supports the NoR and Condition 11 that sets out the requirements for an UDLMP. The submission by Paerata Farms raises a number of relevant urban design concerns, including the potential lack of integration with the Kiwirail concept plan for the Paerata train station, the creation of a 'no-man's land' adjacent to the northern roundabout in the vicinity of the station and potential poor integration of levels with a resulting implication on the area of land take required. Due to the large area of the designation and the long lapse period, the submission considers the designation will not enable a high quality urban environment to develop on the submitters landholding.
- 4.14 KiwiRail are well advanced with planning of the Paerata train station with construction currently underway. Further analysis should be provided in evidence to demonstrate how the proposed designation will ensure good integration with this important urban structuring infrastructure will be achieved. This includes a consideration of how level transitions can be achieved and surrounding land-use can be appropriately integrated. I note that unlike the AT NoRs, this NoR does not propose a condition setting out requirements for a Land Use Integration Process (LIP) (Condition 10 in NoRs 1, 3, 4, 5, 6 and 7). In my opinion, the requirements of the ULDMP set out in Condition 10 are not sufficient to address the fundamental integration concerns raised in this submission.

NoR 3 – Paerata Connections

- 4.15 NoR 3 is closely related to NoR 2 and provides local connections to the corridor to north and south of the Paerata train station with the northern connection crossing the NIMT rail line.

Submissions

- 4.16 The submissions by KiwiRail and Paerata Farms also relate to this NoR. Given the function and relationship of these local connections to the NoR 2 corridor, the issues raised above are also relevant to a consideration of this NoR. I note that Condition 10 (LIP) is proposed for this NoR. However, further analysis at this stage would be beneficial to demonstrate how the corridor will integrate with and contribute to the creation of an appropriate future urban environment in the area around the train station.

NoR 4 – Pukekohe North-East Arterial

- 4.17 NoR 4 will provide for a new road alignment providing a connection to the north east of Pukekohe. The existing and likely future environment is well described in the LVEA. The corridor passes through a complex landscape with an undulating topography including a number of streams and a volcanic tuff ring (not identified as and ONF or ONL in the AUP:OP). The alignment is proximate to an identified ONL (the Pukekohe East Tuff Ring) and a number of SEAs, with one extending into the designation area.
- 4.18 The existing land-use pattern includes a mix of rural and rural residential land-uses. In terms of the likely future environment, the Pukekohe-Paerata Structure Plan identifies a range of zones through the FUZ area including: Business: Light Industry, Business: Local Centre, and Residential, although the mid-section is expected to stay zoned Rural.
- 4.19 Formation of the route will require considerable land modification and structures to cross watercourses. I note the assessment of construction effects on landscape character and visual amenity set out in the LVEA as ranging from moderate-high to moderate. In my opinion, the requirements of the ULDM (Condition 11) are suitable to address the key issues relating to this NoR. This includes the design response to the various streams, landform modification and integration with adjacent land-use. As discussed in Section 3 above, the timing of development in the FUZ areas may present challenges to achieving good integration between the street environment and adjacent development. Condition 10 sets out a mechanism to facilitate discussion and co-ordination with adjacent property owners. I agree that when considering the likely future environment, the operational effects on the landscape character of the rural areas of the route will remain moderate adverse. For areas that are to be urbanised, with an appropriate design of the street corridor and its interface with adjacent land use, I agree that the adverse effects on the landscape character will be very low.

Submissions

- 4.20 The submission by Pukekohe Industrial Park and Storage questions the adequacy of the ULDM requirements to ensure an appropriate interface is created with the operational areas of commercial premises and suggests that further direction is required and suggests Condition 11(f) is expanded to ensure that effects on the

operation of commercial activities are appropriately managed. In my opinion, (f)(i) is adequate to enable appropriate consideration of the way appropriate integration is achieved. I also note the LIP requirements of Condition 10 to facilitate the creation of appropriate interfaces.

- 4.21 The submission by S. Ainsley notes support for the NoR and sets out the process to date for the design for residential development of the submitter's land adjacent to the roundabout at the southern end of the corridor (part of 87 and part of 131 Pukekohe East Road).

NoR 5 – Pukekohe South-East Arterial

- 4.22 NoR 5 comprises a combination of upgrading of existing road corridors and new corridors. With much of the corridor and its surrounding environment located within a FUZ zone, there will be considerable urban transformation in the area. This is signalled by the number of private plan changes in the area, with live zoning now confirmed in some areas (e.g. PC76). The characteristics of the existing and likely future environment is well described in the LVEA.
- 4.23 The LVEA notes that the alignment will require limited landform modification. However, the earthworks required to build up levels for crossing over the NIMT is noted. It is unclear from the assessment what height would be required to achieve suitable clearance of the rail corridor and Station Road and the associated landscape and visual effects that would be associated with this modification. While this portion of the alignment passes through an existing (west of the rail line) and likely future (east of the rail line) industrial area, which is less sensitive to visual change, it is also located adjacent to the Pukekohe Showground. It would be helpful to provide more detailed analysis in evidence. The UDE recommends that future design stages should address how the earthworks required provide vertical clearance of Station Road and the NIMT could be minimised, retained or otherwise configured to present an appropriate interface to the adjacent land uses⁹. I agree with that recommendation.
- 4.24 The underlying landform expresses former volcanic processes with the eastern and central sections of the alignment (spatially limited to Pukekohe East Road and Golding Road) located within the Roseville tuff ring south. This feature is not identified in the AUP:OP as an ONL or ONF. The eastern extent of the alignment extends into the edge of the Pukekohe East tuff ring. This feature is identified in the AUP:OP as an ONF. While the LVEA describes these features in Section 4.3.5 of the report, it does not provide an assessment of the landscape character effects in relation to the landscape values associated with these features. The relationship of various volcanic features in the wider area is depicted in Figure 4-3 of the LVEA. In my opinion, the existing street network provides modification to the volcanic landscape and the remnant features are

⁹ Section 7.5, P. 48, Urban Design Evaluation

not easily distinguished in the wider landscape. In my opinion, the proposed alignment will not diminish the landscape values derived from these features. The requirements of the UDLMP (Condition 11) provide the opportunity to reinforce the volcanic landscape values of the area through elements such as appropriate planting.

Submissions

- 4.25 A number of submissions, including those by EnviroNZ Services Ltd., S. Zheng and OMAC Ltd. and Next Generation Properties Ltd., express concerns about both the alignment and the wide extent of the designation footprint to provide flexibility to accommodate batter slopes, and the resulting implications for surrounding land use. This issue is discussed in Section 3 above.
- 4.26 The submission by Kevin Golding notes the location of mature native vegetation on the property at 97 Golding Road, including a 100 year old Kauri tree located within the designation boundary. The LVEA notes that the extent of vegetation removal in association with NoR 5 is likely to be limited to short sections along the existing road alignment, with the wider vegetation patterns remaining intact¹⁰. I note that the arboricultural review carried out by Arborlab for the Council has only identified vegetation within the road reserve as being protected in the AUP. However, further analysis of the vegetation identified and its contribution to the landscape values of the area and the effects on those values from removal of vegetation within the designation should be carried out and set out in evidence.
- 4.27 The submission by Aedifice Development No. 1 Ltd. raises concerns about the extent of the designation footprint in relation to the property at 2 and 19 Golding Road. This land has recently been live zoned as Residential: Mixed Housing Urban (“R: MHU”). The submission highlights the implication the designation will have on the ability to accommodate residential development in this area and considers the proposal will reduce the amenity of the neighbourhood rather than contributing to it. Further urban design and landscape analysis should be provided to demonstrate the implications of the designation footprint on future residential use of this property (having regard to the AUP Pukekohe East – Central Precinct Plan) and to demonstrate whether a smaller designation footprint can be achieved through an alternative intersection design than the one depicted in the general arrangement plans.
- 4.28 The submission by KiwiRail highlights potential design challenges to spanning the NIMT railway line. These design constraints should be taken into account when responding to the point raised above, requesting further assessment regarding requirements and effects associated with bridging the railway line and Station Road.

¹⁰ Section 6.3.5, p. 88

NoR 6 – Pukekohe South-West Upgrade

- 4.29 NoR 6 applies to small discrete areas within the existing Pukekohe street network to enable improved functionality. The established urban environment passes through industrial and residential areas.
- 4.30 The required upgrading works will largely be accommodated within the existing road reserve so, while there will be some change in character, the extent of change outside the existing corridor will be limited.
- 4.31 The proposed designation impacts on the site that accommodates the Nehru Hall (on the corner of Ward Street and Puni Road). The hall is a scheduled historic place. In addition to its heritage values, the building makes a contribution to the neighbourhood character. In my opinion, the requirements of the UDLMP enable suitable consideration to ensure an appropriate relationship between the street environment and this site is achieved.

Submissions

- 4.32 The submission by E. and B. McIntyre raises concerns about the effect of the proposed designation boundary location on the amenity of their property at 1 Ward Street and particularly the view from their dwelling. The submission seeks a reconsideration of the intersection design to avoid the requirement to widen the road corridor. A more detailed analysis of the amenity effects in relation to this property should be set out in evidence.

NoR 7 – Pukekohe North-West Arterial

- 4.33 This designation ties into and upgrades existing roads (Helvetia Road and Butcher Road) at either end of the alignment with a new corridor created between. While currently accommodating a mix of rural, rural residential and light industrial activities, the corridor is fully located within a FUZ zone and will likely undergo urban transformation.
- 4.34 The UDE notes that a key focus area within the designation that requires further resolution in future design stages relates to the corridor sections within areas anticipated for future residential use. It highlights the issue presented by areas where significant earthworks are proposed, noting the need for transitions and consideration of the interfaces created with future residential and industrial land uses¹¹. In relation to this point, I note that the designation is particularly wide in areas to accommodate significant batter slopes. In relation to the future urban environment and the resulting visual effects resulting from the road alignment and extent of land modification required,

¹¹ Section 7.7, p.59, Urban Design Evaluation

the LVEA recommends that the design should work and integrate with the surrounding topography and improved visual amenity and user experience associated with the corridor.¹²

- 4.35 As noted in the LVEA, the southern end of Helvetia Road is located within the Helvetia tuff ring. However, this volcanic landform is not identified as an ONF or ONL in the AUP:OP. While the construction effects on landscape character notes the requirements for earthworks (fill) along the Helvetia Road alignment, there is no assessment provided in relation to the effects on this volcanic landform. Given the existing modified nature of the landform, I consider the contribution it makes to the landscape character of the existing environment will not be significantly affected by works enabled by the designation.

Submissions

- 4.36 The submission by D. and L. Morrison raises concerns about the ability to develop their property at 17 and 17a Butcher Road, in accordance with the likely future urban zoning as indicated in the Pukekohe-Paerata Structure Plan. Similar concerns are raised by D. and T. Polwart who own 36 and 62 Butcher Road. Further urban design analysis of the potential future use of properties in relation to the designation boundary should be set out in evidence.
- 4.37 The submission by R. Burns raises concerns about the effects of the designation alignment on the current use of his farm and associated dwelling at 106 Beatty Road. Further detailed assessment of the visual effects experienced from the dwelling on this property should be set out in evidence. In relation to future development of the property, I agree with the observation in the submission that the appropriate edge between residential and business zoning would be along the new road alignment.

NoR 8 – Mill Road and Pukekohe East Upgrade

- 4.38 NoR 8 is a Waka Kotahi designation that is proposed to provide a strategic connection between Auckland and Waikato and from State Highway 1 to Pukekohe urban areas for general traffic and freight, and providing an active mode connection. It involves an upgrade of Pukekohe East Road and Mill Road. This NoR interfaces with NoR4 (Pukekohe North East Arterial) and Nor 5 (Pukekohe South East Arterial). The Auckland/Waikato district boundary is located along the central portion of the NoR.
- 4.39 As noted in the LVEA, the proposed alignment will require land modification and associated vegetation removal to achieve a widening of the existing road corridor. The existing road has established a modification to the underlying landform. This includes the Pukekohe East tuff ring (identified as an ONF within the AUP:OP) that extends to

¹² Section 6.3.7, p. 96, Landscape and Visual Effects Assessment

the north and south of Pukekohe East Road and is a distinctive geological and topographical feature. The existing road alignment crosses the southern extent of the ONF overlay. I agree with the assessment set out in the LVEA¹³ in relation to the potential landscape effects resulting from the formation of the road within the designation corridor on this feature. In my opinion, the requirements of the UDLMP (Condition 11) are suitable and will need to be carefully considered to ensure an appropriate design response is achieved in this area. I agree with the overall conclusion that moderate temporary adverse effects on the landscape character of the area will result during the construction phase of the project. Further assessment in relation to scheduled vegetation is set out in the Arboricultural Assessment.

- 4.40 The proposed designation boundary is particularly wide in the area proposed to accommodate the Mill Road wetland stormwater facility. The LVEA notes that construction of the wetland will require cut and fill. However, the assessment considers its formation will not introduce an unexpected element into the rural environment¹⁴. In my opinion, suitable design of the wetland, together with associated planting (as required by the ULDMP), has the potential to enhance the landscape values of the existing wetland and its relationship to existing vegetation within the Mill Road Esplanade Reserve to the north.
- 4.41 In relation to visual effects experienced during construction, the LVEA notes that for properties along Pukekohe East Road and Mill Road that have houses near the existing roads, removal of existing vegetation will open up views towards the works, resulting in adverse visual effects (assessed in the LVEA as low-moderate reducing to low during the operational phase as mitigation planting becomes established).

Submissions

- 4.42 The submission by R. Cunningham raises concerns about the effect of visual pollution on their property at 80 Mill Road. This property is located in the Waikato District. The dwelling on this property has a generous setback from the proposed designation. However, a more detailed assessment of visual effects experienced from this property should be set out in evidence.

¹³ Section 6.3.8, p. 97, Landscape and Visual Effects Assessment

¹⁴ Section 6.3.8, p. 99, *ibid.*

5 Conclusions

- 5.1 The proposed suite of 8 road designations will provide for significant upgrading of the transport network around and through the rapidly urbanising Drury, Paerata and Pukekohe. The key objective of the Project is to protect land for the future implementation of the required strategic transport corridors/infrastructure.
- 5.2 As the requiring authorities (AT and WK) envisage that the network will be delivered over a considerable timeframe, an extended lapse period of 20 years is being sought.
- 5.3 The NoRs are supported by a detailed UDE and LVEA that follow suitable methodologies. In relation to urban design and landscape considerations (which overlap in their scope) my review identifies two key issues common to all the NoRs. The above review discusses and highlights the issues relating to the extended lapse period being sought and the extent of the designations proposed in order to provide flexibility for route protection and the implications this will have on achieving integration with surrounding land use. The second, and related issue, is the extent and scale of earthworks required to achieve the proposed transport routes and the implication this will have on achieving good integration with surrounding (particularly) urban environments. While the AT NoRs include a condition requiring a LIP, the two Waka Kotahi NoRs do not. I recommend that such a condition is also included for NoR 2 and 8 as the issue of achieving good integration is also relevant to these two corridors.
- 5.4 Given the route protection purpose of the designations, the primary method for addressing the issues raised is the requirements for the preparation of UDLMPs for the NoRs as detailed proposals are designed. The suitability of this requirement is discussed in the review.
- 5.5 The review also addresses considerations specific to each of the NoRs having regard to matters raised in submissions. Requests for further detailed analysis to be provided in evidence is set out in the discussion for each NoR.



Rebecca Skidmore

Urban Designer/Landscape Architect

14 December 2023

Arboricultural Memorandum

Prepared for: Joe McDougall
Auckland Council – Plans and Places
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Head Office
76D Paul Matthews Road,
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Date: 06 December 2023

Re: Arboricultural Assessment of 8 NOR's for
the Pukekohe Transport Network

Job Ref. 37936

1. Introduction

- 1.1 Auckland Transport and Waka Kotahi have collectively lodged a package of eight Notices of Requirement referred to as Pukekohe Transport Network. The Notices of Requirement (NOR's) are to designate land for the future construction, operation and maintenance of transport infrastructure in the Pukekohe, Paerata and Drury areas of Auckland. One of the NOR's also includes a portion of road within the Waikato region (NOR8). A full description of the proposal is provided in the information package submitted.
- 1.2 This memorandum is provided as specialist arboricultural advice for the planners preparing the s42a report for the NOR's.
- 1.3 In preparing this memorandum, the following documents have been reviewed:
 - Pukekohe Transport Network Assessment of Arboricultural Effects, prepared by Craig Webb, dated September 2023
 - Pukekohe Transport Network *Assessment of Effects on the Environment* (Version 1.0) prepared by Alicia McKenzie, Vicky Hu, Helen Hicks and dated 13/09/2023.
- 1.4 Whilst reviewing those documents I also reviewed each of the relevant general arrangement plans for each of the NOR's.
- 1.5 I also attended the project briefing at the Te Tupu Nga Tahi offices and the project-wide site visit on the 29th June 2023.



2. Qualifications and Experience

- 2.1 My full name is Leon Saxon.
- 2.2 I am a Senior Consultant Arborist employed by Arborlab Ltd, 76D Paul Matthews Road, Albany, Auckland 0632.
- 2.3 Arborlab is one of New Zealand's leading green space asset management specialists. One of its services to provide arboriculture services relating to all aspects of tree management from practical arboriculture and legal government processes to complex risk analysis and assessment and providing expert witness services.
- 2.4 I have been employed by Arborlab since March 2016. I assess and provide specialist input into resource consent applications and prepare arboricultural reports to support resource consent applications for large infrastructure projects.
- 2.5 I hold a Diploma in Arboriculture from Wintec, the Waikato Institute of Technology. I am also a registered user of the Quantified Tree Risk Assessment System and a qualified International Society of Arboriculture Tree Risk Assessor.
- 2.6 I have over 25 years' experience specialising in arboriculture.
- 2.7 I spent six years working for Auckland Council as an arborist in the Resource Consents and Compliance Department (North).
- 2.8 Since 2016, I have provided specialist input to resource consent applications on a consultancy basis to the Auckland Council Consents and Compliance Department as an employee of Arborlab.
- 2.9 I also I have experience in providing expert evidence in relation to major roading projects (Auckland's Eastern Busway) and cycle paths/shared paths (Glen Innes to Tamaki Drive Shared Path and Te Whau Shared Path).



3. Key Arboricultural Issues

- 3.1 The land that the proposed designations cover are a variety of land-use types, with the vegetation present generally correlating with those land-uses. The zoning of land that the designations cover ranges between Countryside Living, Mixed Rural and Future Urban Zone (FUZ).
- 3.2 The majority of trees located within the proposed designations are not protected by current DP rules, but rather by RP rules. The tree protection relating to the rural areas is generally due to being located within rural zoned areas measuring greater than 6m in height or 600mm in girth. Within these rural zoned areas and Future Urban zoned areas, trees located within the road reserve are able to be removed as a Permitted Activity (E26.4.3.1[A90]). As the land-use changes and these areas become residential zones, the trees that are currently protected by RP rules within the sites will become unprotected, while the trees within the road reserves become protected (when measuring greater than 4m in height or 400mm in girth).
- 3.3 Only two of the NOR areas contain trees currently protected by DP rules, NOR5 and NOR8. These trees are protected by virtue of being located in road reserve (adjacent to residential zoned land), being located within an Outstanding Natural Feature (ONF) or being a scheduled notable tree.

4. Relevant Auckland Unitary Plan Rules – Vegetation

- 4.1 I have reviewed the rules that have been set out in Table 3.1.3 and Table 3.1.4 of the Assessment of Arboricultural Effects. I concur that the rules that have been outlined are relevant to the proposal and are the correct planning mechanism with regards to the Notice of Requirement.

5. Adequacy of Information

- 5.1 The arboricultural report is considered to have utilised suitable methodologies for obtaining the relevant arboricultural data to inform the assessment of effects. The information provided is considered to be sufficient to allow an informed assessment.



6. Assessment

NOR 1

6.1 No trees protected by the DP provisions affected within or adjacent to the designation boundary.

NOR 2

6.2 No trees protected by the DP provisions affected within or adjacent to the designation boundary.

NOR 3

6.3 No trees protected by the DP provisions affected within or adjacent to the designation boundary.

NOR 4

6.4 No trees protected by the DP provisions affected within or adjacent to the designation boundary.

NOR 5

6.5 This area contains two groups of trees protected by the DP provisions growing within road reserve, between the footpath and private properties to the North of Pukekohe East Road. The trees are protected by virtue of being located within road reserve and the adjacent residential land zoning. Species include, pūriri, totara and pōhutukawa. The trees are not located within the designation but have root zones extending into it. Notwithstanding this, the proposal involves widening the road on the southern side for active mode transport. As such, the design does not impact on the identified trees.

NOR 6

6.6 No trees protected by the DP provisions affected within or adjacent to the designation boundary.

NOR 7

6.7 No trees protected by the DP provisions affected within or adjacent to the designation boundary.

NOR 8

6.8 There are a number of trees and groups of trees within NOR8 and covered by a Outstanding Natural Feature Overlay (ONF) affected by the proposal. The trees are well described at section 6.2.2 of the arboricultural assessment of effects report.



- 6.9 Three notable tree listings are located within or adjacent to the NOR8 boundaries.
- 6.10 This includes one Norfolk Island Pine and one English oak at 60 Morgan Road, listed as Notable Tree Schedule 2785. The listing is somewhat ambiguous, as there are three similarly aged and sized Norfolk Island pine trees on the property. Nevertheless, the design poses minimal risk to the trees.
- 6.11 A mature pūriri at 203 Mill Road, Notable Tree Schedule 2705 is identified as potentially requiring a portion of its root zone removed. It has been identified as likely requiring removal.
- 6.12 A redwood tree located at 165C Mill Road, Notable Tree Schedule 686 will be located within the designation and may require works within its root zone.
- 6.13 A solitary totara tree located on the southern side of Pukekohe East Road which is located within Waikato Regional Council land requires removal. The tree is protected under the Waikato District Plan.

7. Proposed Conditions of NOR

- 7.1 To identify existing trees protected under the District Plan, and suitably manage potential adverse effects to those trees, a condition of consent requiring preparation of a Tree Protection Management Plan (TMP) has been recommended by the Requiring Authority as part of a suite of conditions. As set out in the information package submitted, the condition is only applicable to the Designations which currently have trees protected by District Plan provisions (NOR5 and NOR8).
- 7.2 Given the timeframe for the likely construction associated with some of the designations, it is considered that there is potential for trees to become protected between the time of designation and construction. This could occur through the growth of trees, or through changes in adjacent land zoning.
- 7.3 As such, it is considered that the condition for preparing a Tree Protection Management Plan should apply to all of the designations.
- 7.4 A condition is also proposed for the preparation of an Urban and Landscape Design Management Plan for each of the designations. The wording of the condition is considered suitable for ensuring that mitigation planting is carried out to a good standard.

8. Submissions

- 8.1 I have reviewed the submissions and did not note any that raised any significant issues regarding trees currently protected by DP rules.



9. Conclusions and Recommendations

- 9.1 Overall, there are no arboricultural reasons to oppose the NOR's.
- 9.2 The majority of the trees within the proposed designations are not protected by provisions of the District Plan.
- 9.3 Where the condition requiring provision of a Tree Management Plan have been applied, this will ensure that detailed design takes consideration of existing tree features. This condition should be applied to all of the designations, to allow for changes in tree stock and changes in land zoning.

Technical memorandum

Notices of Requirement for works NoR1 to NoR8: Archaeology

To: Karen Bell, Consultant Planner to Auckland Council

And to: Joe McDougall, Policy Planner, Auckland Council.

From: Myfanwy Eaves, Senior Specialist: Archaeology, Cultural Heritage Implementation, Heritage Unit, Auckland Council.

- | | |
|-------------------------------|---|
| 1. Application details | Route protection for planned future growth of Pukekohe, Paerata and Drury. The application includes provision for improved walking, cycling, public transport, and general traffic connections. |
| Applicant's name: | Te Tupu Ngātahi Supporting Growth Alliance, Auckland Transport (AT) and Waka Kotahi (NZTA) |
| Application number: | NoR 1 Drury West Arterial (AT); NoR 2 Pukekohe Link (NZTA), NoR 3 Paerata Connections (AT), NoR 4 Pukekohe NE Arterial (AT), NoR 5 Pukekohe SE Arterial (AT), NoR 6 Pukekohe SW upgrade (AT), NoR 7 Pukekohe NW upgrade (AT), NoR 8 Mill Road and Pukekohe east upgrade (NZTA)(also includes Waikato District Council portion). |
| Activity types: | Various |
| Site address: | Franklin Local Board area |

2. Introduction

Qualifications and relevant experience

- 2.1. My name is Myfanwy May Eaves, and I am a Senior Specialist Archaeology at Auckland Council (**Council**).
- 2.2. I have a Bachelor of Arts (BA) and Master of Arts (MA) (Hons) from Auckland University in Anthropology and Chinese. I also have a Master of Social Sciences (MSocSci) (IA) from the University of Birmingham, United Kingdom in Industrial Archaeology.
- 2.3. In my current role, which I have been in for nine (9) years, I am required to undertake technical reviews of resource consent applications and Notices of Requirement. I also provide advice and subject matter expertise assessments to Council officers on matters relating to archaeology and historic heritage.
- 2.4. Prior to my time at the Council, I studied and worked in archaeology in New Zealand and overseas in several locations: Australia, mainland China, England and Wales. In addition, I have worked as a museum collections manager in Auckland (Auckland Museum) and Australia (Sydney, PHM/MAAS), and therefore understand the care and documentary progression of objects (and sites) from discovery to storage and display extremely well.

- 2.5. I am a member of the New Zealand Archaeological Association (**NZAA**), the International Council on Monuments and Sites NZ/ Te Mana o Nga Pouwhenua o Te Ao (**ICOMOS NZ**) and the Australasian Society for Historic Archaeology (**ASHA**).
- 2.6. I attended the Project site visit on 29 June 2023, provided by Te Tupu Ngātahi Supporting Growth Alliance. I am generally familiar with most of the area.

Expert Witness Code of Conduct

- 2.7. I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. Other than where I state that I am relying on the advice of another person, this evidence is within my area(s) of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express. I have qualified my evidence where I consider that any part of it may be incomplete or inaccurate, and identified any information or knowledge gaps, or uncertainties in any scientific information or mathematical models and analyses that I am aware of, and their potential implications. I have stated in my evidence where my opinion is not firm or concluded because of insufficient research or data or for any other reason and have provided an assessment of my level of confidence, and the likelihood of any outcomes specified, in my conclusion.

3. Overview and scope of technical memorandum

- 3.1. The Applicant, in its capacity as a requiring authority, has given notice to the Council of its requirement for designations to develop, construct, operate and maintain the necessary structures and facilities for:
- **NoR 1 Drury West Arterial (AT)** - A new transport corridor with active mode facilities in Drury West extending south from the intersection of SH22 and Jesmond Road to the edge of the Future Urban Zone near Runciman Road, Drury.
 - **NoR 2 Pukekohe Link (NZTA)** - A new state highway including a shared path. It includes sections of new and upgrades of existing transport corridors from Great South Road, Drury in the north-east, connecting to State Highway 22 in the west, and the area in the vicinity of Sim Road/Cape Hill Road, Pukekohe in the south. Documentation is included with NoR1.
 - **NoR 3 Paerata Connections (AT)** - Two new transport corridors including active mode facilities: One new connection between the existing Sim Road (south) and the Paerata Rail Station. The second new connection between the two extents of Sim Road across the NIMT
 - **NoR 4 Pukekohe NE Arterial (AT)** - A new transport corridor including active modes from SH22, Paerata in the north-west to Pukekohe East Road, Pukekohe in the south-east.
 - **NoR 5 Pukekohe SE Arterial (AT)** - A new and upgraded transport corridor in Pukekohe including active mode facilities. It upgrades part of Pukekohe East Road and Golding Road and a new connection between Golding Road (north of Royal Doulton Drive) and to Svendsen Road across Station Road and the NIMT.
 - **NoR 6 Pukekohe SW upgrade (AT)** - The upgrade of specific intersections and regrade of driveways on Nelson Street, Ward Street, West Street and Helvetia Road for active mode facilities.
 - **NoR 7 Pukekohe NW upgrade (AT)** - The upgrade of Helvetia Road, Pukekohe in the south-west and a new corridor from Helvetia Road to SH22 Paerata in the north-east with active mode facilities.
 - **NoR 8 Mill Road and Pukekohe east upgrade (NZTA)** - An upgrade of Mill Road (Bombay) in the east for additional vehicles lanes and shared path, and Pukekohe East Road, Pukekohe in the west for a shared path. A portion of the application is contained within Waikato District Council as DES0006/24.
- (the NoRs).**

- 3.2. The NoRs were publicly notified on 2 October 2023, and submissions closed on 13 November 2023.
- 3.3. I have reviewed the documentation provided for this application, specifically, *Pukekohe Transport Network Assessment of Effects on Historic Heritage*, September 2023 by Matthew Campbell of CFG Heritage Limited.¹
- 3.4. As a result, I made no Section 92 request for further information. I concur with statements made by Mr Campbell, applicant’s archaeologist.²
- 3.5. I note that as part of the assessment by Campbell, several sites are recorded close to the proposed designations but were subsequently avoided through the Multi-Criteria Assessment (MCA) process,³ redesigning elements away from the historic heritage sites. Avoidance of historic heritage is considered the best form of protection and enhancement of the historic heritage resource under the RMA; we appreciate this approach by the applicant.
- 3.6. I initially reviewed the draft NoRs in October 2023 and confirmed (to the council planner) at that time that there were only TWO recorded historic heritage sites within the Project area and only one of these was identified in Schedule 14 Historic Heritage Schedule to the Auckland Unitary Plan – Operative in Part (**AUP OIP**).
- 3.7. The two historic heritage sites identified by Campbell are:
 - **NoR 6** will encroach into the extent of place of the scheduled Historic Heritage Site *Nehru Hall* (# 2235). The proposed designation also includes temporary use of land for construction works including laydown area. This will affect the brick gateway which is built from the same Huntly bricks as the hall and is assumed to also date to the time of its construction in 1953.⁴
 - **NOR 8** The *Bombay Flour Mill (or Pilgrim’s Mill)*, recorded in the SRS as R12/1208, is in or adjacent to NoR 8. The mill building is probably outside the designation, but features associated with it probably extend into the designation (ibid).
- 3.8. Other than where stated above and for which additional information has been provided, from a historic heritage perspective, I am satisfied that all matters have been addressed in the assessment by Campbell.⁵

4. Statutory considerations

Auckland Unitary Plan (Operative in Part)

- 4.1. I have examined the Project against the following relevant provisions of the AUP-OP:
 - a. Chapter D17 Historic Heritage Overlay and Schedule 14.1 Historic Heritage
 - b. Chapter E11 Regional Land Disturbance
 - c. Schedule 10 Notable Trees
 - d. B5 Regional Policy Statement for Historic Heritage, and
 - e. Chapter E26 Infrastructure.

¹ This document is included with each suite of NoR documents.

² Campbell 2023.

³ Campbell 2023, Section 4.1.7, page 19.

⁴ Campbell2023:19-22.

⁵ Ibid, see footnote 1.

4.2. Overall, I consider the Project to be consistent with historic heritage provisions of the AUP OIP 10 November 2023.

Other statutory documents

4.3. I am familiar with the HNZPT Act 2014, including the sections relating to the process for obtaining archaeological authorities and, as the Applicant has agreed to obtain an Authority from HNZPT, I am satisfied that the proposal is consistent with this Act. Please note the requirement in the Act requiring a stand down period following the granting of an authority and *before commencing* any work on site.

5. Relevant Submissions

5.1. In total, 124 submissions were received for the eight (8) NoRs.

5.2. With reference to Historic Heritage⁶, there were three (3) submissions, all from Heritage NZ Pouhere Taonga (HNZPT). These submissions were contained in NoRs 4, 6 and 8. HNZPT oppose NoR 6 and support NoRs 4 and 8. Each submission is addressed below.

5.3. In the submission for **NoR 4**, HNZPT express concerns regarding two potential pre-1900 villas⁷; NoR is otherwise supported. The submission refers to section 11.10.1.2 in the AEE where NoR-specific construction effects are identified, and inclusion of the following matters in the HHMP are supported:

Item	NoR4 Matters of concern	Remedy requested
1.	Property ID# 608433, Part Lot 30 DP 10637: 199 Paerata Road	Additional research required to assess and clarify if residence is pre- or post-1900 in origin.
2.	Property ID# 608752, Part Allot 30 PSH OF Pukekohe, 131 Pukekohe East Road	Additional research required to assess and clarify if residence is pre- or post-1900 in origin.

5.4. HNZPT also advise (point 10):

...Te Tupa Ngatahi’s recommended wording of draft Condition 22 HHMP, in particular the reference to obtaining an Archaeological Authority under the HNZPTA in point 22(b), and the use of the term ‘unexpected’ in point 22(b)(IX)C.

5.5. The Heritage Unit do not support the replacement of the term “accidental” with ‘unexpected’ as stated in Condition 22(b)(IX)C. This term has no basis in the existing statutory framework and will give rise to confusion between all parties, particularly mana whenua, contractors and subcontractors.

5.6. Moreover, it conflicts directly with the agreed text in Waka Kotahi NZTA’s own P45 Standard and the AUP Accidental Discovery Rule, part of the Auckland Unitary Plan since 2016.

5.7. Changes to text and terminology should be referred to Commissioners during appropriate Statutory reviews and not attempted through other means as they divert attention from Historic Heritage matters.⁸

⁶ RMA Part 1 s2 Interpretation

⁷ Paragraph 12, HNZPT submission (#5) to NoR4.

⁸ See footnote 5.

5.8. A significant matter for concern is the submitter’s statement, between points 12 and 13 of their submission, that:

“Heritage New Zealand seeks the following decision from Council”

5.9. This statement demonstrates the submitter’s misunderstand on the NoR process. Council does not make any decision regarding this, or any NoR application. Council *processes* documentation and Independent Commissioner(s) make *recommendations* to applicants (in this instance NZTA and AT). HNZPT (the submitter) can make application to Waka Kotahi and AT regarding any *decision* those parties make as a result of this NoR process.

5.10. Other than the above issues, I agree with the submitter’s concern around unknown historic heritage across the application area, including pre- or post-1900 residences.

5.11. In submission for **NoR 6**, HNZPT express concern regarding the proposed use of the Nehru Hall property as a work base or site, and the encroachment of the proposed Designation (and implied construction effects) immediately adjacent an unreinforced masonry building.⁹ The NoR is opposed by HNZPT:

Item	NoR6 Matters of concern	Remedy requested
3.	Property ID# 609265, Part Lot 3 DP 887, 59 Ward Street, Nehru Hall. Recommendations in the AEE and supplied conditions do not fully consider or mitigate the known effects that will result from NoR6 on the Nehru Hall and its extent of place	Reconsider the proposed encroachment within the AUP Extent of Place for the Scheduled site. Provide clear mitigation for the known effects that will result from the removal of the gateway entrance and the placement of a major intersection adjacent to Nehru Hall. Work site placement also of concern.

5.12. HNZPT state that the national level importance of this place as it is the site of the very first hall owned and built by the Indian community in Aotearoa New Zealand. The formal entrance from Ward Street has remained unchanged since construction and the setbacks from both sides or the corner form an original spatial relationship between the Hall, the gateway, and the property in general (ibid).

5.13. They request further analysis to determine actual effects and how to mitigate those effects. This matter will be discussed by my Built Heritage Team colleague, Dan Windwood.

5.14. While not part of my subject matter expertise, I concur with this request for further analysis of the effects on AUP Schedule 14.1 #02235, Nehru Hall (and Extent of Place)

⁹ Paragraphs 13-18, HNZPT submission (#8) to NoR6.

at 59 Ward Street, Pukekohe.¹⁰ As this site is scheduled Category B without an identified Primary Feature, all parts are of equal significance.

- 5.15. Additional consultation with and approval from the relevant parties could provide viable alternatives, including identifying a more appropriate work site.
- 5.16. As stated above at 5.8 and 5.9, this NoR application will not be decided by Council.
- 5.17. HNZPT replicate item 5.5 above, the matter will not be repeated only to indicate the inconsistency of the replacement of “Accidental” in an arbitrary and inconsistent manner - in the HNZPT submission the existing statutory sentence at the end of the condition set of point 22 has been copied across:

Accidental Discoveries Advice Note:

*The requirements for **accidental discoveries** of heritage items are set out in Rule E11.6.1 of the AUP.*

- 5.18. The submitter’s (HNZPT) proposed condition for the Nehru Hall (Condition 22 (b) (x)) is appreciated and in general supported; however, I leave any response regarding direct impacts on the building to council’s Built Heritage specialist, Dan Windwood.
- 5.19. In the submission for **NoR8**,¹¹ HNZPT approves of the mechanisms listed in the AEE and condition set and the NoR is supported.

Item	NoR8 Matters of concern	Remedy requested/endorsed
4.	Bombay Flour Mill / Pilgrims Mill (NZAA R12/1208), 144 Mill Road, Bombay . ¹²	Application for Archaeological Authority to allow destruction of any physical remains. ¹³
5.	Possible pre-1900 villa at 188 Mill Road , ¹⁴ Bombay and associated sub-surface remains	Additional research required to assess and clarify if residence is pre- or post-1900 in origin.

- 5.20. As at 5.5 and 5.17, the submitter (HNZPT) draws attention again to the change in statutory terminology. Condition 21 (b)(iii) in the HHMP should be returned to *accidental* in order to maintain consistency with all other statutory frameworks rather than the introduction of the new term “unexpected”.
- 5.21. As stated above at 5.8 (and 5.9) and 5.15, this NoR application will not be decided by Council.
- 5.22. The two errors discussed above have legal implications and require rectification.

¹⁰ Part Lot 3 Deeds 887, Category B, scheduled for A (historical) ,B (social) and F (physical attributes).

¹¹ Paragraphs 9-11, HNZPT submission (#11) to NoR8.

¹² Property ID#11332397 (AC GeoMaps)

¹³ Note: Controlled archaeological investigation (of buildings, structures, or earthworks) is *replacement by record* - the archaeological place is not preserved through this process but replaced by creating a sub-set of the archaeological place.

¹⁴ Property ID#11305495 (AC GeoMaps), PT Allotment 27 Parish Mangatāwhiri District.

6. Affected Parties

- 6.1. I consider the Franklin Heritage Forum¹⁵ to be affected parties to all NoR.

7. Suggested Conditions

- 7.1. The Requiring Authorities have presented these and have approached Council to discuss these further. This proposed discussion (December 2023 to be confirmed) is appreciated.
- 7.2. I do not support the Requiring Authorities (and HNZPT endorsed) change of wording to the HHMP condition discussed above at 5.5, 5.17 and 5.20. This single word change to “unexpected” from the industry standard “accidental” recent and the Heritage Unity consider it implemented without appropriate advice.
- 7.3. HHMP condition (c) applies to RMA Part 3 s35, *Duty to gather information, monitor and keep records*. To achieve this Duty, a specific role should be identified rather than the current “copies of all reports to be submitted to the Manager.” As this condition is within the HHMP, it is logical to insert a term that clarifies this role to be “Manager Monitoring (for Heritage)”.¹⁶
- 7.4. In summary, I agree with the suggest conditions pending the proposed discussion and agreement on the issues outlined above.

8. Conclusion

- 8.1. This Application is for route protection only. The future, staged earthworks along with all construction may require additional Resource Consents and these will be the purview of Council (Auckland and Waikato). As the recommendations from this NoR process will relate directly to these, it is imperative that terminology is correct and legally enforceable.
- 8.2. It is expected that the eventual OPW will provide an HHMP that will provide appropriate historic heritage management rather that removal / relocation of items, for example, the #02235, Nehru Hall (and Extent of Place) at 59 Ward Street, Pukekohe.
- 8.3. Some of these areas have been previously disturbed through rural activities; some are pristine. This presents risk of damage or destruction to subsurface, unknown, historic heritage and archaeological objects and sites. This risk can be addressed through the application for an external permit, an Archaeological Authority. This is also recommended by Campbell in his *Assessment of Effects on Historic Heritage*¹⁷ and I agree with this approach.

¹⁵ This umbrella organisation provides supports to several in the Franklin area: franklinheritagenz@gmail.com is listed by the NZ History Federation (nzhistoryfederation.org.nz) to include Franklin Historical Society (franklinhistsociety@gmail.com), Franklin Vintage Machinery Club (www.vintagemachinery.co.nz), the Karaka Historical Society (karakahistoricalociety@gmail.com), Patumahoe History Group (www.patumahoe.org.nz) and Papakura & District Historical Society Inc (pdhs@papakuramuseum.org.nz) to name some of the groups.

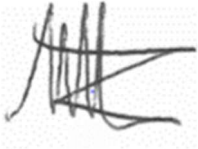
¹⁶ Any external party that requires copies of these document can specify this through a separate legislative process.

¹⁷ See footnote #1.

8.4. The need for the development and incorporation of public interpretation tools across and within this project will help mitigate for the destruction of sites and places and potentially assist in future urban design and community consultation.

8.5. I also agree with the conclusion set out in paragraph 11.10.4 of the Applicant's Assessment of Environmental Effects; with the exception of the two sites stated above¹⁸, all other known heritage places have been avoided.

Signed:



Dated:

6 December 2023

¹⁸ Nehru Hall (NoR6) and Pilgrim's Mill (NoR8).

Technical Memo – Ecology

To:	Joe McDougall, Auckland Council
From:	Simon Chapman (Auckland Council Consultant Ecologist, Ecology New Zealand Limited)
Experience/Qualifications	BSc Ecology; PG Dip Applied Science Ecology 20+ Years Experience. Specialising in terrestrial and wetland ecology
Date:	14/12/2023

Requiring Authority:	Auckland Transport/ Waka Kotahi New Zealand Transport Agency
Application Type:	Notice of Requirement (NoR)
Site Address:	Pukekohe Expressway NoR 1-8

1. Summary of Proposal

Auckland Transport and Waka Kotahi have collectively lodged eight (8) Notices of Requirement (NoRs) for the proposed Pukekohe Expressway. Auckland Transport has lodged NoRs, 1, 3, 4, 5, 6 and 7, and Waka Kotahi has lodged NoRs 2 and 8. Part of NoR 8 falls within the Waikato District.

The project, comprising NORs 1-8, will link the proposed Mill Road Corridor, State Highway 1, and Pukekohe town centre by providing an alternative route to State Highway 22. A full description of the proposal, as it relates to ecological effects, is provided in the NoR documents. The NoR documents which have been considered in the preparation of this memo are:

- Pukekohe Transport Network *Assessment of Effects on the Environment* (Version 1.0) prepared by Alicia McKenzie, Vicky Hu, Helen Hicks and dated 13/09/2023.
- Pukekohe Transport Network *Assessment of Alternatives Report* (Version 1.0) prepared by Vicky Hu, Alicia McKenzie, Helen Hicks and dated 13/09/2023.
- Pukekohe Transport Network *Assessment of Ecological Effects* (Version 1.0) September prepared by Ian Bredin, Sahar Firoozkoohi and dated 11/09/2023.
- Waka Kotahi New Zealand Transport Agency NoRs 1- 8 (AC), prepared by: Waka Kotahi and dated: 2/10/2023.

In addition to the above documents; Simon also attended the project briefing and project-wide site visit on 29th June 2023 prior to the lodgement of the NoRs.

2. NoRs 1-8 Site Description

The proposal is set across eight interconnected locations between Drury and Pukekohe. It comprises both new construction and upgrade works to form roads, active travel routes and associated freshwater structures such as culverts and bridges. The sites are generally located in semi-rural or future urban zones, with terrestrial habitats across all NoRs identified as brownfield, exotic grassland, scrub, and forest (both native and exotic understorey dominated) as well as planted native vegetation, native and exotic dominated treeland, pūriri forest and taraire, tawa, podocarp forest.

The NoR 8 (WDC) proposal is located along the Pukekohe East Road to Mill Road between Pukekohe East and Bombay along the boundary of Waikato and Auckland Regions.

3. Reasons for Notification

Auckland Transport and Waka Kotahi New Zealand Transport Agency have given Auckland Council notice of requirement for eight new designations as part of the proposed Pukekohe Transport Network.

With regards WDC, This is a review of NoR documents provided by Te Tupu Ngātahi Supporting Growth, for the district consent under the Waikato District Council Plan. Note: Any further Resource consent applications under the Regional Authority will be with the WRC.

4. Assessment of Effects on the Environment

a. Fauna

The Requiring Authority has provided an assessment of effects on fauna expected within the footprint and likely zone of influence of the proposal.

The Requiring Authority has stated that there were limitations to assessments of the baseline conditions for fauna. This was largely due to the difficulty in obtaining permission from landowners to undertake surveys and uncharacteristic weather conditions throughout December 2022 and February 2023. Data for fauna was collected from desktop surveys and incidental records in the field. The Requiring Authority has made it clear that fauna surveys and management plans will be submitted during the regional consenting stage.

i. Bats

The assessment identified moderate levels of effect (pre-management) on bats during both the construction and operational phases for all NoRs, except NoR 6. As such, the

ecologist has recommended an Ecological Management Plan to be implemented for all NoRs, except NoR 6.

Specific Bat Management for WDC NoR 8 has been suggested, including the following:

- Consideration to the provisions of the Wildlife Act including the implementation of a vegetation removal protocol (Bat Roost Protocol v2 DOC, 2021 or equivalent version at time of removal).
- Where possible, retain existing mature trees (this is in accordance with the Urban Landscape and Design Management Plan (ULDMP) or the Landscape Management Plan for the Waikato NoR).
- Artificial bat roosts (i.e., bat boxes) should be erected within, or in close proximity to, where suitable roost habitat (i.e., large mature trees) is to be removed in NoR 8. A 1:1 ratio is recommended. The introduction of artificial bat roosts will help to mitigate the short-medium term loss of suitable vegetation.

These conditions are considered appropriate for the NoR at present.

ii. Birds

The overall level of pre-management effects on birds both during construction and during operation of the proposal was assessed as moderate for Threatened and/or At-Risk (TAR) species. This assessment is relevant for all NoRs, except NoRs 3 and 6, as it was considered that habitat in these NoRs do not contain suitable resources to support (TAR) species. In response to the moderate level of effect, measures aimed at managing the project's actual and potential effects on TAR birds have been recommended for all NoRs except for 3 and 6. It should be noted that the assessment categorised all TAR birds as being wetland birds, which ignores the potential presence of Kaka in the Zone of Influence. Additional commentary and impact assessment to include this species should be provided, particularly in relation to NoR 3; where this bird may be present.

iii. Lizards

The ecological assessment considers it likely that both copper skink and ornate skink could be found within all NoRs except NoR 6. The assessment also notes that there is potential for Pacific, forest and Auckland green/elegant gecko within forest stands located in the NoR 8 area, including the WDC NoR 8 area, and within the forest stands which border and extend slightly into NoR 4.

The assessment makes the case that the native lizard species potentially present are habitat generalists and, as such, loss of habitat as a result of works is likely to have a negligible effect on these species' populations. The assessment highlights that, with the exception of NoR 8, the loss of lizard habitats will be addressed during regional consenting. Lizard management measures are proposed for NoR 8 because part of that NoR falls within the Waikato District, where lizard habitat removal is a District Plan matter.

The report has identified the need for a Lizard Management Plan for the removal of district plan vegetation at WDC NoR 8.

iv. Native Invertebrates

No field-based surveys were carried out for terrestrial invertebrates, however, data was gleaned from a desktop review which indicated that no native invertebrate species had been recorded within any of the NoR project footprints. The desktop review, in addition to a review of habitat, suggested that effects on invertebrates were likely to be negligible and they were not assessed further in the report.

v. Freshwater Fauna

A field-based assessment was not undertaken to confirm freshwater fauna, however, incidental records were made during site visits carried out to undertake Rapid Habitat Assessments (RHA) of watercourses scheduled to be impacted by proposals. Freshwater fauna records were gained from the New Zealand Freshwater Fish Database (NZFFD) within stream catchments associated with the proposed NoR sites. Two 'At Risk' species, longfin eel and īnanga, were recorded within catchments associated with NoRs 1, 2 and 8; and 1, 2, 5 and 8, respectively.

As well as the At Risk species, a number of other Not Threatened native freshwater fauna records exist across all NoRs, including WDC NoR 8.

As a result of these findings, the report notes that further surveys will be required at the detailed design stage of the project, as well as fish management, silt and riparian condition management. This is considered an appropriate approach for all NoRs, including WDC NoR 8.

b. Flora/Habitats

The assessment identified the presence of Threatened and At-Risk habitats within the NoR footprints including Machaerina sedge land and raupō reedland. In addition to these, a range of exotic and planted habitats are present, such as exotic wetland, exotic scrub and planted native (recent). Full site-based delineation assessments of all TAR habitats (including wetlands) have not been undertaken, therefore, this has been proposed as part of the assessments for the detailed design stage of works for all NoRs, including WDC NoR 8.

c. Freshwater

The project may impact up to 35 watercourses, ranging from low to high ecological value. Impacts will include stream reclamation, although, exact locations and extents of reclamation are not yet confirmed. The assessment has determined that the project provides an opportunity to restore riparian features along all directly impacted streams. It also notes, however, that full stream assessments will need to be carried out at the detailed design stage for regional consenting on all NoRs, including WDC NoR 8, to confirm scope and scale of required remediation.

5. Other Statutory Considerations

a. National Policy Statement for Freshwater Management 2020 (NPS-FM) and the National Environmental Standards for Freshwater 2020 (NES-F)

The NPS-FM and the NES-F provide national direction for managing New Zealand's freshwater. This direction includes avoiding any further loss or degradation of wetlands and streams in addition to encouraging their restoration.

The assessment highlights that additional wetland surveys may be required at a future regional consenting stage.

b. Wildlife Act (1953)

Most native birds and all native lizards are absolutely protected under the Wildlife Act (1953). It is an offence to disturb, harm or remove protected wildlife without a permit from the Department of Conservation. Wildlife Act (1953) compliance will be addressed during regional consenting.

c. AUP: OP Regional Policy Statement

The Pukekohe Expressway NoRs relate to district plan matters only. Regional matters will be addressed during a future consenting phase, supported by a detailed EclA.

6. Adequacy of Information

The above assessment is based on the information submitted as part of the NoRs. The majority of this assessment was undertaken prior to the introduction of the NPS:IB, thus, additional considerations in line with this document are listed below.

a. Bats

The assessments recommended do not provide full details of proposed further surveys for bats, although, it is recognised that this is difficult to achieve with accuracy prior to the detailed design stage being commenced. In line with NPS:IB Policy 17, surveys detailed in Condition 23 should be undertaken at the detailed design stage for each NoR, with the exception of NoR 6. An associated Ecological Management Plan should be created, agreed and adhered to where appropriate. Survey design should be coordinated between NoRs and should be in line with Policy 17 of the NPS:IB, specifically, regarding population size, location and usage of the wider habitat.

Additionally, in line with NPS:IB Policy 13, appropriate effects management measures for loss of roosting and commuting or foraging habitat should be further considered in light of survey results.

b. Birds

The assessment suggests as New Zealand falcon are a transient species, they do not need to be considered for any of the NoRs. In line with the precautionary principle (NPS:IB Policy 3), further explanation is required regarding why this species would not be present in the footprint or Zone of Influence of works, particularly with reference to its diverse breeding site preferences.

c. Lizards

It is agreed that the proposed pre-construction surveys and associated Lizard Management Plan (LMP) are an appropriate approach to determining and managing lizard risks across all NoRs.

d. Native Invertebrates

As no site-based surveys have been carried out and recording of invertebrates is known to be deficient, the results of the data search may not be a true reflection of on-site conditions. In line with Policy 17 of the NPS:IB, information is lacking on how the conclusion was reached that native invertebrates are unlikely to be present and do not warrant further consideration.

e. Freshwater Fauna

Specific freshwater field surveys (e.g., eDNA surveys) have not been undertaken across any NoRs, therefore, the distribution of key notable and rare freshwater species across the NoRs may not be accurate. It is agreed that the proposed pre-construction fish salvage surveys are an appropriate approach to determining and managing risks for freshwater fauna across all NoRs, including WDC NoR 8.

f. Flora/Habitats

It is agreed that the proposed pre-construction wetland delineation surveys are an appropriate approach to determining and managing risks to freshwater inland wetlands across all NoRs, including WDC NoR 8.

g. Freshwater

It is agreed that the proposed pre-construction SEV surveys are an appropriate approach to determining and managing risks for freshwater environments across all NoRs, including WDC NoR 8.

7. Submissions

No submissions have been received which relate to ecology.

8. Recommendation

The assessment within this memo has not identified any reasons to oppose the designations sought, subject to appropriate conditions, considering that the potential ecological effects of the Pukekohe Expressway Project will be adequately managed as a result of those conditions proposed.

9. Proposed Conditions

NoRs 1, 3, 4, 5 and 7

Having reviewed the proposed designation conditions for NoRs 1, 3, 4, 5 and 7, in particular, conditions 23 and 24, it is considered that the potential ecological effects resulting from the proposed expressway project are likely to be adequately managed by those conditions.

NoR 6

The proposed designation conditions do not include ecological effects management for NoR 6. It is considered that, notwithstanding the potential requirement to manage ecological effects under regional consenting, the highly urbanised environment means that there is limited potential for adverse ecological impacts within the limits of this NoR.

NoRs 2 and 8

Having reviewed the proposed designation conditions for NoRs 2 and 8, in particular Conditions 22 and 23, it is considered that the potential ecological effects resulting from the proposed expressway project are likely to be adequately managed by those conditions. It is noted that Condition 23(a)(iv)-(v) for NoR 8 include requirements for lizard management, however, within the Auckland Region this is only a requirement for consenting at a regional level. It is accepted that the inclusion of this condition ensures alignment with NoR conditions for district plan vegetation removal at WDC NoR 8.

Ngā mihi | Kind regards,

Simon Chapman | Ecologist
Ecology New Zealand Limited – Consultant to Auckland Council

PUKEKOHE TRANSPORT NETWORK

REVIEW OF CONSTRUCTION AND OPERATIONAL NOISE AND VIBRATION ASSESSMENTS

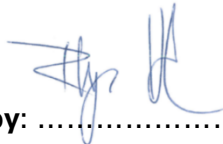
Report No 23055.1v2

Prepared for:

Auckland Council

December 2023

Prepared by:


Rhys Hegley

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1. INTRODUCTION

The Pukekohe Transport Network (the "Project") consists of eight Notices of Requirement ('NoR'), each of which comprises either an alteration to an existing road designation or a new road designation. NoRs 1 and 3 – 7 are being sought by Auckland Transport ('AT') while the remaining NoRs 2 and 8 are being sought by Waka Kotahi NZ Transport Agency ('WK'). Part of NoR 8 is on the boundary between Auckland Council (AC) and Waikato District Council ('WDC'). The remaining NoRs are entirely within the boundary of Auckland Council.

This report provides a technical review of the noise and vibration assessments undertaken for the construction of, and the subsequent operation of, the Project.

2. EXPERIENCE AND QUALIFICATIONS

My full name is Rhys Leonard Hegley. I am a partner with Hegley Acoustic Consultants. I hold a Bachelor of Engineering from the University of Auckland (1993) and have attended specialist courses in acoustics in Australia and America. I am a member of the Institution of Professional Engineers New Zealand.

For the past 23 years I have provided acoustic advice on a wide range of activities such as apartment developments, service stations and workshops through to large scale industrial activities such as petrochemical plants, power stations, dairy factories and roading projects.

My technical skills and experience directly relevant to the current project include the preparation of assessments for the notice of requirement, detailed design or peer review of projects such as Auckland to Botany, Eastern Busway, Drury Arterial Network Project, Northern Corridor Improvements, Southern Corridor Improvements, the SH1 – SH20 link in Manukau, various sections of

the Waikato Expressway, the SH2 Safe Systems Project, SH2 Mangarata upgrade and the Central Motorway Junction.

I attended the project briefing and project-wide site visit on the 29th June 2023 prior to lodgement of the NoRs.

I have read the Code of Conduct for Expert Witnesses contained within the Environment Court of New Zealand Practice Note 2023. I confirm this advice has been prepared in accordance with the Code of Conduct, and is within my area of expertise, except where I explicitly state that I have relied upon information provided to me by another person. I confirm that I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed herein.

3. INFORMATION REVIEWED

The following information was reviewed:

- a. Pukekohe Transport Network: Assessment of Construction Noise and Vibration Effects, September 2023 ('ACNV');
- b. Pukekohe Transport Network: Assessment of Operational Noise Effects ('AONE');
- c. The condition set proposed by AT ('AT Conditions');
- d. The condition set proposed by WK ('WK Conditions');
- e. The general arrangement layout plans for the eight NoRs; and
- f. The submissions.

4. REVIEW OF CONSTRUCTION NOISE AND VIBRATION ASSESSMENT

The following addresses the assessment of construction noise and vibration.

4.1. Clarity of Construction Noise Effects

Sections 6.2.1 – 6.2.8 of the ACNV provide assessments of construction effects for each of the eight NoRs respectively. These assessments are reasonably generic with little information on the actual predicted level of noise/vibration to individual receivers. By way of example, paragraph 6.2.1.1 (NoR 1) reports that:

“Around six existing receivers could experience noise levels that exceed the daytime noise criterion without mitigation. Details of all properties where the criteria could be exceeded are provided in Appendix A”.

“With mitigation in place, as set out in Section 6.3, noise levels of up to 77 dB L_{Aeq} could still occur intermittently at the closest receivers ...”

“Mitigation in the form of barriers can achieve noise level reductions of about 10 decibels. It is therefore predicted that mitigated noise levels can comply with the 70 dB L_{Aeq} noise criterion for most of the construction works”.

In review, Appendix A simply provides a list of receivers where construction noise levels are predicted to exceed 70dB L_{Aeq} with no indication as to the actual level expected by the receiver. The information provided by the ACNV is therefore that levels of up to 77dB L_{Aeq} are expected to the six receivers identified in Appendix A.

In terms of assessing effects, it would be useful for the ACNV to provide more information on noise levels to each receiver, preferably using the same 5dB bandwidths as Table 6-1 (which provides a description of the effects of construction noise). The reason for this is that it is unclear whether the six receivers of Appendix A will all be in the 76 – 80dB L_{Aeq} range, where Table 6-1 reports effects as:

“Continuing office work would be extremely difficult and become unproductive. In a residential context, people would actively seek respite”.

Or whether only the most exposed receiver falls in the above category and the rest are in the lower, 71 – 75dB L_{Aeq} range where the more moderate effects are described by Table 6-1 as being:

“Phone conversations would become difficult. Personal conversations would need slightly raised voices. Office work can generally continue, but 55 dB is considered by the experts to be a tipping point for offices. For residential activity, TV and radio sound levels would need to be raised”.

Essentially, the minimal information provided by the ACNV makes it difficult to determine the effects of the project, either on a global basis, which would be of interest to decision makers, or to individual properties, which would be useful for submitters. Considerable work appears to have been undertaken for the prediction of construction noise, but it has been simplified significantly for the reporting and its subsequent assessment.

With respect to NoRs 4, 5, 6, 7 and 8, the ACNV identifies that “With mitigation in place, as set out in Section 6.3, noise levels over 85 dB L_{Aeq} could still occur intermittently at the closest receivers ...” with NoR 2 specifically identifying 491

Sim Road as a further receiver where levels in excess of 85dB L_{Aeq} are predicted. There are several issues with these sites:

- a) Within the specific assessment sections for each NoR, the effects from such level are described as "*... likely to include loss of concentration, annoyance, and a reduction in speech intelligibility, as well as seeking respite in rooms facing away from construction*". Such a description requires careful consideration so as not to underestimate effects. For example, Table 6-1 of the ACNV attributes such effects to levels that are in the 65 – 70dB L_{Aeq} range. Further, for the 80 – 90dB L_{Aeq} range, Table 6-1 describes construction at such levels as "*Untenable for both office and residential environments. Unlikely to be tolerated for any extent of time*".
- b) The predicted construction noise level is >85dB L_{Aeq} with no indication as to how much higher that 85dB the level actually is. As such, care is required when using Table 6-1 to consider effects as the Table does not extend beyond 90dB L_{Aeq} .
- c) The ACNV provides no indication as to the number (or address) of receivers exposed to levels >85dB L_{Aeq} . Again, such information would be useful to individual submitters who would likely be interested in untenable levels of construction noise to their property. Submitters would likely be of benefit from the ACNV providing noise levels to their dwellings, even if it was in the 5dB bandwidths as Table 6-1 (which provides a description of the effects of construction noise). Specific levels to individual receivers are potentially to be of less relevance to decision makers who are more likely interested in effects as a whole.

In summary, the ACNV provides limited insight into the effects of construction noise and vibration. From reading it, it is clear that effects are likely to be

similar to other roading projects of similar size. There will be varying levels of adverse effects to most neighbouring properties a few who will bear the brunt of construction works. The ultimate response of the ACNV is to propose a Construction Noise and Vibration Management Plan (CNVMP) to address the majority of the effects and Schedules to the CNVMP to address specific construction activities that may arise after the preparation of the CNVMP. These two documents provide a best practice response to dealing with what appears to be some significant, but not unexpected, adverse effects of the Project. The respective conditions describe the consideration of a hierarchy of mitigation to receivers to achieve the best possible outcome, if not compliance with the prescribed noise and vibration limits. This approach is considered a pragmatic one as it provides a method of dealing with an issue that has many unknowns (including the exact method of construction, plant used and future receivers).

Other than amendments to the conditions relating to the CNVMP and Schedules (below) no changes are recommended to the remainder of the construction noise and vibration conditions.

4.2. Mitigation Efficacy

Throughout the assessment of noise effects provided by Section 6.2, the ACNV references barrier mitigation and, more importantly, up to a 10dB reduction from barriers and the associated compliant levels resulting from such barriers. The reality is that a 10dB reduction from a barrier proposed to control construction noise will be difficult to achieve as construction sources are often well elevated (due to the size of the plant, noting that the ACNV provides no information as to the source of the high noise levels). Further, the ACNV correctly states that some sources move linearly meaning barriers may have to be of some length to achieve the intended reductions. In addition, where the construction work occurs within an already developed area, the openings in any barriers required for driveways typically render their mitigation to be all but

negligible. This consideration is particularly relevant for NoR 6 where, without mitigation, 216 receivers are predicted to receive levels above 70dB L_{Aeq} (if work occurs in the most exposed location).

The conclusion of the ACNV that *"it is therefore predicted that mitigated noise levels can comply with the 70 dB L_{Aeq} noise criterion for most of the construction works"* is, therefore, correct for a 10dB barrier, but needs to be read in the context that the mitigation to the degree relied upon is unlikely for all receivers meaning so too is compliance.

One issue not addressed by the ACNV is whether barriers that are proposed for the control of operational noise, could be built at the start of construction, rather than the end. This requirement would be subject to practical considerations but is accepted best practice. As such, an amendment to the CNVMP condition is proposed, as described in section 6 below and the operational noise conditions (section 9 below).

4.3. Clarity of Construction Vibration Effects

As with the noise assessment, the ACNV simply identifies residences where vibration may exceed 5mm/s (without defining the magnitude of the exceedance). Similarly, for commercial buildings, those predicted to receive more than 10mm/s are identified, but not the actual limit.

As with the noise assessment, there is limited information with which to gauge the actual effects. The approach that the ACNV takes instead is that any effects will be managed through the CNVMP and its Schedules. In terms of amenity effects, such an approach is considered appropriate, for the same reason as described for the noise assessment in section 4.2 above. However, vibration differs from noise in that, in addition to amenity, it requires consideration with respect to building damage. Based on the assessment provided, building

damage must be considered a realistic possibility (based on vibration >10mm/s). The management approach suggested by the WK condition 18 is to assess and then monitor the effects of doing so. The comparable AT condition relies upon a Schedule to, presumably, do the same.

Without knowing the magnitude of the vibration, to permit and then monitor the activity introduces the risk that there is damage to buildings that must then be remediated. Any such damage is likely to be cosmetic (cracked plaster) meaning such remediation is, in all likelihood, practicable.

One change to the conditions recommended is to AT 19 where the procedure to follow in the event of the Category B levels being exceeded be replaced by the comparable WK condition (18).

4.4. Night Works

The ACNV identifies the likelihood of night works, noting the difficulties with such work. It is accepted that, for practical reasons, night works cannot be avoided, for example where road closures are required. However, what must be avoided is the use of night works as a means of meeting a construction programme. As such, amendments for the CNVMP and Schedule are proposed below.

5. SUBMISSIONS

The submissions relating to construction effects were general in nature and are not responded to directly.

6. CONSTRUCTION NOISE AND VIBRATION CONDITIONS

The following changes to the proposed conditions are consistent with the review presented in section 4 above.

CERTIFICATION DEFINITION

'Certification' in both the AT and WK conditions is defined as requiring confirmation from Council that the CNVMP/ Schedule has been prepared in accordance with the relevant condition. It is simply noted that confirmation differs from certification and somewhat lessens Council's control over the final product, noting that this definition applies to all Plans required by the conditions.

It is a more important point that while the AT conditions anticipate Council confirmation of the Schedules, the WK definition excludes Schedules from requiring confirmation. As Schedules are expected to cover the high noise and/or vibration activities, it is the Scheduled activities that will require the most scrutiny. WK's response to a similar query on previous NoRs has been that their internal process is robust enough not to require Council oversight. This is inconsistent with the acceptance of Council input to the CNVMP. Further, given the lapse dates of the NoR, it is difficult to see how the current confidence can be extended into the future.

It is recommended that WK definition of Certification match that of AT. This change also necessitates an amendment to WK 20 (as described below).

CONDITION AT 19

Condition AT 19 states that should vibration not comply with the conditioned limits, a Schedule should be prepared. The comparable condition WK 18 includes two further requirements (18(b) and 18(c)) that set out the assessment and monitoring requirements for a situation where vibration exceeds the Category B criteria. While, presumably, these same criteria would be covered by the Schedule, adding the two additional criteria to the AT set would add clarity to the conditions, and is recommended.

CONDITIONS AT 18– 21 and WK 17 - 20

There appears to be an inconsistency in both condition sets, with the following using the AT set as an example. Firstly, the noise (18) and construction (19) conditions both provide objective criteria to be complied with, where practicable. Where not, the reader is directed to the Schedule condition (21). Condition 21 states that 'Unless otherwise provided for in a CNVMP ... a Schedule shall be prepared' for the activity in question. The issue appears to be that while the latter condition 21 expects the CNVMP to be able to address some high noise/ vibration activities, the earlier conditions do not.

One option would be to provide conditions 18(b) and 19(b) the ability to allow higher noise levels through a CNVMP, as follows:

18(b) Where compliance with the noise standards set out in Table 18.1 is not practicable, and unless otherwise provided for by the CNVMP, the methodology in Condition 21 shall apply.

19(b) Where compliance with the vibration standards set out in Table 19.1 is not practicable, and unless otherwise provided for by the CNVMP, the methodology in Condition 21 shall apply.

Further clarity could be added to Condition AT 20 by noting that, in some instances, the CNVMP can enable levels in excess of AT 18 and 19. The following bullet point could be added between current bullet points (v) and (vi):

- *Predicted noise and/or vibration levels, where these exceed the limits of conditions 18 and 19.*

For completeness, 20(x) could be expanded to make it clear that the CNVMP permits exceedances by adding the following to the current condition:

(x) ... will not be practicable, and where not addressed by the CNVMP.

The same changes would also clarify the corresponding conditions WK 17, 18 and 19.

CONDITION WK 20

As discussed above with respect to the WK definition of certification, it is recommended that condition WK 20 be amended to require certification of Schedules, as follows:

20(c) the Schedule shall be submitted to the Manager for information certification at least 5 working days ...

CONDITIONS AT 20 & 21 and WK 19 & 20

As described in section 4.4 above, it is recommended the CNVMP and Schedule conditions of both the AT and WK sets be updated to clarify that the intent of night works is to undertake activities that cannot practically be undertaken during the day, rather than programming reasons.

With respect to AT 20 and WK 19, the following addition is proposed to part (c):

(c) The objective of the CNVMP is to provide a framework for the development and implementation of the Best Practicable Option for the management of construction noise and vibration effects to achieve the construction noise and vibration standards set out in Conditions 18 and 19 to the extent practicable. With respect to night works, the CNVMP can only authorise exceedances of conditions 18 and/or 19 for works that, for reasons limited to safety or practicability, cannot be undertaken during the day time. To achieve this objective, ...

For AT 21 and WK 20, a similar addition is proposed to part (b):

- (b) *The objective of the Schedule is to set out the Best Practicable Option measures to manage noise and/or vibration effects of the construction activity beyond those measures set out in the CNVMP. With respect to night works, Schedules can only authorise exceedances of conditions 18 and/or 19 for works that, for reasons limited to safety or practicability, cannot be undertaken during the day time. The Schedule shall include details such as: ...*

7. REVIEW OF OPERATIONAL NOISE AND VIBRATION ASSESSMENT

7.1. Operational Noise

The following addresses the assessment of operational noise.

7.1.1. Future Environment

RECEIVERS ARRIVING BETWEEN DESIGNATION AND CONSTRUCTION

Section 5.1 of the ACNV specifically requires dwellings built between designation and construction of the various NoRs to be included in the future assessment of construction noise and vibration. This approach is supported by the proposed conditions. However, the AONE takes a different view. While the AONE discussed (section 3.1.2) the adoption of a low noise road surface across all NoRs for the control of noise to current and future receivers, it does not require the assessment of future noise sensitive activities that arrive between designation and construction. The rationale for this approach is that it is in accordance with the definition that NZS 60806¹ provides for a PPF².

¹ NZS 6806: 2010 Acoustics - Road-traffic noise - New and altered roads

The issue with the proposed approach is that road surface alone may not achieve a reasonable level of noise to these future dwellings. Under the current proposal, and assuming that WK/ AT submit on the future Plan Changes for a provision that future noise sensitive buildings incorporate their own mitigation to control noise from the unbuilt road, those developing the land in the future could potentially end up providing a significant portion of the necessary mitigation.

To a certain extent, there is logic to the proposed approach as those moving into the area would have knowledge of the future road. The requiring authority's approach is that those future dwellings should incorporate their own mitigation, such as barriers (which are addressed below) and/or façade mitigation. The practical issue with this approach is that, other than the AONE (which may be difficult for a developer to locate in the future), there is no method by which those building houses prior to the road's construction can determine the noise the house would be exposed to. In other words, asking future developers to design for road traffic noise would likely be impracticable.

There are two possible options to address this issue. Firstly, the definition of a PPF could be amended to include not only the current PPFs, but also those that arrive up until the final design is undertaken. This places the onus of meeting appropriate noise levels at future PPFs on the requiring authority. The second option, and one that has been discussed with AT/WK on previous projects, but not yet implemented, would to require the future developers to provide the necessary mitigation in the same way that is currently proposed. To do this, the requiring authority would make the current noise contours³ publicly

² Protected Premises and Facilities

³ Appendix B of the AONE

available. This could potentially be achieved through a layer on the AUP⁴ zoning maps or appending them to the conditions. The risk with this option is that the noise from the road may change between the current and final designs. A possible means of offsetting this risk would be to add a small (2dB) factor of safety to the current contours.

Of the two options described above, section 9 below suggests an amendment to the definition of PPF on the basis that publishing the noise contours is beyond the scope of this review.

Ultimately, whether the PPFs built between designation and construction are considered at all is an issue that is wider than acoustics as it has planning and legal implications.

SHARED RESPONSIBILITY TO MITIGATION

The AONE approach to road noise mitigation for all future PPFs, whether they are built between designation and construction or as part of some future development⁵, is to share the burden of mitigation between themselves and the adjacent landowners. This shared responsibility is considered necessary for roads as it is typically not practicable to internalise their noise effects. The AONE describes this shared responsibility as the requiring authority providing a low noise road surface and the adjacent landowners addressing any remaining effects. Notwithstanding the practical issues that this imposes on some landowners (which is addressed above), there is merit in considering the contribution of the requiring authority to this shared arrangement.

⁴ Auckland Unitary Plan – Operative in Part

⁵ Such as within the Rural or Future Urban zone

S16 of the RMA requires every occupier of land to adopt the best practicable option to control noise while s17 requires every person to avoid, remedy or mitigate any adverse effect carried out on behalf of that person. The offered road surface mitigation is considered consistent with s16 and s17. However, the duty to satisfy s16 and s17 is not confined to road surface meaning if there are any other mitigation options that would be effective and which could be installed as part of the road construction, they too must be considered and would contribute to the requiring authority's share of the mitigation burden.

Barrier mitigation has the potential to be effective at controlling road traffic noise, particularly to the as yet undeveloped Future Urban Zone (FUZ). It is, however, recognised that barriers require a number of considerations when determining their practicability, including sight lines, openings for driveways, foundations and urban design. However, if barriers were found to represent the Best Practicable Option (BPO) for a particular area, it is difficult to see how the mitigation should not fall to the road maker to install, rather than some developer at a later date.

Essentially, if a barrier is to be installed between say a subdivision and an adjacent road and that barrier would provide a reasonable level of noise protection, it is proposed that the barrier be the responsibility of the noise maker rather than the future developer. In such a manner, the requiring authority can be considered to have done all that is practicable to control noise leaving any remaining portion to the adjacent landowner.

While the currently proposed conditions do not preclude such barriers, they do not encourage their consideration. By way of example, conditions AT 28 and WK 27 require the future design to achieve the Noise Criteria Categories of the current design (which are attached as schedules to the conditions). Table 3-1 of the AONE shows that for new roads, Noise Criteria Category A includes all levels up to 57dB while Noise Criteria Category B ranges from 57dB to 64dB.

The corresponding ranges for altered roads use higher levels. The potential issue can be highlighted by considering a PPF within Category B that is currently predicted to receive a level of 58dB. If, through a change during the detailed design, this level should increase by say 5dB to 63dB, it would remain within Category B, meaning the need for mitigation would be discretionary.

To address this, an additional condition is proposed (section 9 below) that highlights the requirement to consider barriers during the final design. This condition is written with the intention of supporting barriers to screen land that is undeveloped but where noise sensitive activities can reasonably be expected. On this point, it is not necessary for PPFs to actually exist prior to the design of the barrier. Structure Plans typically provide the key design inputs such as site density, boundary setbacks and building height limitations that essentially provide an envelope in which a PPF could exist. While such information may not allow the exact level of noise to be calculated to a particular future PPF, it would be ample for determining whether a barrier would be of acoustic benefit to a community and, therefore, would provide for a BPO assessment.

7.1.2. Noise Criteria Categories

The above section provides an example of how the proposed conditions' use of Noise Criteria Categories provide considerable scope to the noise level that PPFs could experience. As a result, decision makers and submitters need to be aware that they are considering a range of noise levels rather than the specific levels provided in the AONE.

One method of providing a greater degree of certainty in the conditions would be to amend AT 28 and WK 27 so that instead of requiring the final design to maintain the current Noise Criteria Category, they instead achieve the currently predicted noise levels (Appendix A) plus a small (2dB) factor of safety to allow some changes to the design. A suitable condition is suggested in section 9

below. It is noted that conditions AT 31 and WK 30 provide for the situation where the design changes to the extent that the criteria cannot be met.

7.1.3. Road Surface

The WK road noise surface condition (WK 26) is simple and easily understood and, other than discussed in section 7.1.4 above, is supported. By contrast, the comparable AT 27 has been well canvassed during other projects where it was not considered to be fit for purpose. The issues are:

- a) Part (b) relies on any update to the Auckland Transport Reseal Guidelines, which are unknown;
- b) Part (b)(i) only requires roads carrying in excess of 10,000 vehicles per day to be resealed with a low noise road surface⁶. As an example, the noise from a road with 9,000 vehicles per day travelling at 50km/hr with 5% Heavy Commercial Vehicles to a PPF 15m from the road with a low noise road surface would be 60dB $L_{Aeq(24 \text{ hr})}$. This level would increase to 64dB $L_{Aeq(24 \text{ hr})}$ should a reseal use a standard two-coat chip seal. It is hard to see the justification for resealing a road with a lower performance road surface at some point in the future when the NoRs are based on a higher performance road surface. This would appear inconsistent with S16 and s17 of the RMA.
- c) Parts (b)(ii) – (iv) describe situations where the low noise road surface could be replaced with a poorer performing surface. Situations, such as the addition of a cul de sac (b(ii)), are unlikely to arise between the road being built and resealed meaning their inclusion in the conditions is of little use. Should another of the identified situations occur

⁶ Condition AT 27 describes asphaltic concrete (or an equivalent low noise road surface) as being a low noise road surface for the purpose of this condition.

(development into an industrial or commercial area (b(iii)) or town centres, hospitals or schools (b(iv))), any proposal change to the noise mitigation should include a consideration of noise effects as opposed to the blanket statement currently proposed. Instead, part (c) simply requires Council to be advised.

In section 9 below, it is recommended that the AT road surface condition be amended to match that of WK.

7.1.4. First Year After Opening

The analysis presented in the AONE is based on a low noise road surface. Section 6.9 explains that the various roads would in fact be constructed with a noisier chip seal and that sometime within 12 months of opening the road would be resealed with a low noise road surface (conditions AT 27 and WK 26). Section 6.9 explains that the effect of the chip seal alone is a 4 – 6dB increase in noise to PPFs but that this increase is partially offset by a slight reduction in noise due to lower traffic volumes than for the reported 2048 design year. The net result is that all PPFs will experience levels 2 – 4dB above those reported in Appendix A and B of the AONE.

The AONE also notes that a small number of PPFs would move up a Noise Criteria Category, eg from A to B or B to C⁷. The conclusion of the AONE is that the effect will be temporary, only likely to affect new, rather than widened, roads, and will be managed at the time of detailed design.

In terms of the temporary nature of the noise, the conditions allow such elevated levels for 12 months, which extends beyond what could be reasonably considered to be temporary. Further, experience with other roads has shown

⁷ Table 3-1 of the AONE provides a full description of the Noise Criteria Categories

that, particularly for new roads, any issues with noise occur at opening (ie within the 12 month period) when the new noise source is introduced. To allow the noise over this period to be elevated must increase the risk of disturbance to neighbours, particularly those exposed to the higher levels.

As written, the conditions do not appear to allow for an increase in the Noise Criteria Category as they require compliance with the criteria provided in the current design, without a dispensation over the first year. It is, therefore, not clear how the requiring authority intends to comply with the suggested conditions, other than by demonstrating it is not practicable to comply with them and altering the criteria in accordance with AT 31 and WK 30.

7.1.5. Assessment of Effects

The AONE uses two tools with which to assess the effects of the Project. Firstly, it provides an assessment in accordance with NZS 6806. The focus of this standard is on the enablement of roads rather than providing for a full assessment of noise effects. Its shortcomings for this purpose have been well canvassed by Boards of Inquiry for both the Waterview Connection Proposal⁸ and the Transmission Gully Proposal⁹.

The second assessment approach is to compare the noise from the new road with the Do-Nothing scenario, noting that this comparison scenario assumes full development of the surrounding area with the corresponding traffic using

⁸ <https://www.epa.govt.nz/assets/FileAPI/proposal/NSP000012/Boards-decision/ec6f94077d/Waterview-Final-decision-volume-1-Report-and-decision.pdf> from paragraph 925.

⁹ <https://www.epa.govt.nz/assets/FileAPI/proposal/NSP000028/Hearings-Week-01/23871c7f27/01-applicants-casebook-11-Transmission-Gully-Proposal-Final-Decision.pdf> from paragraph 569.

the existing road network. As such, the changes in level would generally be less than if compared to the existing noise levels.

The following Table summarises the range of noise levels that the existing PPFs will be exposed to as a result of each of the NoRs.

Table 1. Summary of Noise Levels

NoR	Predicted Range of Project Noise Levels (dB L _{Aeq(24 hr)})	
	Altered Road	New Road
NoR 1	41 - 58	-
NoR 2	49 - 64	42 - 64
NoR 3	-	33 - 46
NoR 4	41 - 64	50 - 51
NoR 5	41 - 63	42 - 48
NoR 6	NA	NA
NoR 7	39 - 63	49 - 55
NoR 8 (AC)	48 - 66	-
NoR 8 (WDC)	48 - 64	-

In terms of assessing effects, an internal level of 40dB L_{Aeq(24 hr)} is generally considered to provide an appropriate level of internal amenity. It is the level that WK typically promote as the internal criterion for any houses proposed near their network. On the basis that an open window provides in the order of

a 15dB reduction¹⁰, it can be seen that external levels of up to 55dB $L_{Aeq(24 \text{ hr})}$ can be considered to result in effects that are reasonable.

The corollary of this is that levels above 55dB $L_{Aeq(24 \text{ hr})}$ can be considered to have an adverse effect. As pointed out throughout the AONE, noise from the project needs to be considered within the existing noise environment which, particularly in the case of altered roads, may already be high (albeit due to traffic noise). The conclusion is, therefore, that road traffic noise as a result of the various NoRs will produce undesirable levels of noise to some PPFs and that the effects can be considered to be adverse. Again, the AONE points out that it is not possible for the road to internalise its effects meaning after implementing the BPO, the effects remain. It also supports to the discussion in section 7.1.1 above about the importance of the balance between the sharing of mitigation effects.

7.2. Operational Vibration

The AONE considers that vibration resulting from the use of the road will meet all reasonable expectations of it. This is consistent with other projects and appears reasonable. Vibration is, therefore, not discussed further.

8. SUBMISSIONS

The submissions relating to operational effects were general in nature and are not responded to directly.

¹⁰ It is generally accepted that a façade with windows open for ventilation will reduce external noise within a building by approximately 15dB. This reduction is independent of façade construction as it is the open window that controls the mitigation available. "Testing of the sound attenuation of the external envelope of six houses" by George Bellhouse for the Building Industry Authority, March/ April 2000 demonstrates this.

9. OPERATIONAL NOISE CONDITIONS

The following changes to the proposed conditions are consistent with the review presented in section 7 above.

CONDITION AT 27

As discussed in 6.1.3 above, it is recommended that condition AT 27 be replaced with WK 26.

UNNUMBERED CONDITION BETWEEN AT 27 & 28 AND BETWEEN WK 26 & 27

As discussed in section 7.1.1 above, it is recommended that the definition of a PPF in the unnumbered condition should be amended by deleting part (j), the clarification to the NZS 6806 definition of PPF.

This necessitates further changes to subsequent conditions as the Noise Criteria Categories will not exist for future PPFs.

CONDITION AT 28 / WK 27

In response to paragraph 6.1.2, it is recommended that, in addition to Noise Criteria Categories, the additional criteria of the current predicted noise levels +2dB is added, as follows (which also corrects some drafting errors):

The Noise Criteria Categories identified in Schedule [3]: Identified PPFs Noise Criteria Categories at each of the PPFs shall be achieved where practicable and subject to Conditions 27 to 39 (all traffic noise conditions). In addition, noise to all PPFs shall not exceed the Predicted noise levels for all PPFs in Schedule [x] plus 2dB. Where PPFs are not identified in Schedules (3) or [x], the design shall be in accordance with the Best Practicable Option.

~~(a) The Noise Criteria Categories above criteria do not need to be complied with at a PPF where:~~

~~(b) (a) The PPF no longer exists; or~~

~~(b) Agreement of the landowner has been obtained confirming that the Noise Criteria Category does not need to be met.~~

~~Achievement of the Noise Criteria Categories design criteria for PPFs shall be by reference to a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed opening of the Project.~~

The above condition will require Appendix A of the AONE to be added to the condition set as Schedule [x].

CONDITIONS AT 29 & 30 and WK 28 & 29

The same changes are proposed for these two conditions. The first change is to modify them to represent the suggested change to the PPF definition. The second change is to highlight that mitigation should be considered to the as yet undeveloped areas where noise sensitive activities can be realistically expected (section 7.1.1 above). The suggested change refers to 'future residential areas' as development of the FUZ may include non noise sensitive uses.

AT29/WK28 As part of the detailed design of the Project, a Suitably Qualified Person shall determine the Selected Mitigation Options for the PPFs identified on Schedule [3]10: Identified PPFs Noise Criteria Categories.

For the avoidance of doubt, the low noise road surface implemented in accordance with Condition 27 may be (or be part of) the Selected Mitigation Option(s). [WK28 only]

In situations where the project passes through future residential areas, noise barriers shall be included in the Selected Mitigation Options where they can be demonstrated to provide the Best Practicable Option for the control of road traffic noise given its intended future residential use.

AT30/ WK29 Prior to construction of the Project, a Suitably Qualified Person shall develop the Detailed Mitigation Options for the PPFs identified in Schedule [3]11: Identified PPFs Noise Criteria Categories, taking into account the Selected Mitigation Options.

In situations where the project passes through future residential areas, noise barriers shall be included in the Detailed Mitigation Options where they can be demonstrated to provide the Best Practicable Option for the control of road traffic noise given its intended future residential use.

CONDITION AT 31 and WK 30

This condition specifically requires that should, during detailed design, the required mitigation change significantly, the new design must comply with the "... Best Practicable Option in accordance with NZS 6806 ..." Bullet point 6 of Paragraph 925 of the Waterview decision⁷ is clear that NZS 6806 "Inadequately address[es] s16 RMA ("duty to adopt ... the best practicable option "" BPO") ..." As such, it is recommended that the condition should be amended to delete the reference to NZS 6806. It would read as follows:

If the Detailed Mitigation Options would result in ~~the Identified Noise Criteria Category changing to a less stringent Category, e.g. from Category A to B or Category B to C,~~ an increase in noise level at any relevant PPF,

compared to the design criteria of condition AT 28/WK 27, a Suitably Qualified and Experienced Person shall provide confirmation to the Manager that the Detailed Mitigation Option would be consistent with adopting the Best Practicable Option in accordance with NZS 6806 prior to implementation.

CONDITION AT 32 and WK 32

It is suggested that this condition be modified slightly to highlight that, should it be practicable and effective, barriers intended for the control of operational noise will be built to also screen construction noise.

The Detailed Mitigation Options shall be implemented prior to completion of construction of the Project and, where practicable and effective, prior to the commencement of construction. ~~with the~~ The exception of is any low-noise road surfaces, which shall be implemented within twelve months of completion of construction.

Waikato District Council memorandum (technical specialist report to contribute towards Council's section 42A hearing report)

14 December 2023

To: Karen Bell, Consultant Planner, Waikato District Council
From: Trent Sunich, Consultant Stormwater Technical Specialist
Cc: Kelly Cattermole, Consents Team Leader, Waikato District Council

Subject: Pukekohe Transport Network Notice of Requirement – Stormwater and Flood Hazard Technical Assessment

1.0 Introduction

This memorandum summarises the findings of my review on behalf of the resource consents department of the Waikato District Council for the Mill Road – Pukekohe East Road Upgrade Notice of Requirement (NoR 8). My assessment considers flood hazard effects during construction as well as the long-term effects of operating the arterial route.

I note this notice of requirement forms part of a wider set of notices of requirement lodged by Waka Kotahi and Auckland Transport forming the Pukekohe Transport Network. I have drafted a separate memorandum to the Auckland Council reporting on flood hazard effects.

Where appropriate I have also commented on management of operational stormwater discharges from the project, however this matter is largely out of scope currently and may be subject to future Waikato Regional Council resource consent applications. Notwithstanding this it is important to consider that suitable land area will be available within the designation to construct and operate the stormwater management infrastructure receiving runoff from the carriageway impervious surfaces.

My involvement in the project has been from June 2023 where I was commissioned to review the relevant reports for the NoR, any information requests/responses, and review/assess the relevant submissions culminating in the findings of this memorandum.

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

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

- Pukekohe Transport Network Assessment of Effects on the Environment, September 2023, Version 1.
- Pukekohe Transport Network Assessment of Flood, Hazard Effects, September 2023, Version 1.
- NoR 1 – 8 Conditions (notified).
- General Arrangement Layout Plans NoR 1-8 (notified).
- Relevant public submissions.

2.0 Proposed Projects and Flood Hazard Assessment

As described by the Requiring Authority (Waka Kotahi), a notice of requirement has been lodged to designate land associated with the NoR 8 Mill Road and Pukekohe East Road Upgrade. The

project comprises an upgrade of Mill Road (Bombay) in the east for additional vehicles lanes and a shared path and Pukekohe East Road, Pukekohe in the west for a shared path.

Assessment of flood hazard during construction and post development for the NoR has been documented in the report entitled 'Pukekohe Transport Network Assessment of Effects on the Environment' ('the Flood Hazard Report'). A precis of the local receiving environments, flood hazard assessment methodology and findings documented by the Requiring Authority's engineering consultant is detailed in the following subsections. This information has informed my assessment in the later sections of the report and has assisted with responding to the relevant submissions.

Catchment Overviews

For geographical context, the NoR is within the Ngakoroa Stream and Tutaenui Stream catchments. The Tutaenui Stream catchment ultimately flows to the Waikato River, while the Ngakoroa Stream drains to the Manukau Harbour. An overview of the catchments are as follows:

- The Ngakoroa Stream covers approximately 4,015 ha in total catchment area. The Ngakoroa Stream includes a large tributary which splits from the main branch in the Runciman area and extends south for approximately one-third of the catchment.
- The Pukekohe-Tutaenui catchment includes covers an area approximately 2,695 ha and flows north to south into Whakapipi Stream before discharging into the Waikato River.

Flood Hazard Determination and Risk Assessment

In the context of constructing and operating the route, the Requiring Authority's engineering consultant has concluded that flood hazard effects may include changes to; the flood freeboard to existing habitable buildings; overland flow paths and flood prone areas; flood levels on developable land; and the ability to access property by residents and emergency vehicles.

In order to assess these flood hazard effects or the road upgrade, the following steps have been completed:

- Desktop assessment to identify potential flooding locations, namely:
 - Existing buildings that are near/within the existing flood plains.
 - Where the Project involves work near stream crossings, flood plains and major overland flow paths.
 - Flood modelling of the pre-development terrain using the following:
 - the existing terrain using Maximum Probable Development (MPD) development;
 - 100-year average recurrence interval (ARI) plus climate change rainfall (2.1° increase); and
 - 100-year (ARI) plus climate change rainfall (3.8° increase).
- Model results were used to identify flood water levels $\geq 0.05\text{m}$ for the future 100-year flood event (without the proposed project works modelled).
- Inspection of the flood extent maps to identify flooding effects, including:
 - At key cross drainage locations such as culverts and where there are noticeable deep flood levels, consideration was given to flood hazard issues.
 - Properties and buildings with habitable floors showing potential to flooding hazard through flood extent within the existing building footprints.
- A sensitivity analysis to assess the potential impact of climate change on the results.

This assessment focused on whether the designation area is large enough for a future road design to meet the proposed conditions. To date flood modelling has been limited to using the pre-development state only (2.1° and 3.8° climate change scenarios (where applicable)) with an indicative road design and designation layout. The result of this modelling was used to identify areas where the flood hazard is presently a risk and where the designation may need to widen to consider extent for mitigation.

Flood Hazard Model Outputs, Risk Assessment and Proposed Outcomes

In assessing the flood model results, the Requiring Authority’s engineering consultant has developed a flood risk rating which was determined using flood depth from the model outputs to identify where there is an existing flood risk (and hence where the proposed project works could exacerbate flooding). Flood risk was assessed using the following criteria and has been used to identify risk to existing properties along with a corresponding risk rating. The findings of the assessments, summary of mitigation measures proposed and associated proposed NoR conditions are presented in the following section with respect to NoR 8.

I have highlighted the moderate and high-risk model results and included commentary of potential mitigation options later in this memorandum.

Overall Flood Risk	Negligible		Low		Moderate		High
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Flood depth / land use	Less Vulnerable e.g. open space, rural land (not in FUZ)	Moderately Vulnerable e.g. commercial and industrial properties	Highly Vulnerable e.g. dwellings, educational facilities
Negligible (flood depth < 0.05 m on land and freeboard >0.5m to buildings)			
Low (flood depth 0.05 m to 0.15 m on land and freeboard <0.5m to buildings)			
Moderate (flood depth 0.15 m to 0.5 m on land and No freeboard to buildings)			
High (flood depth > 0.5m on land and No freeboard to buildings)			

Utilising the flood hazard modelling information and associated risk assessment, an outcome focused approach has been proposed by the Requiring Authority to flood hazard management which is listed as follows and reflected in the proposed NoR conditions:

- No increase in flood levels in a 1% AEP event for existing authorised habitable floors that are already subject to flooding or have a freeboard less than 150mm;
- No more than a 10% reduction in freeboard in a 1% AEP event for existing authorised habitable floors with a freeboard of over 150mm;
- No increase in 1% AEP flood levels for existing authorised community, commercial, industrial and network utility building floors that are already subject to flooding;
- No more than a 10% reduction in freeboard in a 1% AEP event for existing authorised community, commercial, industrial and network utility building floors;
- No increase of more than 50mm in flood level in a 1% AEP event on land zoned for urban or future urban development where there is no existing dwelling;
- No new flood prone areas; and
- No more than a 10% average increase of flood hazard (defined as flow depth times velocity) for main access to authorised habitable dwellings existing at time the Outline Plan is submitted. The assessment shall be undertaken for the 50%, 20%, 10% and 1% AEP rainfall events.

- Compliance shall be demonstrated in the Outline Plan, which shall include flood modelling of the pre-Project and post-Project 10% and 1% AEP flood levels (for Maximum Probable Development land use and including climate change).

NOR 8: Mill Road – Pukekohe East Road Upgrade:

NoR 8 is an upgrade of the existing Pukekohe East Road and Mill Road. It includes widening Mill Road for additional vehicles lanes and a shared path from State Highway 1 to Harrisville Road and then a shared path on the southern side of the road from this point into Pukekohe along Pukekohe East Road. NoR 8 in the Waikato District passes through the Tutaenui Stream catchment and the Ngakoroa Stream catchment from west to east.

Key features of the proposed road upgrade include the following:

- Pukekohe East Road is proposed to be upgraded (3.4 kms) for walking and cycling facilities on the southern side from Harrisville Road in the east to NoR 5 in the west.
- Upgraded culverts are proposed.

Flood Hazard Summary

The NoR alignment follows the existing Mill Road section and crosses two flow paths, both serviced by existing culverts. The road widening may not require any culvert lengthening or include any floodplain filling with the NoR design. However, future designs might require culvert lengthening. No adverse flood effects are expected from this NoR. Any future designs that may include culvert modification can meet the designation conditions by modelling the effect of the works and oversizing the culvert extension if unacceptable flood effects are found.

The modelled 3.8° climate change scenario produced an overall higher flood level. However, the flood risk rating will remain negligible based on the road crest height allowing flow to overtop the road before causing adverse effects on the upstream land. The only exception being 155 Mill Road (located in the Auckland Region) where the more severe climate change impact would change this properties flood hazard rating from medium to high.

1	155 Mill Road, building floor level: 145m RL	Rural lifestyle block - Rural - Mixed Rural Zone	Remain rural lifestyle block	2.1° Climate change: 144.8m RL	Moderate existing and future risk
				3.8° Climate change: RL 145.2m RL	High risk existing and future risk

Figure 1: NoR 8 Risk Areas

Flood Hazard Effects During Construction

In their Flood Hazard Report, the Requiring Authority acknowledges that there is the potential for construction phase flooding effects. Therefore, for each NoR route an assessment of the potential flood hazard has been included based on the type of work that will be taking place (e.g. embankments and culvert construction) relative to the local flood characteristics. As detailed in the draft conditions of consent further detail is proposed to be provided in the Construction Environmental Management Plan (CEMP) the each NoR route including the form of any mitigation. Indicatively the issues that will be considered include the following:

- Siting construction yards and stockpiles with minimal effects on flood flows.
- Methods to reduce the conveyance of materials and plant that is considered necessary to be stored or sited within the flood plain (e.g. actions to take in response to the warning of heavy rainfall events).
- Staging and programming to carry out work when there is less risk of high flow events.
- Diverting overland flow paths away or through areas of work.
- Minimising the physical obstruction to flood flows at the road sag point.

3.0 Recommended NoR Conditions

The following operational flood hazard related NOR conditions have been proposed by the Requiring Authority for NoR 8:

11 Flood Hazard

- a. The Project shall be designed to achieve the following flood risk outcomes:
 - (i) no increase in flood levels for existing authorised habitable floors that are already subject to flooding or have a freeboard less than 150mm;
 - (ii) no more than a 10% reduction in freeboard for existing authorised habitable floors;
 - (iii) no increase of more than 50mm in flood level on land zoned for urban or future urban development where there is no existing dwelling;
 - (iv) no new flood prone areas; and
 - (v) no more than a 10% average increase of flood hazard (defined as flow depth times velocity) for main access to authorised habitable dwellings existing at time the Outline Plan is submitted.
- b. Compliance with this condition shall be demonstrated in the Outline Plan, which shall include flood modelling of the pre-Project and post-Project 100 year ARI flood levels (for Maximum Probable Development land use and including climate change).
- c. Where the above outcomes can be achieved through alternative measures outside of the designation such as flood stop banks, flood walls, raising existing authorised habitable floor level and new overland flow paths or varied through agreement with the relevant landowner, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work or alternative outcome.

Construction Environmental Management Plan

The Construction Environmental Management Plan (CEMP) condition common to each NoR is as follows, including provision for flood hazard assessment:

- a. A CEMP shall be prepared prior to the Start of Construction for a Stage of Work. The objective of the CEMP is to set out the management procedures and construction methods to be undertaken to, avoid, remedy or mitigate any adverse effects associated with Construction Works as far as practicable. To achieve the objective, the CEMP shall include:
 - a. the roles and responsibilities of staff and contractors;
 - b. details of the site or project manager and the project Liaison Person, including their contact details (phone and email address);
 - c. the Construction Works programmes and the staging approach, and the proposed hours of work;
 - d. details of the proposed construction yards including temporary screening when adjacent to residential areas, locations of refuelling activities and construction lighting;
 - e. methods for controlling dust and the removal of debris and demolition of construction materials from public roads or places;
 - f. methods for providing for the health and safety of the general public;
 - g. measures to mitigate flood hazard effects such as siting stockpiles out of floodplains, minimising obstruction to flood flows, actions to respond to warnings of heavy rain;
 - h. procedures for incident management;
 - i. procedures for the refuelling and maintenance of plant and equipment to avoid discharges of fuels or lubricants to Watercourses;
 - j. measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean up;
 - k. procedures for responding to complaints about Construction Works; and
 - l. methods for amending and updating the CEMP as required.

4.0 Assessment of Effects

The NoR is proposed to be constructed and operated in the Ngakoroa Stream and Tūtaenui Stream catchment. In brief, the NoR proposes the widening to existing carriageway and will be served by infrastructure owned and operated by the Requiring Authority.

As was discussed earlier in this memorandum, this assessment focuses on the land use changes in flood hazard (overland flow and flood plains) as a result of constructing and operating the arterial route. Effects assessment of the stormwater discharges will be assessed at a later date should regional consents be sought for the route and are therefore not assessed in further detail here.

Flood Hazard Assessment

As a result of constructing and operating the route, flood hazard effects may include changes to; the flood freeboard to habitable buildings, overland flow paths, the ability to access property by residents and emergency vehicles, the depth of flooding to roads and flooding arising from the blockage of stormwater drainage. In order to understand and assess the potential flood hazard effects, the Requiring Authority's engineering consultant has developed risk rating criteria to assess against the respective flood hazard model results.

This risk rating criteria has enabled a consistent method for assessment of flood hazard risk in relation to less vulnerable, moderately vulnerable and highly vulnerable land use types using existing flood hazard model information including assumptions regarding matters such as maximum probable development (MDP) future land use cover and climate change scenarios (2.1 degrees and 3.8 degrees where applicable to that catchment). It is noted the risk rating criteria has been used to inform the NoR application and assessment process for the project and does not carry through to risk assessment in the NoR conditions proposed by the Requiring Authority. As is indicated in the section above the conditions seek to achieve a set of flood hazard related outcomes.

During pre-lodgement discussions with the Requiring Authority, I queried whether pre and post development scenarios (including the proposed terrain and alignments for the NoR) should have been modelled such as was the case for the Drury NoRs 1-5 which I had a similar role in assessing. The Requiring Authority's engineering consultant indicated that role of the flood hazard assessment at this time is to identify the designation area is sufficient to provide for the alignment construction and operation and any associated works for flood mitigation techniques (discussed in the next section for NoR 8). On balance I agree with the approach and find the use of the risk criteria sufficient to identify the quantum of effect that current exists for various properties (particularly in relation to moderate and high-risk areas), and correspondingly that will exist in the future when detailed design is completed via the proposed conditions of the Outline Plan process. In principle, the detailed design process will also capture flood hazard that has not been identified in the flood hazard report, but may eventuate as a result of matters such as land use change over the coming decades. Notwithstanding this, I have various comments in relation to the proposed conditions later in this report.

The Auckland and Waikato Regions have experienced extreme weather events earlier this year, in some cases beyond the magnitude (rainfall depth/intensity) of what is typically used as a reference rainfall event in relation to site flood risk assessment. Currently the 1% AEP rainfall event (i.e. 1-in-100 chance of occurring in any one year) is embedded in regional and district objective, policy and rule frameworks, including the influence of climate change to accommodate predictions in rainfall intensity and duration. In this case the flood hazard modelling includes a projected annual average temperature increase by 2090 of 2.1 °C and for the respective catchment models, the more conservative climate change scenario of 3.8 °C. During pre-lodgement discussions, I queried whether sensitivity analysis should be completed for a further conservative climate change scenario noting the lapse period for constructing the NoR is up to 20 years. The Requiring Authority's engineering consultant responded as follows¹:

¹ Soft Lodgement Response: Pukekohe Comments Register, prepared by SGA, September 2023

A range of sensitivity assessments can be carried out not limited to rainfall but also to surface roughness, percentage culvert blockage, tailwater conditions, impervious surface/ soil infiltration changes. These sensitivity assessments would be more beneficial at the resource consent phase in understanding the performance of the model and the sensitivity of the design effects. At this stage, (NoR for the designation of a road) assessing a higher flood depth would not lead to the identification of any new properties at risk or any change in condition. Therefore, I propose additional sensitivity not be undertaken until resource consent phase.

I agree with this response and consider over time flood hazard prediction will continue to evolve through local and national direction as an evidence base is developed in relation to planning for the influence of more extreme rainfall events. The proposed NoR conditions also need to be sufficiently flexible to accommodate a range of model sensitivity scenarios using the best information available at that time (including more conservative climate change scenarios, if that eventuates), noting flood hazard prediction and modelling is not an exact science, but rather a tool to assist with decision making and assessment of the NoR against the applicable Waikato Regional Policy Statement objectives and policies in the operative and proposed Waikato District Plans

I conclude the assessment methodology presented in the Flood Hazard Report and how the model results have been reported at this stage of the project design at this time is fit for purpose. Further, the findings for the NoR route are suitable to understand the quantum of flood hazard effects, albeit being based on existing flood hazard information and current land forms. This conclusion is reached on the basis that further detailed analysis will be carried out during the detailed design phase should the notice of requirement be approved, thereby placing some reliance on the effectiveness of the designation conditions and the outcomes sought in relation to floodplain and overland flow path flood hazard management. To assist with the implementation of designation condition implementation, I have recommended edits to the NoR conditions in Section 6 of this memorandum with associated commentary outlining why the edits are recommended.

Flood Hazard Assessment Results Summary and Proposed Mitigation

Overall it is concluded that the potential flood hazard effects understood and there is a provision for mitigation through the performance-based requirements stipulated in the NoR conditions, noting I have recommended changes to the conditions in Section 6 of this memorandum. It is anticipated understanding of flood hazard effects will continue to be defined as detailed design progresses for the NoR and will include flexibility to capture the potential for the emergence of new flood hazards (e.g. due to concurrent land use change) while also future proofing an evolving science of flood hazard management and prediction in light of the recent flood events and the realisation that climate change is not static.

As was discussed in the assessment above a component of the flood hazard assessment report and its findings was to understand flood hazard features in proximity to the designation and to demonstrate mitigation options are available. A summary of the mitigation options, material to this assessment are listed below. In principle, I agree these mitigation options align with good practice in terms of flood hazard and stormwater management, subject to detailed design in the future.

NoR 8 Mill Road and Pukekohe East Road Upgrade:

- Extend culverts at the same diameter and replace culverts at the same diameter.
- Avoid lifting the crown of the road along Mill Road to prevent adverse effects upstream. Or lowering the road crown to cause effects downstream.
- Attenuation for the 10yr and 100yr in the Ngakoroa and Tutaenui Stream catchments.

Flood Hazard Effects During Construction

In the Flood Hazard Report, the Requiring Authority's engineering consultant has discussed the potential location specific flood hazard effects associated with constructing the NoR. This is based on the type of type of work that is anticipated to be carried out (e.g. culvert construction,

cut and fill activities, diversions). Due to the dynamic nature of construction staging it is not typical practice to assess potential flood hazard in the manner that has been completed for the permanent operational phase of the arterial routes. Therefore, a consent condition has been recommended by the Requiring Authority's requiring flood hazard assessment during construction (and associated mitigation) is addressed as part of the Construction Environmental Management Plan (CEMP). This proposed approach is considered satisfactory to assess and or mitigate any temporary flood hazard effects associated with the construction activities. No edits are recommended to the CEMP conditions.

5.0 Submissions

Rodney Cunningham, 80 Mill Road

Submission:

Negative impacts on our property 80 Mill Rd Bombay. Notable immediate impacts include increased stormwater runoff into our property at 80 Mill Rd, Bombay.

Relief Sought:

Not specified.

Assessment:

Notwithstanding the proposed conditions, viewing the design plans, the stormwater management proposal for this section of the designation is limited in detail (other than the mitigation options listed in the Flood Hazard Report). Some further commentary from the Requiring Authority would be if assistance in this regard to specifically address this submission.

6.0 Conditions

I have reviewed the conditions and have the following recommendations indicated in underlined (additions), with deletions (~~strike through~~). I note I have also made similar recommendations in my reporting to the Auckland Council and thus in the interests of consistency are repeated here being relevant to NoR 8 (with the Auckland related references removed).

Flood Hazard Condition.

- a. The Project shall be designed to achieve the following flood risk outcomes:
 - (i) no increase in flood levels in a 1% AEP event for existing authorised habitable, community, commercial, industrial floors that are already subject to flooding ~~or have a freeboard less than 150mm;~~
 - ~~(ii) no more than a 10% reduction in freeboard in a 1% AEP event for existing authorised habitable floors with a freeboard of over 150mm;~~
 - ~~(iii) no increase in 1% AEP flood levels for existing authorised community, commercial, industrial and network utility building floors that are already subject to flooding;~~
 - ~~(iv) no more than a 10% reduction in freeboard in a 1% AEP event for existing authorised community, commercial, industrial and network utility building floors;;~~
 - (ii) Maintain the minimum freeboard requirement outlined in the relevant code of practice at time the Outline Plan is submitted;
 - (iii) no increase of more than 50mm in the 1% AEP event on land zoned for urban or future urban development where there is no existing dwelling on land zoned for urban or Future Urban; No increase in flood plain extent unless there is a site-specific flood assessment to show there is no reduction in developable land in urban or land zoned for urban development in the future;
 - (iv) new overland flow paths shall be diverted away from habitable floors and discharge to a suitable location with no increase in flood levels in a 1% AEP event downstream;
 - (v) no loss in conveyance capacity or change in alignment of existing overland flow paths, unless provided by other means;
 - (vi) no new flood prone areas; and

- (vii) ~~no more than a 10% average increase of flood hazard (defined as flow depth times velocity) classification for main vehicle and pedestrian access to authorised habitable dwellings existing at the time the Outline Plan is submitted. The assessment of flood hazard shall be undertaken for the 10% and 1% AEP rainfall events.~~
- b. Compliance with this condition shall be demonstrated in the Outline Plan which shall include flood modelling of the pre-Project and post-Project ~~400-year ARI~~ 1% AEP flood levels (for Maximum Probable Development land use and including climate change).
- c. Where the above outcomes can be achieved through alternative measures outside of the designation such as flood stop banks, flood walls, raising existing authorised habitable floor level and new overland flow paths or varied through agreement with the relevant landowner, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work or alternative outcome.

Commentary On Condition Edits:

- (i): Simplified condition outcomes with regard to buildings that are already subject to flooding and included other building types, with consequential deletion of (ii), (iii) and (iv). Propose removing metrics around specific numbers (e.g. 150mm) as may become obsolete in the future.
- (ii): Referencing code of practice freeboard requirement, including futureproofing minimum freeboards as the document evolves.
- (iii): Remove 50mm metric as may be a blunt instrument depending on floodplain topography (e.g. confined floodplain vs flood plains that are flat and open). Enable site specific assessment to determine suitability of flood level increase vs land use type.
- (iv) and (v): Introduction of overland flow specific conditions for new and existing overland flow paths to clarify an expectation around their management. (iv) could be a duplication of assessment that will be required with respect to future stormwater discharge consent application requirements but I have conservatively added this as an outline plan outcome.
- (vii): The use of the 10% metric has limited relativity (e.g. 10% increase at some sites will have a more significant effect than at other sites where there is no flood hazard). Current flood hazard approaches (e.g. Australian Disaster Resilience Handbook Collection – Flood Hazards Guideline 7-3) provides flood hazard curves related to the risk to people and vehicles, hence the introduction of a classification metric to assess and identify risk.
- (b): AEP vs ARI terminology. It is unclear why the Requiring Authority is using both.

7.0 Objective and Policies

The natural hazards and flooding related objectives and policies for the Waikato Regional Policy Statement (WRPS) and Waikato District Plans (WDP) (operative and proposed), are assessed as follows :

- WRPS:
 - IM-05, HAZ-01, PAZ-P1, HAZ-P2.
- WDP (Operative)
 - 7.2.2(2), 7.2.3(4), (5), (6), (10), (11).
- WDP (Proposed)
 - SD – O13, NH - O2, NH-P28.

Consistent with the WPRS, the Requiring Authority has identified and assessed current flood risk associated with the NoR route and has used tools such as flood hazard mapping and the application of risk ratings to identify negligible, low, medium and high risk areas. This has lead to decisions around the extent of the designation required and the type of mitigation methods proposed to be employed in the future (in the context of risk and vulnerability) subject to detailed design and associated post development flood hazard assessment with the designation alignment completed.

The Requiring Authority has also sought to incorporate the influence of climate change projections consistent with WDP operative and proposed policy frameworks, including the more

conservative scenario of 3.8 degrees where applicable to that catchment. This is also consistent with the precautionary approach to natural hazard risk management and the Requiring Authority's engineer has indicated this has/will also include other sensitivity assessments (e.g. surface roughness, percentage culvert blockage, tailwater conditions, impervious surface/ soil infiltration changes) to assess the response of the infrastructure and surrounding land uses to low probability but high potential impact rainfall events.

Although post development flood risk has not be assessed as part of the NoR, the quantum of flood risk hazard is understood (with the information currently available) such that there is pathway through the proposed designation conditions for mitigation. I have also recommended condition edits as is discussed in the above section.

Further assessment is required during detailed design of the NoR route where suitable performance requirements will need to be met as conditions of the designation contributing to overall consistency with the WRPS and WDP objective and policy frameworks.

8.0 Conclusions and recommendations

The assessment in this memorandum does not identify any reasons to withhold the NOR. The flood hazard assessment of the proposal is considered by this memorandum that could be granted subject to recommended conditions, are for the following reasons:

- The Requiring Authority has used a fit for purpose flood hazard risk assessment method using a series of steps to establish and assign an operational risk rating.
- The flood hazard modelling accounts for the effects of climate change by adjusting for changes in temperature and rainfall patterns in accordance with MfE guidance.
- The flood hazard modelling and reporting of the results is suitable to inform the quantum of flood hazard that exists and whether the designation extent is suitable to implement mitigation practices though the performance related flood hazard designation conditions. Further flood hazard modelling will be required as part of the Outline Plan including modelling of post project landforms and infrastructure.
- Subject to the imposition of the designation conditions the proposal is not inconsistent with the flood hazard related objectives and policies in the Waikato Regional Policy Statement and Waikato District Plans.



Trent Sunich
Consultant Stormwater Technical Specialist

12 December 2023

To: Karen Bell, Stantec, Reporting Planner

From: Wes Edwards, Arrive Ltd, Technical Specialist - Transport

Subject: Notices of Requirement – Pukekohe Transport Network - Transport Review

1 Executive Summary

- 1.1 At the request of Auckland Council and Waikato District Council (the councils) I have undertaken a review of notices of requirement for the Pukekohe Transport Network in relation to transport effects.
- 1.2 After reviewing the notified material and submissions I have a few concerns about transport matters, recommend some additional information be provided, recommend some designation boundaries be altered, and recommend some amendments to conditions.
- 1.3 I have a concern around the safety of the active mode path proposed in the 6 Pukekohe South West Upgrade Project. In my view the location of the path close to the property boundaries in combination with multiple residential driveway presents a significant hazard and adverse effect on safety. I conclude the Project is inconsistent with its stated Purpose.
- 1.4 Most of the Projects will, or will have the potential to, remove right turn movements at driveways and some side roads due to the introduction of median islands or median barriers. The assessment considers the impact of these changes relying on the presence of roundabouts at multiple key intersections; however, the decision to control these intersections with roundabouts is understood to be preliminary, and if changed to another form such as traffic signals the impact of removing right turn movements from driveways could be significantly worse.
- 1.5 Subject to those concerns, and a number of relatively minor caveats, I find the assessment of transport effects to be broadly acceptable.
- 1.6 The designation footprints for the Projects are based on initial concept designs which are subject to change and refinement as the design and approval processes progress in future. A number of future design decisions have the potential to significantly change the impact on several properties. These decisions include the form and width of active mode facilities and the methods for addressing height differences. The concept designs almost universally use embankments for addressing height differences and in some locations the use of an alternate method such as retaining walls or bridge structures could significantly change the impact on some properties.
- 1.7 I consider the assessment of alternatives to be generally adequate at the larger scale subject to some more information about possible alternative alignments in two locations. Due to issues such as those discussed above, I consider additional assessment of alternative methods in relation to detailed impacts on several properties is warranted.
- 1.8 I consider most of the Projects to be reasonably necessary, although subject to further information about the ability to reduce the area of land required from some properties in relation to alternative methods, at the detailed level some parts of some designations may not be reasonably necessary, and I recommend one change to a designation boundary.
- 1.9 As the 6 Pukekohe South West Upgrade project has, in my view, adverse safety outcomes I consider it is contrary to the stated Purpose and is therefore not reasonably necessary.
- 1.10 I recommend that additional information is provided about several aspects. These are discussed in the body of the report and summarised in the conclusion.

- 1.11 I make recommendations for changes to the condition relating to existing property access and to the Construction Traffic Management Plan conditions.
- 1.12 My recommendations are:
- | | |
|---|---------------------------------|
| a) 1: Drury West Arterial. | Approve with amendments |
| b) 2: Drury-Pukekohe Link | Additional information required |
| c) 3: Paerata Connections | Approve with amendments |
| d) 4: Pukekohe North-East Arterial | Additional information required |
| e) 5: Pukekohe South-East Arterial | Additional information required |
| f) 6: Pukekohe South-West Upgrade | Additional information required |
| g) 7: Pukekohe North-West Arterial | Additional information required |
| h) 8: Mill and Pukekohe East Roads Upgrade - Auckland | Additional information required |
| i) 8: Mill and Pukekohe East Roads Upgrade - Waikato | Additional information required |

2 Introduction

- 2.1 At the request of Auckland Council and Waikato District Council (the councils) I have undertaken a review of notices of requirement (NoRs) for the Pukekohe Transport Network in relation to transport effects.

Qualifications and Experience

- 2.2 I hold a New Zealand Certificate in Civil Engineering, and a Bachelor's degree in Civil Engineering. I am a Chartered Professional Engineer and an International Professional (APEC) Engineer.
- 2.3 I am an Engineering New Zealand Fellow and a Professional Member of the Institute of Transportation Engineers.
- 2.4 I have over 38 years engineering experience, with 32 of those years as a transport specialist based in Auckland. My current role is Transportation Advisor and Director of Arrive Limited, a company which I founded in 2002.
- 2.5 I am a road safety auditor, have experience in collision investigation and road safety engineering, am accredited by KiwiRail as a Level Crossing Safety Impact Assessor, and have formerly been accredited by Waka Kotahi New Zealand Transport Agency (NZTA) as a Traffic Controller, Inspector, and Site Traffic Management Specialist.
- 2.6 I have experience in the design of transport infrastructure including intersections controlled by traffic signals or roundabouts, the design and layout of streets and neighbourhoods, the design of bus interchanges, bus priority measures, active modes lanes and paths, and parking facilities.
- 2.7 I have experience in traffic engineering and transport planning matters associated with resource management, including resource consents, structure plans and plan changes, and notices of requirement for road infrastructure, rail infrastructure, and schools;
- 2.8 I have provided specialist opinions on traffic and transport matters as an expert witness in council, District Court, Environment Court, Land Valuation Tribunal, Environmental Protection Agency Board of Inquiry, and High Court proceedings.

- 2.9 I was formerly accredited by the Ministry for the Environment as a Resource Management Act Hearings Commissioner.
- 2.10 My work experience relevant to this matter includes:
- a) Advising Auckland Council or private parties on several private plan changes and significant developments in southern Auckland, including:
 - i) Anselmi Ridge subdivision, Pukekohe, 2005-08;
 - ii) Pokeno Village Plan Changes, subdivisions, and District Plan review, 2007-22;
 - iii) Pukekohe West (Belmont) Plan Change, 2007-2009;
 - iv) Franklin 2 Precinct (Paerata Rise) SHA Plan Variation, 2016-20;
 - v) PC55 Patumahoe South, 2019-22;
 - vi) PC61 Waipupuke (Drury West), 2020-21;
 - vii) PC91 McLarin Rd, Glenbrook Beach, 2021-23.
 - b) Advising councils and private parties on Notices of Requirement (NoRs) for schools, rail infrastructure projects, and arterial road infrastructure projects including:
 - i) NZTA NoRs for widening of State Highway One in Whangarei, 2010-18;
 - ii) KiwiRail NoRs for North Island Main Trunk Wiri to Quay Park, 2020-2021;
 - iii) KiwiRail NoRs for Ngākōroa (Drury West) station and interchange, 2021-2023;
 - iv) NZTA NoR Warkworth – Te Hana motorway, 2021;
 - v) NZTA NoR for SH1/ SH29 intersection, 2022;
 - vi) Auckland Transport NoRs for Southern Frequent Transport Network, 2023-;
 - c) Advising councils and private parties on numerous development projects.

Involvement in this Matter

- 2.11 I was engaged by the councils in early 2023 to advise on this plan change and participated in discussions about the projects prior to the lodging of the notices. I am broadly familiar with the road network in the area and attended the project briefing and project-wide site visit on 29 June 2023 prior to lodgement of the Notices.
- 2.12 In writing this memo, I have reviewed the following documents relating to the Plan Change:
- a) Form 18 Notice of Requirement for each of the eight NoRs;
 - b) the Assessment of Environmental Effects (AEE);
 - c) the Assessment of Alternatives (AOA) appended to the AEE;
 - d) the Assessment of Transport Effects (ATE);
 - e) the proposed conditions included with the notified material; and
 - f) submissions relating to transport.

Exclusions

- 2.13 The consideration of some matters is outside the scope of this report or my expertise. I do not consider:
- a) matters relating to noise, dust, or light spill generated by vehicle movements;
 - b) matters relating to stormwater runoff;
 - c) matters relating to road pavement structure or integrity, earthworks or structures;
 - d) the affect of traffic on amenity, except in the general context of street design;

Outline

- 2.14 This review considers transport matters common to all eight Projects and also considers aspects of each Project separately.
- 2.15 The outline of this report broadly follows the Auckland Council specialist report pattern and includes the following sections:
- a) an overview of the key transport issues for these notices (Section 3);
 - b) a summary of the Projects (Section 4);
 - c) a summary of the requiring authorities' (RA's) transport assessment (Section 5);
 - d) additional description of the transport environment (Section 6);
 - e) a summary of the assessment of alternatives (Section 7);
 - f) my review of operational transport effects and management methods (Section 8);
 - g) my review of construction transport effects and management methods (Section 9);
 - h) statutory considerations (Section 10);
 - i) a review of transport matters raised in submissions and by the Local Board (Section 11);
and
 - j) a review of the proposed conditions (Section 12);
 - k) conclusions and recommendations (Section 13).

Terminology

- 2.16 In this report "active mode" refers to travel by walking, cycling, scooters, mobility devices and similar modes of transport. Where locations or organisations have multiple or alternative names I generally refer to the formal or legal name. A glossary of terms and abbreviations is appended.

3 Key Transport Issues

Provision for Growth

- 3.1 The Auckland Region has experienced high rates of population growth over the past decades, and growth is expected to continue at relatively high rates into the future. Policies and strategies at both a national and regional level are focussed on providing for a significant

proportion of that growth through intensification within the existing urban footprint, supplemented by “greenfield” growth in some rural areas around the periphery of the city.

- 3.2 Pukekohe is referred to as a satellite town that is expected to accommodate a significant portion of growth in the southern Auckland region, along with greenfield areas in Drury, Paerata, and on the outskirts of Pukekohe.
- 3.3 The northern Waikato region is also expected to have high growth rates extending into the future and the region is planning for expansion of existing towns and villages including Pokeno, Tuakau and Buckland in the northern part of the region.
- 3.4 Population growth results in increased demand for travel. Travel enables people and communities to provide for their social, economic and cultural well-being, and has the potential to adversely affect those matters, health and safety, and the natural environment.
- 3.5 The Projects proposed to be enabled by the NORs are intended to accommodate the increased demand for travel generated by the growth expected to occur in the southern Auckland and northern Waikato regions while addressing some of the adverse effects of that increase. For that reason alone the Projects have significant benefits.
- 3.6 Auckland Council has a number of plans and strategies that must be considered. As the ability to fund and construct bulk infrastructure to support growth is limited, Auckland Council has recently adopted a new Future Development Strategy (FDS) that replaces the former Future Urban Land Supply Strategy (FULSS) that was the relevant document throughout assessment and analysis of the Projects through to notification.
- 3.7 High-level structure planning for the areas the Projects are located in has been undertaken as part of the Drury-Opāheke Structure Plan (DOSP) and Pukekohe-Paerata Structure Plan (PPSP), both of which were supported by an extensive but high-level Integrated Transport Assessment (ITA). That work has considered possible land use patterns and the structuring of infrastructure, with the planned transport network being a key consideration in the determination of the projects.
- 3.8 A key issue for these NORs is the inter dependency of this set of Projects with the manner in which the forecast growth occurs.

Project Interdependencies

- 3.9 The eight Projects are part of a wider-ranging suite of projects that are intended to address and enable growth. Some of those projects are being constructed at this time (for example rail electrification, widening of the Southern Motorway between Papakura and Drury, and Paerata Station), others have designations in place (e.g. Drury Arterials), and others are planned to be addressed in parallel with these NORs, or in the future (e.g. widening of the Southern Motorway between Drury and Bombay).
- 3.10 While some of the Projects that are the subject of these NORs could be built and operated independently of the others, some are dependant on at least parts of others, and each of the Projects is intended and designed assuming that all of the other projects would also be implemented. Some of the Projects could also be constructed in stages with some sections implemented earlier than others.
- 3.11 A key issue for these NORs is the inter dependency of each of the Projects with each other and with other transport infrastructure projects in the area.

Adverse Effects

- 3.12 The Projects would provide substantial benefits but would also produce some adverse effects.
- 3.13 Some sections of some Projects are located along existing roads. In some cases the projects require additional land along one or both sides of those roads so that new or improved transport facilities can be provided. In some locations the design of those facilities is

expected remove existing development, alter property access arrangements, or change movements at intersections.

- 3.14 Some parts of the Projects will provide new sections of road that will significantly change the local environment, divide properties, affect existing land use, and change access to properties.
- 3.15 A key issue for these NORs is how the adverse effects generated by the design and operation of the Projects can be managed, particularly as many design decisions have yet to be made, and some of those design decisions may affect the management of effects.
- 3.16 Other adverse effects will be produced while the Projects are being constructed, and the construction of most Projects is expected to extend over many months and potentially be staged over several years. A key issue for these NORs is how the adverse effects generated by the Projects can be managed during construction.

Reasonably Necessary and Consideration of Alternatives.

- 3.17 Two key issues for the hearing panel are if the consideration of alternatives is adequate, and if the Projects are reasonably necessary.

4 Summary of the Projects

- 4.1 The report considers nine Notices of Requirement for eight arterial road projects in the Pukekohe, Paerata, Drury, Runciman, and Bombay areas of southern Auckland and northern Waikato. Auckland Transport (AT) is the Requiring Authority (RA) for six of the eight projects, and Waka Kotahi New Zealand Transport Agency (NZTA) is the RA for the remaining two projects. The assessments and other documentation have been prepared by Te Tupu Ngātahi Supporting Growth Alliance (SGA), a collaboration between AT and NZTA.
- 4.2 None of the Projects are expected to be implemented in the short to medium term. The designations sought by the NORs are intended to protect the routes from development that would prevent or hinder the implementation of the Projects.
- 4.3 The Projects are generally well described in the notified material and I summarise each project below. Some details of each project are described in more detail later in this report.
- 4.4 The projects include four arterials near the periphery of Pukekohe that together could act as a “ring road” around Pukekohe.

NOR 1: Drury West Arterial



- 4.5 The Drury West Arterial (1:DWA) is an AT project. It is a new arterial road connecting Karaka Road (State Highway 22, SH22) at Jesmond Road with Ngākōroa Station and over the North Island Main Trunk (NIMT) railway to connect with NOR 2 Drury-Pukekohe Link near Runciman Road.

NOR 2: Drury-Pukekohe Link




- 4.6 The Drury-Pukekohe Link (2:DPL), an NZTA project is a new state highway connecting from Great South Road near a proposed new Southern Motorway (State Highway 1, SH1) interchange in southern Drury, and running broadly parallel to the NIMT railway to meet the proposed ring of arterials around Pukekohe in the northern outskirts of the town. It also includes a connection between the DPL and Karaka Road (SH22).


NOR 3: Paerata Connections

- 4.7 This AT project (3:PC) includes two new roads connecting the DPL with existing and future roads at Paerata Rise including Paerata Station. 


NOR 4: Pukekohe North-East Arterial

- 4.8 Together with NORs 5 to 7, the Pukekohe North-East Arterial (4:PNEA) is an AT project that will provide for a ring route around Pukekohe. The 4:PNEA project is a new arterial road forming the north-eastern quadrant of the ring. 


NOR5: Pukekohe South-East Arterial

- 4.9 The Pukekohe South-East Arterial (5:PSEA) is an AT project that uses new and existing road sections to form the south-eastern quadrant of the ring route. 


NOR 6: Pukekohe South-West Upgrade

- 4.10 The Pukekohe South-West Upgrade (6:PSWU) is an AT project that involves adding active mode facilities along existing streets in south-western Pukekohe that could act as part of the ring route. 

NOR 7: Pukekohe North-West Arterial

- 4.11 The Pukekohe North-West Arterial (7:PNWA) is an AT project that uses new and existing road sections to form the north-western quadrant of the Pukekohe ring route. 

NOR 8: Mill Road and Pukekohe East Road Upgrade

- 4.12 This NZTA project proposes changes including widening to Mill Road (Bombay) and Pukekohe East Road. Part of the Mill Road and Pukekohe East Rd Upgrade (8:MPEU) project is in Auckland Region and part is in Waikato Region, so this project involves two Notices, one to Auckland Council and one to Waikato District Council. 

5 Requiring Authorities' Transport Assessment

- 5.1 SGA has prepared the Assessment of Transport Effects (ATE) report for the Projects for AT and NZTA which has informed the Assessment of Environmental Effects (AEE).
- 5.2 The ATE and AEE provide a brief summary of the planning and project refinement process that led to the adoption of the proposed network and the Notices that are intended to protect the routes and enable the eventual implementation of the Projects. An Assessment of Alternatives (AOA) is appended to the AEE.
- 5.3 The AEE and ATE describe the general approach to the assessment of these Projects, which can be summarised as:
- a) considering the operational effects of all the Projects together in the environment when currently planned growth¹ is completed, nominally 2048+, meaning around 2048 or beyond;
 - b) deferring the detailed design and address individual property access arrangements to the Outline Plan of Works (OPW) stage; and

¹ As per the Auckland Council Future Urban Land Supply Strategy (FULSS)

- c) deferring the management of effects produced by construction to a range of management plans.
- 5.4 The ATE is informed by a range of data sources including historical crash data, and software models of forecast transport environments at regional and local scales. The regional transport model is based on forecast land use patterns, with the version used for assessing the Projects assuming the land use patterns contained in the FULSS are realised.
- 5.5 The notified material explains that the designs provided are initial concept designs developed to determine the areas of land that need to be protected. The intention is that sufficient land will be protected to enable a Project to be implemented at some point in the future. The final form of each Project could be different to the concept designs included in the notified material.
- 5.6 I generally agree with most of the AEE and ATE and the conclusions drawn, although those conclusions are subject to a few caveats that I discuss later in this report.

6 Transport Environment

- 6.1 As explained in the notified material, the Projects are not expected to be implemented in the short or medium term, although it is possible that some parts of some Projects may be implemented earlier if funding is provided. As a result, the receiving environment for the Projects is expected to be significantly different to the current environment in some areas but could be very similar in other areas where growth is not planned.
- 6.2 While the designations sought by the NORs will be effective immediately, they are not expected to have any significant effect on how the transport network operates until construction work begins. Construction could occur in stages over a number of years depending on how funding is prioritised.
- 6.3 The existing and forecast future environment in the vicinity of each Project is well described in the notified material. The studies and material informing the background and development of the Projects reflects the current growth planning at that time, as set out in FULSS, the DOSP and the PPSP.
- 6.4 Since those documents were prepared changes such as the Medium Density Residential Standard (MDRS), the intensification requirements of the National Policy Statement on Urban Development (NPS-UD) and the proposed Plan Change 78 (PC78) have occurred. Those changes have influenced the FDS.
- 6.5 The FDS removed some future urban areas that were included in FULSS, but none of the removed areas are in the area relevant to these Projects. The FDS also delayed the development of some areas including Paerata South.
- 6.6 The FDS lists timing and infrastructure prerequisites for identified future urban areas, including those summarised in Table 1 below, where only transport infrastructure is listed, and the Projects are shown in bold. All of the Projects, apart from 3:PC are included as prerequisites with some expected to be in place some time after 2035 or 2040.

Table 1: FDS Future Urban Areas, Timing and Transport Infrastructure Prerequisites²

Staging	Timing	Infrastructure Prerequisite
Drury		
Drury West Stage 1	Not before 2035+	SH22 Upgrade Drury Arterials Papakura-Pukekohe Rail Electrification Ngākōroa Station
Drury West Stage 2	Not before 2035+	SH22 Upgrade Drury Arterials Ngākōroa Station
Drury West Stage 3	Not before 2035+	SH22 Upgrade Drury Arterials Ngākōroa Station SH1 Drury South Interchange 1,2: Drury West and South Drury Connection ^a Great South Road Upgrade
Pukekohe and Paerata		
Paerata South	Not before 2035+ (previously 2030+)	SH22 – Paerata Station Connection 2: Paerata Arterial ^b Paerata Station
Pukekohe East	Not before 2035+	5: Pukekohe South East Arterial ^c 8: Mill Road Upgrade (Bombay Interchange and Harrisville Road) ^d Papakura-Pukekohe Rail Electrification
Pukekohe South West	Not before 2035+	6: Pukekohe South West Upgrade ^e Papakura-Pukekohe Rail Electrification
Paerata West	Not before 2040+	SH22 – Paerata Station Connection 2: Drury-Paerata Link ^f 2: Paerata Arterial ^g SH22 Safety Improvements Paerata Station
Pukekohe Northeast	Not before 2040+	4: Pukekohe North East Arterial ^h 2: Paerata Arterial ^g Papakura-Pukekohe Rail Electrification
Pukekohe Southeast	Not before 2040+	5: Pukekohe South East Arterial ^c Papakura-Pukekohe Rail Electrification
Pukekohe Northwest	Not before 2040+	7: Pukekohe North West Arterial ⁱ Papakura-Pukekohe Rail Electrification

Notes:

- a. Drury West is NOR1:DWA. South Drury Segment of NOR2:DPL
- b. Paerata Arterial Segment of NOR2:DPL
- c. NOR5:PSEA
- d. NOR8: MPEU and a separate project to upgrade Bombay Interchange
- e. NOR6: PSWU
- f. Drury-Paerata Segment of NOR2:DPL
- g. Paerata Arterial Segment of NOR2:DPL
- h. NOR4: PNEA
- i. NOR7: PNWA

6.7 The slight delay in Paerata South timing is not expected to change the need for any of the Projects, but the timeframes and dates in the notified material should be considered to be general indications.

6.8 Some aspects of the existing and forecast environment are discussed further below.

² Extract from Auckland Future Development Strategy Appendix 6 (Auckland Council Planning Environment and Parks Committee Minutes 2 November 2023 Version)

7 Assessment of Alternatives

- 7.1 The RMA provides for a RA to designate “for a project or work; or in respect of any land ... where a restriction is **reasonably necessary** for the safe or efficient functioning or operation of such a project or work”³.
- 7.2 As the Hearing Panel will be well aware, it must consider the effects having particular regard to four areas, two of which are :
- (b) *whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if ...*
 - (c) *whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and*
- 7.3 The notification material, and chiefly the AOA document, describe the process taken to consider a wide range of alternative means and methods of achieving the objectives. In general the process considered a broad range of alternative routes and forms and evaluated each against various criteria.
- 7.4 In my view most of the Projects, or at least projects very much like them, are reasonably necessary to provide for forecast growth in the sub-region at the macro scale. I am also of the view that alternatives sites, routes, and methods have been well considered at the macro scale. I would therefore agree that a new arterial route around the north-eastern periphery of Pukekohe, for example, is reasonably necessary when considered together with the other Projects, that a range of alternatives to such a link have been considered, and that the alignment is broadly in an appropriate location.
- 7.5 What may be less certain is the adequacy of consideration given to alternative methods of undertaking the work and how reasonably necessary every individual part of every piece of land to be restricted is at the micro scale.
- 7.6 The material presents initial concept design drawings, and as noted earlier the implemented project may differ from the concept design. My understanding is that detailed design matters such as determining the exact location of any particular element or choosing different methods of construction such as a batter slope or a retaining wall have not yet been made and are intended to be made at the OPW stage when detailed designs have been completed. For example, the final level of the Project at any point could change, so the need for and extents of features such as a batter slope or retaining wall have a degree of uncertainty.
- 7.7 That is somewhat understandable given the expected implementation timeframes and the resulting uncertainty about what the future environment may look like. As a result, in some locations there may be opportunities to consider an alternative method of undertaking the work in order to reduce effects, potentially including the area of land required. There may be locations and properties where consideration of alternative methods could result in refinement of the Project footprint now, and other locations where it may be premature to refine or restrict the range of methods at this time.
- 7.8 The proposed requirements for land also include land required for the construction, operation and maintenance of the Projects. When construction is complete it may be possible to reduce the area of land required. This is commonly done for other road infrastructure projects, and it is expected to occur for these Projects.
- 7.9 Some NORs I have been involved with have made a distinction between areas required permanently and areas required only for construction, but in each case the design had progressed to a more detailed stage and implementation was imminent. Given the route protection intention and the early concept level of design the absence of a distinction between the permanent and temporary occupation extents is understandable and, in my view, appropriate.

³ S168 (2) Resource Management Act 1991

- 7.10 Where access to properties is or may be affected by a Project I understand the design work and the AOA has not considered a range of options for how access to all properties may be managed. Access to properties is considered in more detail below.
- 7.11 There is no discussion in the notification material about other design decisions, such as considering the alternatives of an on-road cycle lane versus an off-road cycle path, or a shared path for both pedestrians and cyclists versus two separate paths. The concept designs prepared to support the notices either adopt the current standard of the relevant RA or defer the decision to the detailed design and OPW stage.
- 7.12 At this preliminary stage that may be an appropriate response as design standards change over time; however, there are some aspects of these design decisions that may be less suited to some environments.
- 7.13 For example, where cyclists are travelling close to the road boundary and intersect driveways the provision of appropriate visibility between cyclists and drivers of vehicles leaving properties is an important factor for safety. This is often addressed by restricting or prohibiting driveways across such paths, increasing the distance between the path and the boundary (to somewhere in the order of 8m), reducing the speed of cyclists, or imposing controls on boundary fencing or planting. Some of those measures could increase the designation footprint or affect property owners. None of the concept designs or assessments include these measures.
- 7.14 I have significant concerns around the safety of the proposed active mode paths where they cross driveways, and this is most significant where cycle or shared paths are provided in urban areas with a higher frequency of driveways, such as along 6:PSEU.
- 7.15 In other cases where the volume of pedestrians and cyclists is likely to be lower, such as in the rural areas, the use of a single shared path for both cyclists and pedestrians may be acceptable and result in less land being required.
- 7.16 Ultimately, the provision of a sufficiently safe and effective transport environment, including cycling facilities, is the responsibility of the RAs, however the assessment of likely effects and the reasonable necessity for the extent of land required are squarely within the scope of this process. For those reasons I request the RAs provide additional information on these points at the hearing.

8 Operational Transport Effects and Management Methods

Scope of this Report

- 8.1 This report has been prepared on the basis that its primary function is to assist the reporting planner and the hearings panel to understand the likely transport-related effects of the projects, and to assist with their decision making with respect to the key matters of the assessment of alternatives, and if each project is reasonably necessary.
- 8.2 In considering the assessment of alternatives I note that the RA is not required to have undertaken an exhaustive assessment of every possible alternative and is not required to have selected the “best” alternative.
- 8.3 This report is not a design review or a safety audit and does not address the adequacy or suitability of the proposed designs, except where this is likely to impact on the effects or where relevant to submissions.
- 8.4 If, for example, the road near a roundabout is too steep or there are too many roundabouts within a short distance, those are not matters this report is properly able to consider, unless the assessment of alternatives, the assessment of effects, or the necessity of the project is significantly impacted.

- 8.5 When considering the impact of the Notices, there are also a range of potential effects that could be generated without a designation. For example, a wire rope median barrier could be installed along an existing road to improve safety at the expense of additional journey length for properties that no longer have right turn movements available. This type of activity is being undertaken on parts of SH22, albeit with management of some adverse effects following consultation with affected parties.
- 8.6 In a similar manner, each Road Controlling Authority (RCA) may undertake maintenance and construction work within the road reserve, and in some cases the effects arising from this already-enabled work may be similar to the effects generated during construction of some parts of the Projects. This report attempts to consider the operational and construction-related effects of the Projects bearing those already-enabled effects in mind.

All Projects

- 8.7 In general the methodology and techniques used for assessing the operational effects as presented in the notified material are considered to be appropriate and adequate; however, there are some points to be aware of.

Purpose

- 8.8 The Form 18 for each NOR sets out the purpose and objectives for each Project. The purpose and objectives are not repeated here but are important when considering the need for each project and the sites, routes, and methods for the work.

Design Standards

- 8.9 As explained in the ATE the assessment of the Projects is aimed at route protection for longer-term projects and some aspects of the receiving environment and the design are not yet certain.
- 8.10 The ATE explains that as part of this approach the assessment uses use of “*generic cross-sections and design standards*”⁴ and focuses “*more on desired outcomes and footprints*”.⁵ Generic design standards invariably include desirable dimensions, or at least “desirable minimums” rather than absolute minimum values. In many cases a non-compliant design may still provide appropriate service.
- 8.11 Given the uncertainties about how growth will occur it is considered generally reasonable that the Projects are based on generic designs in order to provide some ability to adapt the Projects to the growth environment at the time of implementation, and to site-specific environmental conditions. It is preferable that Projects are implemented to a reasonable standard, although there may be opportunities to reduce impacts and effects in some locations through judicious adjustment of design parameters. That would be a normal aspect of the detailed design phase, but some of those decisions could appropriately be made now.
- 8.12 For example, the notified material shows an indicative form of intersection control, such as Give Way, roundabout, or traffic signals. While the form shown in the concept designs is probably the most likely to be adopted, the various trade-offs between those choices may result in a different decision being made prior to construction. As detailed below the choice of intersection control in particular may have a significant impact on some effects.
- 8.13 Another example is the decision to provide separated or combined walking and cycling paths. That appears to be a decision that is easier to make now and one that could have a significant impact on the amount of land required in some areas.
- 8.14 The Hearing Panel may wish to consider how the stated “desired outcomes” relate to the “alternative methods” and “reasonably necessary” matters at a more detailed level when considering submissions.

⁴ ibid

⁵ Page 9, ATE

Management of Effects

- 8.15 Given the longer timeframes and inherent uncertainties around what the receiving environment or the design will look like at the time of implementation, the material relies heavily on management plans to manage effects. In that situation the deferral of effects management to future management plans may be the most practicable option but it is essential that the conditions which govern the preparation and implementation of those plans have a relatively broad scope and are robust. I return to the conditions around management plans later.

Integration of Transport and Land Use

Overall Growth

- 8.16 The ATE explains that a key element of the assessment is the environment against which the effects are assessed. It acknowledges the relationship between the Projects and the growth they are intended to support, and that the Projects are “*unlikely to occur without such development*”⁶.
- 8.17 The assessment material evaluates the benefits of the Projects assuming that all development would occur with or without the Projects. In my view much of the development is unlikely to occur without the Projects, which has not been accounted for in the ATE benefits analysis, although the interplay is acknowledged. This dependency of growth on the projects is reinforced by the FDS which makes the Projects prerequisites for growth in various areas.
- 8.18 This interplay is not unexpected given the desire to integrate land use and transport is a common theme in growth strategies and plans and it may be difficult, and undesirable, to try and separate the two. It is now relatively common for plan changes to rezone land for development to connect the provision of infrastructure with various levels of development, and I expect future plan changes could place some restrictions on the scale of development until specific parts of some of the Projects are operational.
- 8.19 I do not consider it appropriate or necessary to assess the effects or effectiveness of the Projects against what could be a nearly infinite number of possible development scenarios, but it is useful to remember that the benefits attributed to the Projects may not all occur unless all of the planned growth also occurs.

Local Development

- 8.20 The Projects do not include the provision of planned collector roads as shown in the DOSP and PPSP. Collector and local roads are expected to be provided by developers as the land is developed, often in general accordance with a Precinct Plan which may show (indicative) locations for collector roads.

Assessment of Operational Effects

- 8.21 The assessment of effects from the operation of the Projects has been informed by computer modelling. As noted in the ATE the modelling has compared the effects of all growth occurring without any of the Projects in place against all growth occurring with all of the Projects in place.
- 8.22 The ATE acknowledges that the Projects have “*been designed as part of an overall integrated system, but in general the projects can be delivered separately.*” From my examination of the projects I consider it is also possible, or even likely, that individual Projects may be delivered in stages.
- 8.23 As always, it is possible that some parts of some Projects, or indeed whole Projects, may not be delivered in parallel with the planned growth, or may not be delivered at all. That could occur for a variety of reasons including growth occurring in an unexpected manner.

⁶ ibid

- 8.24 In the event that some parts of one or more Projects are not implemented as currently envisaged it is possible that the full range of benefits attributed to the combined Projects may not be realised. It is also plausible that some parts of some Projects may not operate as efficiently without other parts of the network in place and that the benefits of the remaining projects may not be fully realised.
- 8.25 It may not be necessary or appropriate to model each part of each Project separately, but the potential for the benefits to be less than expected in a partial implementation situation should be understood. Given the Projects have been considered as a whole, it is also possible that one Project, or one part of one Project is not (as) beneficial on a stand-alone basis.
- 8.26 The transport models used to inform the assessment include using the regional MSM model which is based on land use forecasts which in turn are based on regional population forecasts produced by Statistics New Zealand. The models represent the planned land use pattern, such as those shown in the DOSP and PPSP. As land is not always zoned in accordance with those expectations there may be some differences between the forecasts and the actual land use pattern.
- 8.27 I understand the models used for the assessment were the most current available at the time, but do not reflect potential intensification of existing urban areas. Such intensification may assist in slowing down the demand for development of greenfield areas, so there may be some more localised differences.

Road Safety

- 8.28 The assessment of the effects on road safety has considered the recent crash history in the area and how the design standards align with a harm-minimisation approach which focusses most heavily on reducing deaths and serious injuries (DSIs) from crashes.
- 8.29 The ATE presents a summary of crashes on selected routes in the study area over the ten-year period 2012-2022. The ATE notes that AT has recently reduced speed limits on many of the key routes studied with the intention of reducing DSIs and total crash numbers. In addition, the Covid-19 Health Orders and the residual effects on working and travel patterns are likely to have contributed to a reduction in total crashes during 2021 and 2022.
- 8.30 Some of the routes in the area have previously been identified as having a high or medium crash risk using the historical KiwiRAP assessment. Some safety improvements have been undertaken on SH22 and more are proposed to occur within the medium-term.
- 8.31 Due to the increase in travel associated with the forecast growth and the relatively poor standard of some parts of the road network, the current road network is stated in the ATE to not be fit for purpose, despite planned improvements.
- 8.32 The Projects will provide a number of new high-standard roads that are expected to be an attractive choice for many journeys in the area resulting in fewer vehicles travelling on the lower-standard roads, reducing the risk of crashes on those roads, as crash frequency is proportional to traffic volume.
- 8.33 There are a small number of railway level crossings in the area. The level crossings on the NIMT railway are all considered to be high-risk with that risk being exacerbated by increasing traffic volumes and increasing train movements. All of the level crossings on the NIMT are proposed to be removed or replaced by grade-separated crossings as part of other projects.
- 8.34 The level crossing of the Mission Bush Branch (MBB) railway on Heights Road on the north-western periphery of Pukekohe is likely to remain given the relatively low traffic volume and train movements, and the proposed 7:PNWA Project is expected to reduce the future traffic volume on that road. Development in that area that has the potential to increase the volume or pattern of traffic using a level crossing may need to undertake an independent Level Crossing Safety Impact Assessment (LCSIA) to KiwiRail standards, and potentially upgrade the crossing.

- 8.35 The ATE states “*There are significant safety-related adverse effects expected if future growth progresses and the existing transport environment remains the same*”⁷
- 8.36 If the Projects are not confirmed, or if their implementation is delayed, I would not expect the existing transport environment to remain the same. I expect the road controlling authorities (AT and NZTA) would address the increased crash risk by other means.

8.37 For example, the ATE suggests:

“The upgrade is expected to result in significant positive effects on safety when compared to the existing and future receiving environment without the projects, and these consist of:

...

- *An improved speed environment by reducing speed limits to more appropriate urban speeds with enhanced place function and consequential reductions in the risk of DSI’s;*

...

- *Improved rail crossing facilities for all users in Drury, Paerata and Pukekohe by adding five grade-separated crossings over the NIMT which will reduce the risk for DSI’s, see Figure 5-1. No explicit recommendation for closure of existing rail crossings has been proposed as a part of the NoRs but it is assumed to be in place as per the TCDM, Part 9 level crossings; and”*

- 8.38 I would expect that reduced speed limits would occur with or without the Projects as areas are urbanised. Other projects are planned that would result in the removal of rail level crossings in the area.
- 8.39 While I consider the safety benefits attributed to the Projects may have been slightly overstated, I consider the proposed Projects are likely to be the most effective means of reducing the crash risk, and note the Projects are expected to produce significant reductions in the rate of crashes on roads in the area.
- 8.40 Safety aspects of the proposed cycle facilities are discussed below.

Active Modes

- 8.41 The ATE provides a description of the existing active mode (walking and cycling) facilities in the area. As expected, most of the roads have no dedicated facilities where they are located in a rural environment.
- 8.42 Figure 3-6 of the ATE shows maps of the existing walking network and deficiencies sourced from AT Future Connect (AT’s Network Plan). The “Walking Deficiency Indicator” map shows deficiencies in the existing walking network, and these may include a footpath that is narrower than the current standard width or paths along a busy road where there are few pedestrian crossing facilities. Many of the footpaths present in the network would have been constructed prior to Auckland Transport adopting the current standard 1.8m width, so would show on the map as being deficient.
- 8.43 There are few cycle facilities in the area, particularly in the rural areas. In general, cycling can be undertaken relatively safely on lower-speed lower-volume streets such as those found in the majority of the suburban residential areas, but on busier roads the higher speeds and higher volumes of both bicycles and other vehicles increases the desirability of providing some form of cycle facility such as a roadside path or an on-road lane.
- 8.44 The low population density in the rural areas would generally result in low and dispersed demand for walking and cycling, but as development occurs and the population density increases the demand for walking and cycling would increase.
- 8.45 Some destinations in the area would be within cycling distance for many residents, but it is expected that perceived safety risks would deter many people from choosing to cycle unless suitable facilities are provided.

⁷ Pg 33, ATE.

- 8.46 The ATE shows⁸ three significant active mode facilities are planned in the area. These include proposed facilities along Karaka Rd (SH22) as that corridor is widened, a planned Regional Cycling Corridor beside the Southern Motorway (Drury to Bombay) supplementing the cycle path further north, and a Regional Active Mode Corridor (AMC) beside the NIMT railway including between Drury and Pukekohe. These facilities will improve the movement of people as the area around Drury is developed and better service longer-distance cycling journeys in the sub-region.
- 8.47 As land in the area is urbanised it is expected that footpaths would be constructed on both sides of every new or widened road, and that cycle facilities would be constructed on both sides of every new or widened collector or arterial road. In some locations additional facilities, such as paths beside streams or through reserves may also be added. As a result, as the area develops active mode connectivity within each new urban area is expected to be excellent.
- 8.48 The ATE suggests that the provision of active mode facilities within every one of the Projects is essential, principally to enable access to “*social, educational and employment opportunities*” without needing to have access to a car⁹.
- 8.49 Active mode facilities along the Project corridors are part of the expected road form for all new or upgraded collector or arterial roads in urban areas. In rural areas the form of the facility would generally be considered in relation to the expected demand, which in turn relates to the location of destinations. Given the distance between many of the destinations in the area, walking and cycling journeys on the longer sections of the rural or semi-rural network are more likely to be recreational.
- 8.50 The concept design for each Project includes walking and cycling facilities on at least one side of the road. The form of the facilities is yet to be determined and is intended to be confirmed at the OPW stage once detailed design has been completed. As noted earlier this decision could impact the amount of land required.

Cycle Path Safety Concerns

- 8.51 Some of the Projects propose the installation of shared or separated cycle paths between the property boundary and the edge of the general traffic carriageway. In the existing urban areas, particularly along the 6:PSWU route the paths are crossed by numerous property access driveways.
- 8.52 Moving cyclists from a shared lane or dedicated lane on an arterial road to an off-road location can result in significant improvements to cyclist safety as a result of increased distance between the cyclists and motor vehicles resulting in fewer collisions.
- 8.53 This may be offset by an increase in crash risk where a cycle path crosses multiple driveways. The risks are higher where:
- a) the cycle path is relatively close to the property boundary and sight lines between cyclists and drivers are constrained by boundary treatments such as fences and planting;
 - b) the path is a bi-directional one;
 - c) the speed of cyclists is higher;
 - d) the speed of driveway vehicles is higher;
 - e) there are more driveways.
- 8.54 New Zealand research showed that 14% of cyclist crashes in urban areas occurred at driveways and notes:¹⁰

⁸ Figure 3-15, page 35, ATE

⁹ Section 3.2.3, ATE.

¹⁰ Pgs. 107, 115. National Cycle Facility Design Guidance Best Practice Review, Abley and Via Strada, July 2015.

“Risks at intersections and driveways are a major factor in terms of the relative safety of one directional vs bi-directional facilities.”

8.55 The 6:PSWU facility is proposed as a bi-directional path along one side of the road.

8.56 One well-respected New Zealand practitioner has stated¹¹:

Well-designed cycle paths, can be safe and pleasant for cycling.

Having said that, many existing cycle paths in New Zealand fall far short of the required design “best practice”, and potentially put cyclists at risk. Simply put, a good cycle path has no driveways crossing it unless there is ample unimpeded visibility between driveway users and the path. In practice, this means that a cycle path must be separated from the boundary (from where driveways emerge) by at least 7 m. Where a cycle path is close to the boundary, cyclists are unable to stop in time to avoid hitting (or being hit by) a car emerging from a driveway.

8.57 The national NZTA Cycle Network Guidance (CNG) states¹²:

As for two-way separated cycleways, shared paths adjacent to roads involve hazards for cyclists at driveways, particularly those travelling in the direction opposite to that of traffic on the adjacent lane.

8.58 NZTA also notes:

While separated cycleways feel safer and have been proven to be safer between intersections and driveways, they are generally less safe at intersections and driveways, which are the locations where the risk is highest overall. It is crucial that this risk is mitigated through good design.

Cycling in the contraflow direction is more hazardous for separated cycleways at driveways, especially for cycleways located close to the roadway, where drivers base their expectations for cyclists’ direction of travel on the adjacent traffic lane.¹³

8.59 The CNG also refers to the Australasian guidelines. The Australasian design guidance recommends that one-way paths have limited driveway crossings (preferably fewer than 1 per 100m), and¹⁴:

In urban arterial road related areas it is recommended that where practicable paths are to be located with adequate clearance from both road traffic and the property line so that adequate sight distance is achieved for vehicles and pedestrians leaving driveways and gateways.

8.60 The Christchurch Cycle Design Guideline states¹⁵:

Preferred location for this facility is when the path only has to cross a limited number of intersections and driveways. Consideration is to be given to the buffer distance from the driveway, intervisibility, between pathway users and drivers entering/exiting, fence and boundary vegetation heights, the layout and locations of buildings, including auxiliary buildings such as garages, high volume driveways and density of land use.

8.61 The Auckland Transport Design Manual (TDM) sets out some requirements:

- a) The TDM considers it imperative that driveway entrances are minimised, that driveways show priority for the paths, and that speeds are reduced.

¹¹ The Case Against Cycle Paths, Macbeth, AG,

¹² <https://www.nzta.govt.nz/walking-cycling-and-public-transport/cycling/cycling-standards-and-guidance/cycling-network-guidance/cycle-network-and-route-planning-guide/principles/cycle-route-components-between-intersections/#shared-paths>

¹³ Technical Note TN002: Updated guidance on separated cycleways at side roads and driveways, NZTA, 2020.

¹⁴ Page 36, Guide to Road Design Part 6A: Paths for Walking and Cycling, Austroads, 2017.

¹⁵ Pg 2, Christchurch Cycle Design Guidelines, Christchurch City Council, 2016.

- b) *“Visibility splays must be provided suitable for the operating speed of the cycleway, from a vehicle stopped clear of the cycle way”*
- c) *“Vehicle crossings to multiple residential properties may require a speed control measure such as a ramp up to the vehicle crossing at the property boundary in addition to the visibility splay.”*
- d) *“Where cycle facilities cross commercial driveways “green dashed” markings should be used to raise awareness of people on bikes.”*

8.62 In greenfield development areas Precinct Provisions are often included at the request of Auckland Transport and these can include the provision of cycle paths on all new collector or arterial roads, with no property access allowed across a path. As an example, the following standard applies in the Warkworth North Precinct:

I553.6.4. Standards for vehicle access to Western Link Road and roads with separated cycleways or shared paths

Purpose:

- To ensure the safety of cyclists and pedestrians and facilitate public transport.

- (1) Sites that front onto the Western Link Road or roads with separated cycleways or 3m shared path (pedestrian/ cycle) must not have direct vehicle access to the road and must be provided with access from rear lanes (access lots) or side roads at the time of subdivision.

8.63 To summarise:

- a) I have concerns about the safety of cyclists using the proposed paths where there are numerous driveways, and those concerns are exacerbated for bi-directional and shared paths;
- b) The safety issues may require mitigation measures to be taken, for example speed bumps on driveways, that have not been conveyed to potential submitters; or
- c) The safety issues may require an alternate design, such as a separated/ protected cycle facility (similar to that provided on Nelson Street in Auckland’s CBD) where cyclists are more conspicuous.

8.64 I recommend Auckland Transport provide more evidence on this matter for the hearing.

Public Transport

8.65 The primary public transport services in the area are the Rapid Transit Network (RTN) rail services along the NIMT railway with stations at Pukekohe, Paerata and Ngākōroa. A small number of connector and local bus services are intended to support and supplement the RTN services by connecting local neighbourhoods to the rail stations and to each other.

8.66 The Projects are expected to improve the speed and reliability of some of the bus routes in the area by reducing traffic congestion, and in some cases by providing a new or improved route. No bus lanes are proposed for any of the Projects except on the 1:DWA between Karaka Road (SH22) and Burt Road near Drury West station.

Freight

8.67 A significant volume of freight is moved through the project area, and a substantial proportion of that volume is agricultural produce being moved from producer to consumer. Several of the roads in the project area are classified as part of the strategic and supporting freight networks

8.68 The forecast growth would, in the absence of the Projects, result in significant additional traffic congestion, incurring many economic costs, including costs relating to the movement of

freight. By reducing expected traffic congestion in the area the Projects are expected to reduce delays and provide for more efficient and effective movement of freight.

General Traffic

- 8.69 As noted above, the forecast growth is expected to result in a significant increase in the demand for travel. While the Projects and other planned changes will improve the travel options available to people moving through the area, the majority of travel is expected to use private vehicles, as that will remain the most attractive and efficient option for many journeys.
- 8.70 The Projects will provide new and widened sections of road, increasing the overall capacity of the network, and enabling more efficient and economic movement of people and goods, including in private vehicles. While levels of traffic congestion would be less than in the absence of the Projects the congestion may not be less than what occurs now, at least during peak times.

Travel and Emissions

- 8.71 Planning decisions need to have regard to Climate Plans and the Emission Reduction Plans that may be prepared to support them.
- 8.72 Auckland's Transport Emissions Reduction Plan (TERP) has a goal of reducing travel in order to reduce emissions. The TERP provides vehicle kilometres travelled (VKT) as a measure of travel and an input into the calculation of vehicle emissions. VKT is problematic to measure.
- 8.73 VKT for assessments such as this is provided as an output of software transport models such as the regional MSM model or in this case the district-level SATURN model. The VKT estimates output by the models are for private vehicles (cars and trucks) and do not include travel made by public transport vehicles. As stated in the ATE the models predict that the Projects would reduce private vehicle travel by 15.4 million vehicle kilometres per year. As the models use the same population projections and land use patterns this reduction in VKT would result from the new roads providing shorter journey distances and/ or more people using public transport.
- 8.74 By making several assumptions around the average occupancy of vehicles, vehicle fuel efficiency, average travel speed, and congestion conditions the quantity of CO₂ emissions can be estimated from the VKT estimate. In this case the Projects are estimated to result in an annual reduction in CO₂ emissions of 2,700 t. The percentage change in VKT and emissions is not given.

Property Access

- 8.75 Most of the Projects will, or have the potential to, have significant impacts on property access arrangements.
- 8.76 As the 2:DPL and 8:MPEU Projects are NZTA projects I expect that these roads could become State Highways and/ or Limited Access Roads (LAR), but those processes would be independent of these NORs. Properties on a LAR can only be accessed through crossing points approved by NZTA under the Government Roadway Powers Act 1989. SH22 is a LAR.
- 8.77 In addition to the LAR powers administered by NZTA, the designation of land requires the approval of the RA to do some things within the designated land including subdividing it or changing the land use activities, so both NZTA and AT would have the ability to control property access. The Auckland Unitary Plan (AUP) and the Waikato District Plan (both Operative and Proposed) also provide some control on property access arrangements.
- 8.78 NZTA or AT can install median barriers, median islands, or side barriers on any road following consultation with affected parties. Medians may prevent right turns in and out of properties and some side roads, and due to the inconvenience caused these treatments are generally only implemented on existing roads in order to address a significant safety issue. NZTA is currently working on installing flexible wire rope median and side barriers to improve safety on some sections of SH22.

- 8.79 It is common practice for new or upgraded higher-order arterial roads to have limited or no property access, particularly for right turns. The absence of property access points, and right turns in particular, is known to make arterial roads operate more efficiently. Safety can be significantly improved, particularly where cycle paths are provided.
- 8.80 The ATE notes that the requirement for turning restrictions will be determined as part of the OPW process. I address this and other property access considerations for each Project below.

Existing Property Access

- 8.81 The ATE notes (emphasis added):

*For existing properties, our design philosophy for the Projects has been to **retain access wherever feasible**.*

...

*In situations where a project impacts access (such as the need for realignment or regrading), these **specifics will be confirmed during the detailed design phase**, in coordination with the landowner, as part of property discussions under the Public Works Act*

...

*Due to the complexity of evaluating access arrangements changing over time, it's not currently possible to confirm a precise treatment for all individual accesses, particularly in areas that is transitioning from rural to urban. These arrangements may undergo changes before the projects are carried out. Thus, the most suitable time to confirm these details is during the detailed design stage, prior to the onset of construction. It should be emphasised that the requirement for turning restrictions will be determined as part of the Outline Plan, at this stage the focus is on route protection. The **draft conditions** include a condition relating to existing property accesses, which **will require the Outline Plan to demonstrate how safe alternative access will be provided** to any property where vehicle accesses that exist at the time of the Outline Plan lodgement will be affected.*

*An assessment of property access has been undertaken to inform the designation boundary and concept design and to assess potential effects. However, as the area continues to develop, particularly in the FUZ areas, addressing access during future detailed design stages is recommended. **In certain scenarios, restrictions on right-turn movements may be necessary for safety reasons**. The following assessment takes into account journey times affected by right-turn restrictions and suggests necessary mitigation measures.¹⁶*

- 8.82 All property must have legal access. I would therefore expect that if a suitable access could not be provided for a property for some reason, that property may need to be acquired by the RA.
- 8.83 Given the potential impact of changes to property access arrangements I consider it is important that the conditions for the designations address this matter comprehensively.
- 8.84 The ATE has considered the number of properties that are likely to have access arrangements changed, and these changes are primarily the removal of right-turn movements due to the introduction of a median island or median barrier.
- 8.85 The ATE has estimated the longest additional journey time imposed by this change. In almost all cases the assessment of this additional journey length is based on the presence of proposed roundabouts nearby as roundabouts allow for safe U-turn movements to be undertaken. The ATE also suggests that in many cases the decision on the form of intersection control (give way, roundabout, or traffic signals) will be made during the detailed design and OPW stage.
- 8.86 Should an intersection currently proposed to have a roundabout have a different form of control, that is likely to exacerbate the adverse effects generated by the removal of right turn movements. Those could include adverse effects on efficiency by requiring longer detours or additional delay at an intersection. Longer vehicles in particular may be unable to make a U-turn movement except at a roundabout. The effects could also include adverse effects on

¹⁶ section 5.1.5, ATE.

safety as U-turn movements have a relatively high risk of collision when not made at a roundabout.

- 8.87 With that caveat, I consider the ATE assessment of effects on existing property access to be otherwise reasonable and adequate.

New Property Access

- 8.88 Reducing or eliminating property access from arterial roads is easier to achieve on new roads in greenfield development situations as the local street network can be designed to provide access to each property, with collector roads connecting the local street network to the arterials in a few discrete locations. This accords with best practice, particularly for higher-volume higher-speed arterial roads.

- 8.89 The ATE recommends an approach consistent with best practice:

For new property accesses, direct property access is not advised to better align corridors with its future arterial access requirements¹⁷.

- 8.90 The concept design does not provide collector road connection points as the design of the collector roads is subject to further investigation and may be in a different location to the indicative locations shown in the structure plans. I expect the location of such intersections can be determined through liaison between the RA and developers at the time of detailed design of the Projects, or once the projects are constructed.

Parking

On-Street Parking

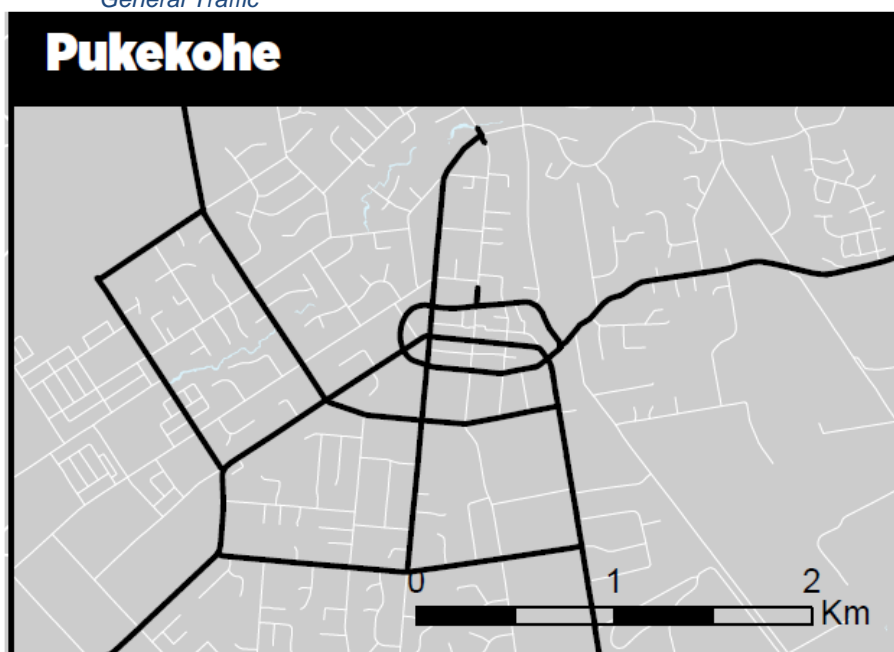
- 8.91 The existing sections of road in the rural areas generally have no parking restrictions, although these roads have relatively narrow shoulders with little opportunity for parking. As a result of this and the low development density little on-street parking occurs in these areas.
- 8.92 The existing sections of road in the urban areas typically have relatively moderate to high demand for on-street parking.
- 8.93 I would expect that the higher-speed higher-volume sections of Project roads would have little if any demand for parking as a result of their being no direct property access in urban areas. I would also expect that parking restrictions could be imposed to prohibit parking on these road sections if necessary.
- 8.94 AT and Council have developed a Parking Strategy entitled “*Room to Move*”¹⁸ which explains that general vehicle parking is given the lowest priority for allocation of kerbside space, and that on the Strategic Transport Network movement will be prioritised over parking. The strategy also says “*Where delivery of projects on AT’s Strategic Transport Network requires the repurposing of road space dedicated to parking, AT’s policy is to repurpose that space to the more beneficial use - unless there are exceptional circumstances*”¹⁹
- 8.95 In this area the Strategic Network includes Karaka Road and Paerata Road (SH22), East Street, Pukekohe East Road, Mill Road, Manukau Road and Buckland Road, and the roads shown in Figure 1. I expect that each of the Projects would become part of the Strategic Network and are therefore unlikely to have any on-street parking.
- 8.96 I address any project-specific on-street parking matters below.
- 8.97 Regardless of the longer-term operational availability of on-street parking I expect that parking may need to be removed or restricted during the construction period(s), and that would be managed through the proposed management plans.

¹⁷ ibid

¹⁸ Room to Move: *Tāmaki Makaurau Auckland’s Parking Strategy*, Auckland Transport, May 2023

¹⁹ Page 41, Room to Move.

Figure 1: Strategic Transport Network – Pukekohe for Active Modes, Public Transport, Freight and General Traffic²⁰



Parking on Affected Properties

- 8.98 Some properties proposed to be designated have parking or loading areas located in the affected areas, and the ultimate removal of the designated land may also result in parking or loading areas outside the designation being affected by changed access or manoeuvring geometry.
- 8.99 The impact of this change has not been assessed in the NOR documentation. I expect that most of the rural properties would be able to relocate any parking relatively easily. Urban properties that have higher development density may not be able to relocate or replace the parking or loading spaces lost as a result of the Projects. I address this further below.

Management of Effects

- 8.100 Given the uncertainties due to the current level of design and the long implementation timeframes it is not possible to be certain about the degree of adverse effects.
- 8.101 For access to properties the RAs propose a condition requiring the OPW to demonstrate how safe access will be provided for each existing access that is altered. I recommend that the condition be amended to require that access is also demonstrated to be efficient and effective bearing in mind the vehicles that need to access the site.
- 8.102 It is common for construction effects for larger projects to be managed through one or more management plans, and that is the process proposed for these projects. The content of the construction management plan conditions is addressed later.

NOR 1: Drury West Arterial

Design and Changes to Network

- 8.103 This link is intended to be an urban arterial road with a 50km/h speed limit and walking and cycling facilities on both sides of the road. The stated purpose of this link is to, together with the future Southern Motorway Drury South Interchange and NOR 2: DPL, to relieve the load on the existing Drury Interchange and provide for growth in Drury West. It also provides access to Ngākōroa Station. The concept design includes a median with the form (flush or raised) to be determined later.

²⁰ Extract from Map 2, Room to Move.



Northern End

- 8.104 The north end of the Project is the intersection of Karaka Road (SH22) and Jesmond Road, and the DWA will result in this T-intersection becoming a cross-roads. This intersection lies within three existing designations – NZTA designation 6706 for widening of SH22, a KiwiRail designation for provision of a transport interchange and access adjacent to Ngākōroa Station (currently awaiting confirmation on appeal), and AT designation 1840 for the provision of widening of Jesmond Road. NOR 1 would add a fourth overlapping designation.
- 8.105 Through these other designation processes it has been determined this intersection would be controlled by traffic signals. The northern end of the project is proposed to be constructed as part of the SH22 widening project and/ or station access project.
- 8.106 Some land along SH22 and Jesmond Road has “live” zoning for development with the remainder of the land zoned Future Urban. I expect the land on either side of SH22 may be rezoned for development in the medium term.

Station Access – Burt Road

- 8.107 South of the station access the four-lane road would pass over the NIMT railway via a new overbridge and intersect with Burt Road. The four-lane section between SH22 and Burt Road is proposed to have one dedicated bus lane in each direction and one general traffic lane in each direction.
- 8.108 The intersection with Burt Road is expected to be controlled by a new roundabout, although the form of intersection control is subject to review. The form of intersection may also change as the surrounding land is developed and the number of pedestrian and cyclist movements increases. The land south of the NIMT railway is expected to be developed in the medium to long term.

South of Burt Road

- 8.109 South of Burt Road the two-lane DWA cuts through rural properties to terminate at the 2:DPL project. That crossroads intersection is expected to be controlled by a new roundabout. The intersection lies over part of the Runciman Road reserve and it is proposed the northern part of Runciman Road be diverted to a T-intersection on the DWA a short distance north of the 2:DPL intersection.
- 8.110 Without the diversion the 1:DWA/ 2:DPL / Runciman intersection would have five approaches. An intersection with five approaches is difficult to manage efficiently with traffic signals, and a roundabout with five approaches would need to be significantly larger in order to provide geometry with sufficient safety. The proposed form appears to be a reasonable method for implementing the projects.
- 8.111 The Project will result in a small increase in travel distance for journeys along Runciman Road, which would be represented in models and therefore in the overall VKT. There is no separate assessment of this additional travel distance in the material, but I expect in future that travel patterns would change and that it is quite likely that journeys along this part of Runciman Road might well occur along the 1:DWA or along the eastern part of the 2:DPL in any case. On that basis, and given the short additional distance, I consider the impact of this change to be relatively minor.

Interdependencies and Staging

- 8.112 The northern end of the project is expected to be constructed in the short term in order to provide vehicle access to Ngākōroa Station. As noted in the ATE the remainder of the project could be implemented as a stand-alone project, although there are likely to be few benefits to constructing the remainder in the short to medium term. Constructing the section north of Burt Road would have some benefits for accessing public transport services once the land south of the railway is rezoned. Constructing the southern portion would appear to have few benefits in the absence of the Drury South interchange and the eastern end of the 2:DPL.

8.113 The FDS makes provision of the “Drury West and South Drury Connection” a prerequisite for development of the Drury Stage 3 area which is expected to have timing of “Not before 2035”.

Property Access

8.114 The section north of the NIMT railway cuts through a few existing properties, with future access arrangements already affected by the Ngākōroa Station access project. The section between the NIMT railway and Burt Road appears to have no impact on access to properties other than dividing a rural property in two.

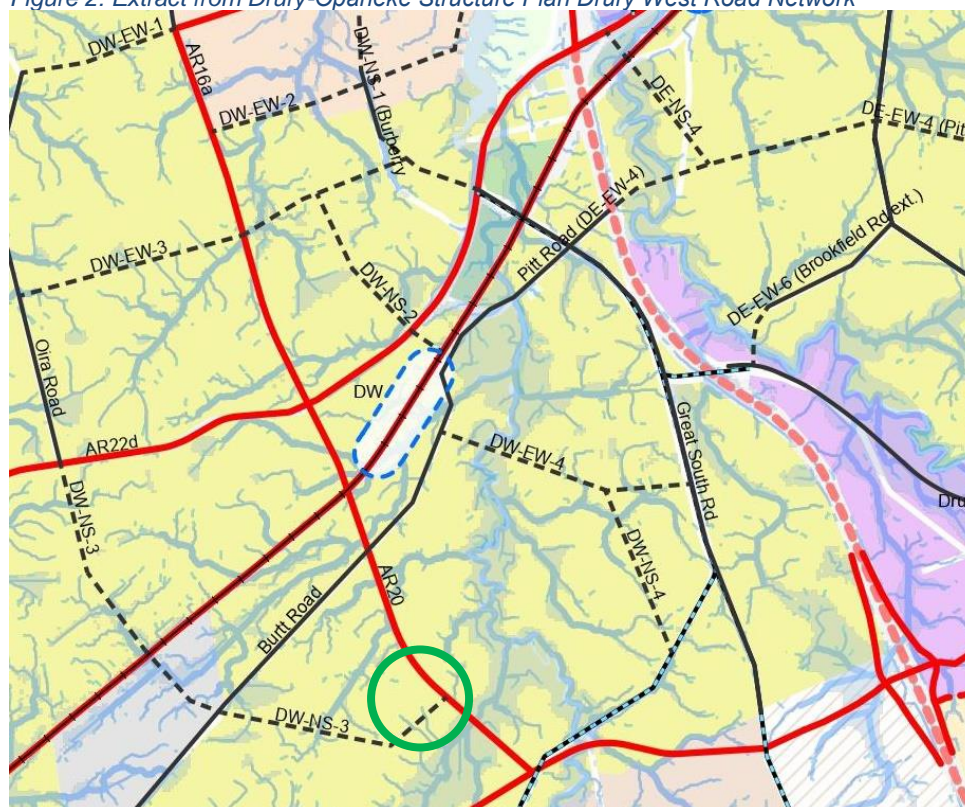
8.115 The section between Burt Road and Runciman Road is also a new section of road so no properties are currently accessed from it, although the alignment does cut through some properties and may displace existing access arrangements from Burt Road or Runciman Road.

8.116 The ATE anticipates that up to three properties will have access restricted to left-in left-out movements due to the introduction of a median. The impact of the diversions required by the removal of right turn movements has been assessed in the ATE by assuming nearby roundabouts would safely provide for U-turn movements and that travel times would be increased by up to two minutes. If one or both intersections are controlled by traffic signals the additional travel time could be longer, but in the context of the probable existing journey times and the small number of properties affected I consider this impact to be reasonably minor, particularly in the future when additional local roads may provide more routing options.

8.117 The ATE recommends against the 1:DWA providing direct access to properties. I expect all new development would be accessed from a collector road, and that only collector roads would connect with the 1:DWA.

8.118 The DOSP shows the proposed 1:DWA as “AR20” and shows an indicative collector road “SW-NS-3” connecting with the DWA about halfway between Burt Road and the DPL (shown as a green circle in Figure 2).

Figure 2: Extract from Drury-Opāheke Structure Plan Drury West Road Network



8.119 The concept design for the 1:DWA does not show this collector road as the exact location is currently unknown. The final form and location of any collector roads will be determined through future rezoning processes (either a Plan Change or a revision of the Unitary Plan).

There appears to be sufficient ability to provide a new collector road intersection in this section of the 1:DWA.

Parking

- 8.120 There is currently no parking on this route, and no on-street parking is expected to be provided.

Management of Effects

- 8.121 Effects are proposed to be managed by management plans, and the requirements for these are addressed later in this report.

NOR 2: Drury-Pukekohe Link

Overview



- 8.122 The Drury to Pukekohe Link (2:DPL) is the most significant of the eight projects, both in terms of the length of the route (10.6km) and in terms of the impact on changing travel patterns in the area. The ATE describes this Project as “a new inter-regional strategic corridor connecting Drury, Paerata and Pukekohe.”²¹
- 8.123 The link will provide an arterial route between Drury and Pukekohe on the south-eastern side of the NIMT railway, complementing Karaka Road and Paerata Road (SH22) on the north western side. It also provides a third arterial road connection to Pukekohe.
- 8.124 In earlier documents, such as the DOSP, PPSP and the Integrated Transport Assessment (ITA) that informed them, this link was referred to as the “Pukekohe Expressway”. In those documents the expressway was expected to be delivered some time after 2048, was predicted to alleviate demand on SH22, and was predicted “to operate near capacity for significant sections across all parts of the day when introduced.”²² The expressway and the proposed Southern Motorway Drury South interchange were described as “needed to support the future place function of SH22”²³, which means the expressway was intended to reduce traffic volumes on SH22 so that SH22 could be urbanised as land on either side was developed.
- 8.125 The AOA document provides some background on the evolution of this corridor and others with respect to alignment and form. The Draft Strategic South Detailed Business Case (DBC) recommended a four-lane high-speed state highway²⁴.
- 8.126 A range of options were then examined, and the AOA suggests that changes in government policy with an increased focus on climate change had an impact on the outcome. From the AOA it appears that a four-lane road was thought to be less desirable based on, among other things, a theory that additional lanes might induce extra travel which would result in less travel by public transport and produce additional emissions, and this was one of many items included in a multi-criteria analysis. The evaluation is summarised in Table 4-17 of the AOA.

Design, Changes to Network, and Interdependencies

- 8.127 The Project, now referred to as the Dury-Pukekohe Link, is proposed to provide a two-lane state highway with a median, having a 50km/h speed limit in urban sections and 80km/h in rural sections, although speed limits are subject to change as the design and surround development progress.
- 8.128 The ATE material divides the route into four segments.

²¹ Section 5.1.5.2, pg 69, ATE.

²² Pg xv, Dury-Opāheke and Pukekohe-Paerata Structure Plan ITA, April 2019.

²³ Pg 42, DO and PP SP ITA.

²⁴ Pg 56, AOA

South Drury Connection Segment

- 8.129 The South Drury Connection segment runs from Gt South Road where the Southern Motorway Drury South interchange is proposed to connect, westward to near Burt Road. Burt Road is proposed to be realigned so that it meets the 2:DPL at right angles, and the intersection is expected to be controlled by a roundabout. The realignment of Burt Road is considered necessary to avoid Burt Road meeting the 2:DPL at an acute angle which would produce poor operational outcomes for either traffic signals or a roundabout.
- 8.130 This section is expected to have an urban environment on the northern side and a rural environment on the southern side. Walking and cycling facilities are proposed on the northern side. The speed limit is expected to be 60km/h or 80km/h and the road is expected to have a median with the form to be determined later.
- 8.131 The South Drury Connection is listed in the FDS as a prerequisite for Drury West Stage 3 “Not before 2035+).

SH22 Connection Segment

- 8.132 About 600m west of Burt Road the Drury-Paerata Link segment intersects with the southern end of the SH22 Connection segment. The SH22 Connection segment passes over the NIMT railway to intersect with the northern part of Sim Rd before following the northern end of Sim Rd to SH22²⁵. All of the intersections along these segments are expected to be controlled by roundabouts.
- 8.133 This segment is expected to be a rural arterial road with an 80km/h speed limit. Walking and cycling facilities are proposed on one side.
- 8.134 The ATE notes the South Drury and SH22 Connection segments could be implemented separately from the remainder of the DPL as land in Drury West is developed to assist in reducing the volume of traffic using Karaka Road (SH22).
- 8.135 The FDS does not explicitly include this segment as a prerequisite.

Drury-Paerata Segment

- 8.136 From the SH22 connection intersection the Drury-Paerata segment of the DPL turns to the southwest and runs broadly parallel to the NIMT railway (at a distance of 50-150m) for about 2km before meeting the southern end of the two 3:PC roads at T-intersections that are expected to be controlled by roundabouts. The section between the two roundabouts replaces part of Sim Road (south).
- 8.137 This section is expected to be a rural arterial with a speed limit of 60km/h or 80km/h with walking and cycling facilities on one side.
- 8.138 The ATE suggests this segment would be staged last “to provide optimum mode shift outcomes”²⁶. I interpret that to mean that completing the 2:DPL earlier is thought to encourage people to drive instead of taking the train.
- 8.139 The FDS lists the “Drury-Paerata Link” as a prerequisite for development of Paerata West “Not before 2040+.”

Paerata Arterial Segment

- 8.140 From Paerata the Paerata Arterial segment runs to the south along the remaining length of Sim Rd (south) and the section of Tuhimata Road between Sim Road and Cape Hill Road. It then replaces a short section of Cape Hill Road to terminate at 4:PNEA.

²⁵ Sim Road has a formed northern section, an unformed central section, and a formed southern section.

²⁶ Pg 46, ATE

- 8.141 This segment will have an urban environment on one side and a rural environment on the other, a 50km/h speed limit. Walking and cycling facilities may be provided on one or both sides.
- 8.142 The ATE suggests this southern segment would be best provided in conjunction with 3:PC and 4:PNEA to connect this segment to the remainder of the network at either end.
- 8.143 South of the 3:PC the route replaces parts of Sim Road, Tuhimata Road and Cape Hill Road, and therefore is expected to have a significant impact on access in the area. The impact on properties is addressed below, but the Project also has an impact on local road connections.
- 8.144 By passing along a short (200m) length of Tuhimata Road the Project essentially divides Tuhimata Road into two parts. The intersection between the 2:DPL and the western part of Tuhimata Road is expected to be controlled by a roundabout where all movements are provided for.
- 8.145 The intersection with the eastern part of Tuhimata Road is currently shown on the concept designs as having a median island installed across the intersection, removing the ability to turn right here. Traffic wishing to turn right out of Tuhimata Road would need to turn left and U-turn around the proposed roundabout at Cape Hill Road, a detour about 700m in length. Traffic currently turning right from Cape Hill Rd into Tuhimata Rd would need to U-turn around the proposed roundabout to the north, a detour about 400m long. I expect some of the traffic currently making those turns may reroute along the new roads, although the demand for turning right out of the eastern part of Tuhimata Road may increase as a result of the 2:DPL being more attractive than using Burt Road or Runciman Road. The impact of these detours is not explicitly assessed in the ATE although I expect these movements are represented in the model and accounted for in the VKT estimate. I invite the RA to clarify this.
- 8.146 The FDS lists the "Paerata Arterial" as a prerequisite for development of Paerata South "Not before 2035+", Paerata West "Not before 2040+" and Pukekohe Northeast "Not before 2040+".

Active Modes

- 8.147 As noted earlier 2:DPL generally runs parallel to the NIMT railway, and in some places these corridors are less than 100m apart. The regional Active Mode Corridor (AMC) is proposed to be constructed along one side of the NIMT railway to provide an active mode connection between Pukekohe, Paerata, and Drury with regular connections to the remainder of the network at various points along the route. Active mode facilities are also expected to be provided along Paerata Road Karaka Road (SH22) as the area is urbanised, which also runs broadly parallel to the NIMT railway on the opposite side to 2:DPL.
- 8.148 2:DPL is proposed to have walking and cycling facilities along one side to provide an active mode connection between Pukekohe, Paerata, and Drury with regular connections to the remainder of the network at various points along the route. This represents a duplication of facilities and raises a question about the additional width of the 2:DPL corridor being reasonably necessary.

Property Access

- 8.149 It is expected that direct property access would not be available along this route. Most segments of this route are new sections of road with no existing property access. The ATE expects that up to 10 properties may have access restricted to left-in left-out movements, requiring detours for the previous right-turn movements. The ATE assesses the impact of the detours as being less than three minutes.

South Drury Connection Segment

- 8.150 This section is predominantly a new section of road although access to some properties is expected to be affected, particularly where the route intersects with existing roads such as Gt South Rd, Runciman Road and Burt Road.

- 8.151 Any properties with access between Gt South Road and Runciman Road would be able to use the roundabout at Runciman Road for one direction, but as the Gt South Road intersection is expected to be controlled by traffic signals a detour in the opposite direction would need to include other roads in the area.
- 8.152 If there are any properties with access at the western end of this segment the roundabouts at the SH22 connection and Burt Road are about 600m apart.

SH22 Connection Segment

- 8.153 Properties in the northern part of this link where the route uses the existing Sim Road alignment would need to use the roundabouts at SH22 and at Sim Road, which are 800m apart to overcome the removal of right turns resulting in a detour up to 1.6km long, although shorter routes may be available by making use of SH22 and/ or Sim Road through Paerata Rise when the latter connection becomes available.
- 8.154 For properties in the southern part of the link the two roundabouts are about 1km apart resulting in detours up to 2km long, but as this is a new section of road few if any properties are expected to be affected.

Drury-Paerata Segment

- 8.155 Properties with access between the SH22 Connection Segment roundabout and the 3:PC roundabout would need to use those roundabouts, which are 2.5km apart, to replace the former right-turn movements, resulting in detours up to 5km long for some directions of travel.
- 8.156 If any properties have access to the 2:DPL between the two 3:PC roundabouts, they would be able to use the two roundabouts, which are about 500m apart to overcome the removal of right turn movements.

Paerata Arterial Segment

- 8.157 Several properties at the southern end of Sim Road will need to use the Tuhimata Road roundabout and the southern 3:PC roundabout which are 1.2km apart so the detours for those properties would be more significant at around 2.4km. Properties between the roundabouts on Cape Hill Road and Tuhimata Road will be able to use those roundabouts which are about 600m apart, resulting in detour lengths of up to 1.2km. Depending on the length of the overall journey the additional detour length could represent a minimal to moderate increase in the journey length.

NOR 3: Paerata Connections

Design and Changes to Network



- 8.158 This Project provides two new road connections between 2:DPL and Paerata Rise. The roads are expected to have an urban form with a 50km/h speed limit and active mode facilities on both sides.
- 8.159 The northern road replaces the connection between the northern and southern parts of Sim Road lost when the former Sim Road bridge crossing of the NIMT railway was removed. The southern road provides a new road connection between 2:DPL and Paerata Station and the road network surrounding it. Both new roads are proposed to have two traffic lanes, active mode facilities on both sides and a 50km/h speed limit.

Interdependencies and Staging

- 8.160 The ATE suggests this Project could proceed on a stand-alone basis, but as these roads would not connect to anything in the absence of the 2:DPL project, it appears the two connections are entirely dependant on at least part of the 2:DPL project being constructed. Alternately, the 2:DPL project appears to be largely independent of these two connections.

- 8.161 This Project is not listed as an infrastructure prerequisite for any growth areas, presumably as they are intended to service land that is live zoned.

Property Access

- 8.162 The northern Sim Road connection lies adjacent and over the existing Sim Road alignment and interacts with a few properties. The ATE notes that only one or two properties are affected and it considers realigning existing accesses to Sim Road to be viable. It is expected that medians would prevent right turn movements, and the ATE assesses the additional travel time at less than one minute.
- 8.163 Properties accessed from Sim Road could make use of the roundabout proposed for the Sim Road / 2:DPL intersection for one direction of travel, but for the other direction of travel those vehicles would need to either make a U-turn somewhere within the Paerata Rise development or take an entirely different route. Given these properties are currently accessed from the end of Sim Road, which is relatively remote, the opportunity to travel through Paerata Rise could result in a reduction in travel time to many destinations.

NOR 4: Pukekohe North-East Arterial

Design and Changes to Network



- 8.164 This two-lane corridor forms the north-eastern quadrant of the “ring road” around Pukekohe. The stated purpose is to provide for development in this area and to connect key arterial routes. It connects Paerata Road (SH22), the 2:DPL, Cape Hill Road, and Pukekohe East Road with each intersection likely to be controlled by a roundabout.
- 8.165 The road follows the unformed alignment of Butcher Road between SH22 and the NIMT railway, and a new alignment for the remainder. The environment west of Cape Hill Road is expected to be urban on both sides and the environment east of Cape Hill Road is expected to be rural on both sides through the centre with urban on one side near Pukekohe East Road.

Interdependencies and Staging

- 8.166 The ATE notes this Project could be implemented as a stand-alone project to provide an alternate route (bypass) around this quadrant of Pukekohe. Without this Project the southern end of the 2:DPL project would be connected to nothing and may only be implemented as far south as Cape Hill Road.
- 8.167 I expect it may also be feasible to construct this Project in sections by providing a link between SH22 and 2:DPL or Cape Hill Road at a different time to the eastern section.
- 8.168 The FDS lists the Project as a prerequisite for development of Pukekohe Northeast “Not before 2040+”).

Property Access

- 8.169 The ATE indicates that existing property access “*will be retained where feasible*”. It expects that access to one or two properties may be affected with an additional journey time of up to two minutes.
- 8.170 A relatively small area of land would end up being surrounded by SH22 on the western side, the MBB railway on the northern side, the NIMT railway on the eastern side and the Project on the southern side. Access on the SH22 frontage is constrained by the height difference as SH22 passes beneath the MBB railway and by limited sight distances to the north. It appears these properties currently utilise the Butchers Road reserve for access.
- 8.171 It appears the only practicable option for access to this land is from the western end of the Project away from the embankment rising to the new bridge over the NIMT. In that case I would expect access to be limited to left-in and left-out movements. The roundabouts at SH22 and 2:DPL are about 700m apart so a detour could be up to 1.4km long. Depending on

the delays at each roundabout the additional travel time could be around 3-5 minutes at peak times so I consider the ATE estimate of 2 minutes could be understated.

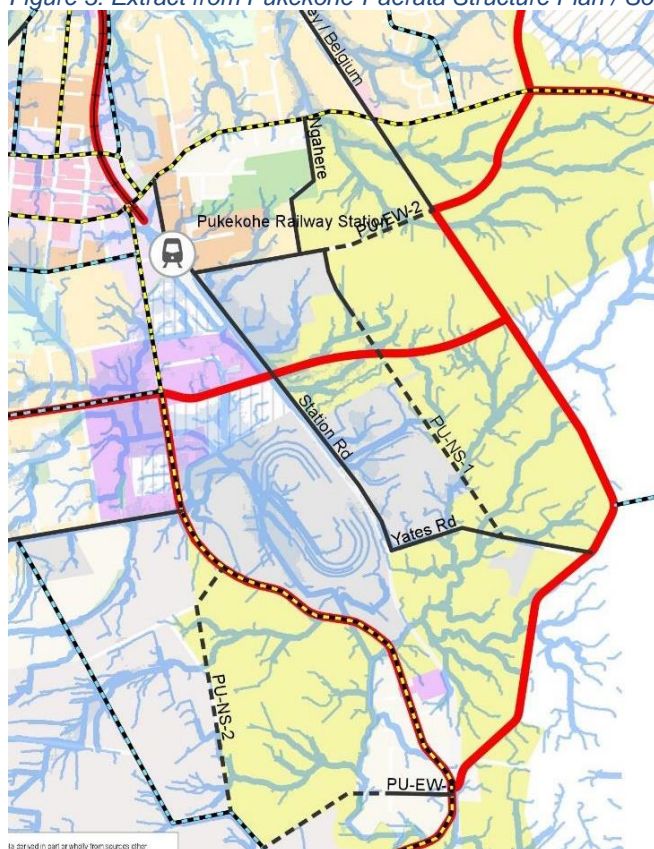
NOR5: Pukekohe South-East Arterial



Design and Changes to Network

- 8.172 This Project is intended to provide the two-lane 50m/h south-eastern quadrant of the “ring route” and it:
- a) widens Pukekohe East Road between the Pukekohe East Road/ Belgium Road/ Golding Road / East Street roundabout and the proposed 4:PNEA roundabout to add active mode paths along the southern side of the road;
 - b) enlarges the Pukekohe East Road/ Belgium Road/ Golding Road / East Street roundabout to two circulating lanes;
 - c) widens and urbanises Golding Road between Pukekohe East Road and Royal Doulton Drive providing separate active mode paths on both sides;
 - d) creates a new section of road with active mode paths on both sides running from a new single-lane roundabout on Golding Road, over Station Road and the NIMT railway, to a new roundabout at the intersection of Crosbie Road/ Wrightson Way/ Svendsen Road;
 - e) realigns the western end of Svendsen Road which in turn connects with Manukau Road at an exiting single-lane roundabout.
- 8.173 No connection with Station Road is proposed. Svendsen Road currently has a footpath on the southern side and no path on the northern side. The Project retains a footpath on the southern side and adds separate paths on the northern side.
- 8.174 The stated purpose of this route is to connect land currently separated by the NIMT railway and to improve connections between south-western Pukekohe and the Pukekohe East Road – Mill Road corridor and the connections to the Southern Motorway and Waikato Expressway (SH1) at Bombay.
- 8.175 This arterial will improve connectivity in south-eastern Pukekohe, although it does not connect directly to the eastern end of the 4 :PNEA.
- 8.176 The PPSP planned road network, part of which is shown in Figure 3, includes an arterial route linking Buckland Road on the southern periphery of Pukekohe along Logan Road and Golding Road, meeting the eastern end of a link to Svendsen Road, and then connecting with the eastern end of 4:PNEA via a new alignment.
- 8.177 The AOA summarises some recommendations of analysis following the South DBC including consideration of reducing embodied carbon through investigating the upgrading of existing roads, the opportunity to better support urban development on either side of Golding Road, and a desire to avoid wetlands. The AOA also summarises consideration of four alternate routes for the northern and western sections of this route. The routes east of Golding Road were discarded due to impacts on the tuff ring, potential impacts on wetlands and bat habitat, the amount of land required, and traversing difficult topography.

Figure 3: Extract from Pukekohe-Paerata Structure Plan / Southern ITA



Interdependencies and Staging

- 8.178 The ATE notes this Project could be implemented separately from the other projects. It also appears that this project could be implemented in parts, potentially with the upgrading of Golding Road occurring separately from the east-west connection between Svendsen Road and Golding Road.
- 8.179 The FDS lists the Project as a prerequisite for development of Pukekohe East “Not before 2035+”) and Pukekohe Southeast “Not before 2040+”.

Property Access

- 8.180 As this Project includes parts of Pukekohe East Road, Golding Road, Crosbie Road and Svendsen Road there is potential to affect property access, particularly west of the NIMT railway which is urban. The ATE notes that property access near the Svendsen Road/ Crosbie Road intersection will be realigned and regraded. Property access on the remainder of this route is not recommended in the ATE and this road is expected to have a raised median preventing right turn movements at property access points.
- 8.181 Properties on the eastern side of the railway are expected to be redeveloped in future with access rearranged to be from collector roads rather than directly from Golding Road where possible.
- 8.182 The ATE expects up to four properties would have access restricted to left-in and left-out movements and has determined the additional journey time to be up to two minutes. Inspection of the general arrangement drawings suggests that there could be more dwellings where right turn movements could be removed.
- 8.183 Properties between the east-west section and Pukekohe East Road would be able to use the roundabouts at each end of that section, which are about 1km apart, to undertake U-turns, resulting in additional travel distances of around 2km. Properties south of the east-west section may have significantly longer detours if right turn movements are removed.

Parking

- 8.184 Parking is not restricted on Pukekohe East Road or Golding Road except at intersections. There appears to be little demand for on-street parking on these roads and I expect that is attributable to the low-density rural land use and the lack of attractive locations for roadside parking. I expect the Projects would have little to no impact on parking on these roads.
- 8.185 On-street parking is not restricted on Svendsen Road, although the narrow marked shoulders are likely to discourage parking on this road, and the lack of direct property access fronting this road appears to result in little to no demand for on-street parking in the western part of this road, but adjoining land use does create some demand for on-street parking in the eastern end. Parking is prohibited on both sides of Wrightson Way, and there appears to be a moderate to high demand for on-street parking in Crosbie Road and Austen Place. I expect the removal of parking from Svendsen Road due to the Project is likely to result in the demand for on-street parking in Crosbie Road and Austen Place becoming high to very high.

NOR 6: Pukekohe South-West Upgrade



Design and Changes to Network

- 8.186 This Project connects the western end of 5:PSEA in Svendsen Road with Helvetia Road via John Street, Nelson Street, Ward Street, Puni Road and West Street.
- 8.187 The stated purpose of the project is to “*provide for targeted intersection treatments that support safer active mode facilities*” but much of the land to be designated is away from intersections, and no changes to intersection controls are proposed. Rather, the required land facilitates adding a bi-directional cycle way along one side of the corridor.
- 8.188 The project also involves provision of footpaths on both sides of each road as some sections of Nelson Street, Ward Street, and Puni Road currently have a footpath on one side.
- 8.189 In my view the land requirements for this project could be considered to be reasonably necessary only if the provision of a cycle facility along this corridor is seen to be reasonably necessary. In my view the provision of a cycle facility is highly desirable, but perhaps not “essential” as the transport network could still function without it, although with deficiencies in the ability for people to travel by bicycle.

Safety

- 8.190 As noted earlier, I have significant concerns about conflicts at driveways along the proposed path and consider the Project could have an adverse impact on safety, contrary to the stated purpose.
- 8.191 I request the RA provide information on this at the hearing; however, my preliminary view is that this Project has significant adverse effects, is not in accordance with the stated purpose, and is not reasonably necessary.

Interdependencies and Staging

- 8.192 The ATE considers this Project could be implemented separately from the others as no other Project depends on it, and it does not depend on any of the other Projects.
- 8.193 The FDS lists the Project as a prerequisite for development of Pukekohe Southwest “Not before 2035+”.

Property Access

- 8.194 In this case there are multiple existing property accesses along the route and the ATE says “*it is expected that all will be retained*”²⁷. As noted above, I consider the project is likely to result in poor safety outcomes at driveways.

²⁷ Pg 71, ATE

Parking

- 8.195 As with the other projects, based on the General Arrangement drawings I do not expect on-street parking to be retained along this corridor adjacent to the proposed cycle path, although that decision is proposed to be deferred to the future detailed design and OPW process.

NOR 7: Pukekohe North-West Arterial



Design and Changes to Network

- 8.196 This Project connects Helvetia Road with SH22 and forms the North-Western quadrant of the “ring route.” The project is predominantly a new route and is proposed to be a two-lane urban arterial with a 50km/h speed limit and active mode facilities on both sides. The Project includes:
- a) a new single-lane roundabout at the intersection of Helvetia Road/ Birdwood Road / Kauri Road;
 - b) widening and urbanisation of Helvetia Road from Birdwood Road to Gun Club Road;
 - c) a new dual-lane roundabout at the intersection of Helvetia Road/ Heights Road/ Gun Club Road;
 - d) a new link between Helvetia Road and Beatty Road, partly along an unformed section of Keith Road and then through a reverse-curve;
 - e) a new dual-lane roundabout on Beatty Road;
 - f) a new section of road between Beatty Road and Butcher Road;
 - g) a new dual-lane roundabout on Butcher Road, with part of Butcher Road realigned;
 - h) widening and urbanisation of the northern end of Butcher Road through to the new 4:PNEA roundabout on SH22.
- 8.197 The ATE explains the intent of this arterial is to support surrounding development and to connect the north-western part of Pukekohe with SH22 and 4:PNEA.

Interdependencies and Staging

- 8.198 This Project could be implemented in isolation and provide improved access to this part of Pukekohe. The benefits would be greater once 4:PNEA is in place, particularly when the Paerata Arterial segment of 2:DPL is also in place.
- 8.199 The FDS lists the Project as a prerequisite for development of Pukekohe Northwest “Not before 2040+”.

Property Access

- 8.200 While some sections of this route are a new alignment, the ATE expects that up to eleven properties may need to have access arrangements changed with some having movements restricted to left-in and left-out. The ATE assesses the additional journey time for the right-turn detours to be less than one minute.
- 8.201 The longest detours are likely to occur along the Helvetia Road as the two proposed roundabouts will be 800m apart, and I expect most affected property accesses will be located in this section. Unlike some other sections the alternative connections available via Birdwood Road and the other roads may mean that the additional journeys to circumvent the removal of the right turn movements may be less than 1km. On the other sections proposed roundabouts are around 500m apart and few if any properties are likely to be affected.

- 8.202 The ATE also notes that development areas are likely to have access from a new collector road network yet to be determined.

NOR 8: Mill Road and Pukekohe East Road Upgrade



- 8.203 Some parts of this Project are within Auckland Region and some are in Waikato District in Waikato Region. The regional boundary runs along the road reserve from the west side of Runciman Road in the west to a point about 850m west of the Bombay Interchange.
- 8.204 The speed limit on this route is proposed to be 80km/h. The stated intent is to improve safety, capacity, and travel choice on this corridor.

Auckland Region

Design and Changes to Network

- 8.205 This Project involves adding active mode paths on the southern side of Pukekohe East Road between 5:PSWA, past the 4:PNEA roundabout to the regional boundary and beyond. No changes are proposed to the carriageway or the northern side of the road.
- 8.206 A proposed dual-lane roundabout at the intersection with Harrisville Road and widening of the carriageway to four lanes east of Harrisville Road requires additional land on the northern side of this section. Land on the southern side of the road is also required east of the regional boundary.
- 8.207 A new dual-lane roundabout is proposed approximately 400m west of the Bombay Interchange, and two side connections to this roundabout would provide for some combined property accesses. This roundabout and the access formation requires land on both sides of the road. The Project ends a short distance east of this roundabout where it is proposed to tie in with the SH1 Papakura to Bombay project which is expected to provide a four-lane cross-section through to the Bombay Interchange.

Interdependencies and Staging

- 8.208 As noted in the ATE this Project could be implemented stand-alone to provide for increased capacity and safety on this corridor, although without 4:PNEA and/ or 5:PSEA the western end of the corridor may experience increased volumes on the existing alignment leading to poorer safety outcomes, so the benefits would be improved with 4:PNEA and / or 5:PSEA in place.
- 8.209 The FDS lists the Project as a prerequisite for development of Pukekohe East “Not before 2035+”.
- 8.210 The Auckland and Waikato notices for this single project are interdependent. If one of the notices is not supported the Project could not be implemented as proposed.

Property Access

- 8.211 The ATE expects that all properties on Pukekohe East Road would be retained, although some may need to be regraded.
- 8.212 The ATE does not state if property accesses on Mill Road are expected to be retained. As this is an NZTA project, I expect this road could become a State Highway and/ or a Limited Access Road, in which case property accesses may be reviewed and rationalised as part of a separate process.
- 8.213 The General Arrangements drawings show a median island as part of the four-lane section east of Harrisville Road. The drawings do not show any type of median on Pukekohe East Road, but the ATE states “Median may be raised or include a barrier to improve safety

*outcomes. Flush medians may be used in some locations. This will be determined at detailed design.*²⁸

- 8.214 For properties located east of Harrisville Road, the Project includes a new roundabout at 185 Mill Road to facilitate U-turn right-turn detours for one of the directions of travel. The other direction of travel could use the proposed roundabout at Harrisville Road. Those roundabouts are 1.8km apart. The ATE suggests the additional journey time would be around three to four minutes.
- 8.215 It is possible a median barrier that would prevent right turn movements could be introduced in the two-lane section west of Harrisville Road. If that occurs detours in one direction could use the Harrisville Road roundabout. There is no suitable location for U-turn movements in the other direction and those movements are likely to occur in or around Runciman Road about 1km west of Harrisville Road or at the 4:PNEA roundabout a further 1.6km west once that roundabout is constructed.
- 8.216 I consider that without a suitable U-turn facility west of Harrisville Road the possible removal of right turn movements at properties along this section could result in lengthy detours and poor safety outcomes. I recommend the RA provide additional information for the hearing on this matter.

Waikato Region

Design and Changes to Network

- 8.217 Within Waikato the Project involves widening the corridor on the south side west of Harrisville Road to provide for a wide swale and active mode path(s) on the south side of the road together with sizeable batter slopes.
- 8.218 The new dual-lane roundabout at the Harrisville Road intersection requires land on the southern side of the main corridor and on both sides of Harrisville Road. The proposed active mode paths stop a short distance along Harrisville Road.
- 8.219 This Project involves widening Mill Road to four lanes between the Southern Motorway and Harrisville Road with active mode path(s) on the southern side. It also involves adding active mode path(s) with a combined width of 4.5m on the southern side of Pukekohe East Road between Harrisville Road and NOR 5: PSWA. The speed limit is proposed to be 80km/h. The stated intent is to improve safety capacity and travel choice on this corridor.
- 8.220 East of Harrisville Road through to the regional boundary the Project requires land on the southern side of the road to provide for widening the carriageway to four lanes with a median, swales, and active mode path(s) on the southern side of the road.

Interdependencies and Staging

- 8.221 As noted in the ATE this Project could be implemented stand-alone to provide for increased capacity and safety on this corridor, although without 4:PNEA and/ or 5:PSEA the western end of the corridor may experience increased volumes on the existing alignment leading to poorer safety outcomes, so the benefits would be improved with 4:PNEA and/ or 5:PSEA in place.
- 8.222 There may be considerable benefits in implementing the roundabout at the Harrisville Road intersection early to address safety and capacity issues.
- 8.223 The Auckland and Waikato notices for this single project are interdependent. If one of the notices is not supported the Project could not be implemented as proposed.

²⁸ Page 54, ATE

- 8.224 All comments for the Auckland Region also apply to the Waikato Region.

9 Construction Effects and Management Methods

All Projects

- 9.1 As noted above, given the longer implementation timeframes and the absence of detailed designs the general approach to effects generated by construction of the Projects is proposed to be addressed through the use of management plans.
- 9.2 Some Projects involve work in or alongside existing operational road corridors, and those projects have the most potential to disrupt the operation of the road network and occupants of adjacent properties.
- 9.3 The ATE has assumed that each of the Projects will be constructed separately at different times and that construction effects would not overlap. The ATE acknowledges that more than one Project could be under construction at the same time and considers this eventuality could be managed appropriately.
- 9.4 It is also possible that one or more of the Projects could be constructed at the same time as another infrastructure project in the area, and that has the potential to increase cumulative effects. For example, if works on Mill Road or Pukekohe East Road are undertaken at the same time as work on either SH22 or SH1 the impact could be substantially greater.
- 9.5 A condition to preclude this eventuality is considered to be unduly onerous as the management plan process should be sufficient to manage this eventuality and it is considered unlikely that there would be significant disruption on more than one corridor at the same time.
- 9.6 The ATE recommends that a Construction Traffic Management Plan (CTMP) be prepared prior to the construction of any and all of the Projects and recommends several items that each CTMP should include.
- 9.7 The ATE also provides Table 5-6 that lists sites near some of the Projects that should be given special consideration when the CTMPs are prepared. The list includes rail stations, the school zone on Burt Road, and the commercial area on and near Svendsen Road.
- 9.8 The ATE has an expectation that contractors “will undertake a property specific assessment of any affected access and provide temporary access arrangements if required” and it states these requirements should be captured in the CTMP or a Site-Specific Traffic Management Plan (SSTMP), if required.
- 9.9 I consider that provided the purpose of the CTMP is adequately described, but I consider that some amendments are required to the list of matters the CTMPs should address. I address the proposed conditions later.

10 Statutory Considerations

National

Government Policy Statement on Land Transport 2020

- 10.1 This policy is summarised and assessed in the ITA, and the four strategic priorities of the GPS-LT are assessed below.

Safety

- 10.2 The GPS safety priority is developing a transport system where nobody is killed or seriously injured. All of the Projects provide for new and/ or improved transport links of a high standard and will improve safety, with the possible exception of 6:PSWU.

Better Travel Options

- 10.3 This priority is summarised as providing people with better transport options to access social and economic opportunities. All of the Projects provide improved active mode facilities that will provide people with those transport options. The projects will also improve movement of other transport modes.

Climate Change

- 10.4 The GPS seeks to develop low carbon transport systems that support reductions in carbon emissions while improving safety and inclusive access. The ATE describes the analysis of the project and states the Projects will collectively result in a reduction in VKT compared to a scenario where all of the development occurs in the absence of the Projects. While I consider that situation to be unlikely, particularly in light of the FDS linking development of growth areas with the provision of most of the Projects, I acknowledge that the projects are likely to result in a reduction in private vehicle VKT. As a result I consider the Projects would result in fewer operational carbon emissions.

Improving Freight Connections

- 10.5 The GPS seeks to prioritise the improvement of freight connections for economic development. Most of the Projects would improve freight connections by providing new links and by improving the travel time on most links in the sub-region.

Summary

- 10.6 I consider each project is consistent with and gives effect to this policy statement, with the exception of 6:PSWU.

National Policy Statement on Urban Development 2021

- 10.7 The NPS-UD sets out several objectives and policies

Well-Functioning Urban Environments

Policy 1: Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:

- ...
(c) *have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport;*
and

- 10.8 The Projects are considered to be essential to this policy being realised.

Infrastructure Readiness

Policy 2: Tier 1, 2, and 3 local authorities, at all times, provide at least sufficient development capacity to meet expected demand for housing and for business land over the short term, medium term, and long term.

- 10.9 The newly released Auckland FDS sets out development capacity and links this with the provision of key infrastructure including most of the Projects. I consider those Projects listed in the FDS (all but 3:PC) are required to realise this policy.

Emissions Reduction Plan

10.10 The national Emissions Reduction Plan [ERP] has three focus areas for reducing transport emissions over the next 30 years:²⁹

- *reduce reliance on cars and support people to walk, cycle and use public transport*
- *rapidly adopt low-emissions vehicles*
- *begin work now to decarbonise heavy transport and freight.*

10.11 The ERP sets four targets to support the focus areas:

Target 1 – *Reduce total kilometres travelled by the light fleet by 20 per cent by 2035 through improved urban form and providing better travel options, particularly in our largest cities.*

Target 2 – *Increase zero-emissions vehicles to 30 per cent of the light fleet by 2035.*

Target 3 – *Reduce emissions from freight transport by 35 per cent by 2035.*

Target 4 – *Reduce the emissions intensity of transport fuel by 10 per cent by 2035.*

10.12 The implementation of all of the Projects is estimated to produce a reduction in VKT compared with none of the Projects being implemented but with all forecast growth still occurring. The Projects are considered to be consistent with Target 1.

Auckland

Regional Policy Statement

10.13 Relevant objectives and policies that are relevant to transport are identified below.

B2 Urban Growth and Form

10.14 This section identifies a number of issues and states:

Growth needs to be provided for in a way that does all of the following:

- (1) *enhances the quality of life for individuals and communities;*
- (2) *supports integrated planning of land use, infrastructure and development;*
- ...
- (5) *enables provision and use of infrastructure in a way that is efficient, effective and timely;*
- (6) *maintains and enhances the quality of the environment, both natural and built;*
- ...

10.15 These Projects would provide transport infrastructure that directly addresses issue (5). These issues are reflected in a number of Objectives including:

Objective B2.2.1 (1)

A quality compact urban form that enables all of the following:

- ...
- (c) *better use of existing infrastructure and efficient provision of new infrastructure;*
- (d) *improved and more effective public transport;*
- ...
- (g) *reduced adverse environmental effects.*

10.16 Project 1:DWA provides bus lanes and access to Ngākōroa Station from the south. Project 3:PC provides access to Paerata Station from the south and east, so these projects provide for more effective public transport.

²⁹ Pg 172, Emissions Reduction Plan, Ministry for the Environment, Wellington June 2022.

Objective B2.2.1 (5)

The development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages is integrated with the provision of appropriate infrastructure.

- 10.17 The Projects provide the infrastructure that the FDS integrates with the development of land.

B2.2.2 Policies

(4) Promote urban growth and intensification within the urban area 2016 (as identified in Appendix 1A), enable urban growth and intensification within the Rural Urban Boundary, towns, and rural and coastal towns and villages, and avoid urbanisation outside these areas.

(5) Enable higher residential intensification:

(a) in and around centres;

(b) along identified corridors; and

(c) close to public transport, social facilities (including open space) and employment opportunities.

- 10.18 The Projects enable urban growth, and in relation to the FDS are required for that growth to occur.

B2.4. Residential Growth

B2.4.2 Policies – Residential Intensification

(6) Ensure development is adequately serviced by existing infrastructure or is provided with infrastructure prior to or at the same time as residential intensification.

- 10.19 The Projects provide infrastructure which is intended to be implemented prior to residential intensification.

B3.3 Transport

Objective 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.

- 10.20 The Projects collectively do all of these things.

B3.3.2 Policies

(1) Enable the effective, efficient and safe development, operation, maintenance and upgrading of all modes of an integrated transport system.

...

(4) Ensure that transport infrastructure is designed, located and managed to:

(a) integrate with adjacent land uses, taking into account their current and planned use, intensity, scale, character and amenity; and

(b) provide effective pedestrian and cycle connections....

- 10.21 Together with the FDS and other instruments that provide for integration, the Projects achieve each of these items.

- (5) *Improve the integration of land use and transport by:*
(a) *ensuring transport infrastructure is planned, funded and staged to integrate with urban growth;*
...

10.22 The Projects enable the provision of transport infrastructure to support urban growth.

Auckland Plan 2050

10.23 The RPS describes the Auckland Plan as:

The Auckland Plan, being the spatial plan required to be prepared and adopted under sections 79 and 80 of the Local Government (Auckland Council) Act 2009 as a comprehensive and effective long-term (20- to 30-year) strategy for Auckland's growth and development, is a relevant statutory planning document for the preparation of the regional policy statement.

10.24 As noted in the ITA, the Auckland Plan 2050 (AP) identifies six Outcomes, one of which is Transport and Access, which has three Directions and seven Focus Areas.

Direction 1: Maximise safety, environmental protection and emissions reduction

10.25 The AP notes that in 2020, Auckland Transport adopted Vision Zero which follows the Safe System approach. The Projects have been and will continue to be designed following the Safe System approach, and I consider the Projects will maximise safety, with the exception of 6:PSWU.

10.26 Emissions are discussed below.

Direction 2: Better connect people, places, goods and services

10.27 The Projects provide for better connections.

Direction 3: Increase genuine travel choices for a healthy, vibrant and equitable Auckland

10.28 The Projects provide active mode facilities and are expected to improve the operation of bus services and access to rail services.

Focus area 1: Make better use of existing transport networks

10.29 This focus area discusses the expense of widening roads, and making the most efficient use of the roads we have by changing the demands we put on them. The focus area proposes encouraging greater use of public transport and active modes.

10.30 The Projects involve both new and existing roads, together with public transport, which have been considered as a whole network.

Focus area 2: Target new transport investment to the most significant challenges

10.31 This focus area discusses the importance of strategic planning to make the best use of transport funding. These Projects represent that strategic planning and investment.

Focus area 4: Make walking, cycling and public transport preferred choices for many more Aucklanders

10.32 This focus area states, "*Reducing congestion and emissions will only be possible if more Aucklanders walk, cycle and use public transport*". The active mode facilities and improved access to rail stations provided by the Projects are compatible with this focus.

Focus area 5: Better integrate land-use and transport

- 10.33 These Projects provide the transport that documents such as the FDS integrate with land use.

Focus area 6: Move to a safe transport network free from death and serious injury

- 10.34 This focus area discusses the goal of reducing death and injury caused by travel on the road network. The Projects improve the quality of the road network by providing safer designs and additional capacity which is expected to result in traffic diverting from more hazardous rural roads onto less hazardous new roads. I have safety concerns in relation to 6:PSWU.

Focus area 7: Develop a sustainable and resilient transport system

- 10.35 This focus area discusses the need to improve the resilience of or transport system in response to disruption, including disruption from accidents or incidents, weather events, or other changes. By adding a new road connection through this area to Pukekohe and additional routes in and around Pukekohe, Drury and Paerata the Projects improve resilience.

Summary

- 10.36 I consider the Projects to all be consistent with, and give effect to, the Auckland Plan and FDS, with the possible exception of 6:PSWU.

Te Tāruke-ā-Tāwhiri Auckland Climate Plan

- 10.37 The climate plan is a document related to the Auckland Plan. The plan has eight priorities including Transport.

Transport

- 10.38 The plan seeks to reduce emissions from transport. It states:

While there are many potential pathways to our goal, we need to make significant changes to:

- *how and where we live*
- *how we conduct and power our personal travel*
- *how we transport our freight*
- *how much we travel*
- *how we grow as a region.*

- 10.39 It also states:

The highest priority is reducing emissions generated by light passenger vehicles and commercial vehicles, given these generate about 80 per cent of on-road emissions.

- 10.40 This priority has some Action Areas.

Action area T1. Changing the way we all travel

- *Encourage the use of public transport, walking and micro-mobility devices, rather than driving.*
- *Shorten private vehicle trips, and fulfil several travel needs at once including for business purposes.*
- *Choose lower emissions vehicles when purchasing, sharing, or leasing.*
- *Reduce private vehicle travel and encourage lower emissions travel options by introducing pricing and parking measures.*

- 10.41 The Projects address the first point by providing active mode facilities and improving access to rail stations.

Transport Emissions Reduction Pathway

- 10.42 This document (TERP), endorsed by Auckland Transport and adopted by Auckland Council, is intended to give effect to the climate plan. It directs the activities of the Council and AT, describes eleven transformation areas, and provides an implementation pathway.

Reduce Travel

- 10.43 The TERP seeks to reduce travel where possible and appropriate. One measure is “*restricting road expansion that induces light vehicle travel.*” This is based on the hypothesis that road expansion projects (new or wider roads) can stimulate additional travel, which could undermine the goal.
- 10.44 In my view that hypothesis should not in and of itself prevent widening of an existing road or the construction of a new road, as not all expansion projects induce significant additional travel, not all additional travel is undesirable, and such projects can reduce congestion and emissions.
- 10.45 The TERP seeks to use VKT as a measure of travel. VKT is a travel metric that is not readily measurable, and I consider it to be a poor proxy for transport emissions. It takes no account of the type of vehicle being used, the number of people in the vehicle, or the fuel used (and hence emissions) per kilometre of travel, which is sensitive to speed and changes in speed so highly sensitive to congestion. It also does not account for any economic or other benefits associated with the travel.
- 10.46 Additional development requires additional travel, so additional VKT is a somewhat inevitable part of enabling people and communities to provide for their social, economic and cultural well-being, health and safety.
- 10.47 Nevertheless, the ATE states that collectively the projects reduce congestions and VKT compared to the scenario with all development and none of the Projects.

Build Up Not Out

- 10.48 One of the transformations in the area of reducing reliance on cars, is “*6 Build up not out*” which includes planning for an increase in sustainable modes, a reduction in light vehicle VKT, reducing the scale of urban expansion, and locating more intensive development in areas with good access to opportunities. The pathway includes upzoning around areas of high access.
- 10.49 The TERP states:

...

More intensive development around places with good access to opportunities. Auckland is a rapidly growing city, and its population growth is projected to continue. To minimise transport emissions, much more growth needs to occur near existing and emerging employment hubs and in areas with good access to jobs, services and amenities, so that it is easier for people to access these opportunities via sustainable modes of transport. It is also easier and more cost-effective to deliver sustainable transport options in higher density areas.

More growth is also needed in locations which are best served by PT. While recent government driven changes have set a minimum level of density that councils must permit around rapid transit stations, council and the government must do more to support mixed-use urban renewal around PT stations in the near term. While quality development in an area can incentivise further development other cities are more explicitly incentivising development within the walkable catchment of their rapid transit networks, and some have set explicit targets for the proportion of new dwellings that should be located within these catchments.

- 10.50 While the Projects partly enable expansion into greenfield rural areas, these are areas that Auckland Council has identified as being appropriate for growth. The Projects primarily facilitate the expansion of Drury, Paerata, and Pukekohe which are all locations with access

to rapid transit (rail) services and employment hubs with good access to jobs, services and amenities.

Future Development Strategy

10.51 The FDS has five principles. Those most relevant to transport are summarised below.

Principle 1: Support greenhouse gas emission reduction

10.52 A compact urban form is seen as a critical requirement, as it reduces car dependency and vehicle kilometres travelled (VKT). This is addressed above.

Principle 3: Make efficient and equitable infrastructure investments

10.53 Principle 3(a) is “Take a regional view to infrastructure investment and costs”. In my view the assessment of the Projects has done this.

Principle 5: Enable sufficient capacity for growth in the right place and at the right time

10.54 The Projects enable transport capacity for growth.

10.55 In my view the Projects collectively support the FDS.

Waikato Region

Waikato Regional Policy Statement

10.56 The Waikato RPS sets out objectives and policies with domains and topics, with the relevant matters for this assessment being within Urban Form and Development. The RPS Urban Form and Development section includes objectives relating to the integration of land use and infrastructure planning, including:

3. *integrating land use and infrastructure planning, including by ensuring that development of the built environment does not compromise the safe, efficient and effective operation of infrastructure corridors;*
5. *recognising and protecting the value and long-term benefits of regionally significant infrastructure;*
8. *anticipating and responding to changing land use pressures outside the Waikato region which may impact on the built environment within the region;*

10.57 I consider the 8:MPEU Project to be consistent with, support, and give effect to the RPS with respect to transport matters to protect the route of future infrastructure corridors and by responding to land use pressures in Auckland.

Waikato Regional Policy Statement Change 1

10.58 This change to the RPS addresses the National Policy Statement on Urban Development 2020 and Future Proof Strategy update, with a decision pending at the time of writing this report.

10.59 The notified version of this change added another point to the UFD-O1 Objective:

12. *strategically planning for growth and development to create responsive and well-functioning urban environments, that:*
 - a. *support reductions in greenhouse gas emissions and are resilient to the current and future effects of climate change;*
 - b. *improve housing choice, quality, and affordability;*

- c. *enable a variety of homes that enable Māori to express their cultural traditions and norms;*
- d. *ensure sufficient development capacity, supported by integrated infrastructure provision, for identified housing and business needs in the short, medium and long term;*
- e. *improves connectivity within urban areas, particularly by active transport and public transport;*
- f. *take into account the values and aspirations of hapū and iwi for urban development.*

10.60 I consider the 8:MPEU Project to be consistent with the notified version of the RPS Change 1 by providing development capacity and improving connectivity.

Waikato District

Waikato Operative District Plan: Franklin Section

10.61 The Operative plan sets out a number of objectives and policies relating to transport including minimising conflict through the use of a road hierarchy to manage the balance between safety and property access, ensuring a safe roading network, and to ensure that the construction modification and use of roads do not cause adverse effects. I consider the 8:MPEU Project to be consistent with those objectives.

Proposed Waikato District Plan (Appeals Version)

10.62 Relevant objectives and policies in the Strategic Directions section include:

*SD-O5 Integration of infrastructure and land use.
New development is integrated with the provision of infrastructure.*

*SD-O7 Regionally significant infrastructure and industry
Recognise the importance of regionally significant infrastructure and regionally significant industry.*

10.63 I consider all of the Projects are consistent with these objectives.

10.64 Relevant objectives in the All Infrastructure section include:

*AINF-O1 Development, operation and maintenance of infrastructure.
Infrastructure is developed, operated, maintained and upgraded to enhance social, economic, cultural and environmental well-being*

*AINF-O3 Infrastructure in the community and identified areas.
Provision of Infrastructure takes into account the qualities and characteristics of surrounding environments and community wellbeing.*

AINF-O8 Land transport network.

(1) An integrated land transport network where:

(a) All transport modes are accessible, safe and efficient; and

(b) Adverse effects from the construction, maintenance, upgrading and operation of the transport network are avoided, remedied or mitigated;

(c) Strategic road and rail corridors play an important role in the district for facilitating the movement of inter and intra-regional freight; and

(d) There is an effective and efficient land transport system that enhances economic well-being, and supports growth and productivity within the Waikato region and upper North Island.

10.65 I consider the transport aspects of the 8:MPEU Project are consistent with these objectives with suitable amendments to conditions with respect to AINF-O8 (1)(b).

10.66 Relevant policies in the All Infrastructure (AINF) section include:

AINF-P1 Development, operation and maintenance.

- (1) *Provide for the development, operation, maintenance, repair, replacement, upgrading and removal of infrastructure throughout the district by recognising:*
 - (a) *Functional and operational needs;*
 - (b) *Location, route and design needs and constraints;*
 - (c) *Locational constraints related to the need to access suitable resources or sites;*
 - (d) *The benefits of infrastructure to people and communities;*
 - (e) *The need to quickly restore disrupted services; and*
 - (f) *Its role in servicing existing consented and planned development;*
 - (g) *The need for physical access to infrastructure.*

AINF-P29 Construction, maintenance, upgrading and operation of the land transport network.

- (1) *Provide for the construction, maintenance, upgrading and operation of an efficient, effective, integrated, safe, resilient, accessible and sustainable transport network through:*
 - (a) *Corridor, carriageway and intersection design which is appropriate to the road function as specified in the road hierarchy and in accordance with relevant guidelines;*
 - (b) *The appropriate design and location of sites' accesses;*
 - (c) *Traffic signage, road marking, lighting, rest areas and parking as appropriate;*
 - (d) *Safe and accessible provision for pedestrians and cyclists to maximise accessibility, including off-road facilities and connections;*
 - (e) *Corridor and carriageway design which enables provision of public transport;*
 - (f) *Provision for other infrastructure, including where suitable low impact design stormwater facilities;*
 - (g) *Provision for stock underpasses where suitable access is not readily available;*
 - (h) *Discouraging the installation of new at grade road and pedestrian rail level crossings:*
 - (i) *Controlling the location of buildings and other visual obstructions within the sightline areas of rail level crossings; and*
 - (ii) *Railway crossing design in accordance with the requirements of the rail operator.*
 - (i) *Protection and promotion of the development of the regional rail network for the transportation of freight; and*
 - (j) *Development of efficient processes and freight routes for the movement of high productivity motor vehicles through the region.*

AINF-P35 Land transport network infrastructure

- (1) *Ensure that land transport network infrastructure is developed so that:*
 - (a) *The design, location, alignment and dimensions of new land transport networks provide safe vehicle, pedestrian and cycling access and manoeuvring to every site;*
 - (b) *The land transport network provides good connectivity to the site and integrates with adjacent developments and identified as future growth areas including walking and cycling networks and facilities and public transport;*
 - (c) *There is adequate provision of on-site parking and manoeuvring for land use activities;*
 - (d) *Contaminants generated during construction are appropriately mitigated; and*

- (e) *Design, alignment and dimension of new roads will accommodate the installation of network infrastructure in accordance with technical and safety specifications.*

10.67 I consider the transport aspects of the 8:MPEU Project are consistent with these policies.

Waikato 2070

10.68 The Mill Road and Pukekohe East Road corridor upgrade will assist movement of people and freight in the Waikato and also includes active mode facilities, and I consider these align with Waikato 2070.

Climate Action Plan

10.69 The Projects are expected to result in a reduction in light vehicle travel with an associated reduction in emissions and is considered to be consistent with the Climate Action Plan.

11 Submissions

11.1 This section summarises the transport matters raised in submissions, and matters raised by the Franklin Local Board of Auckland Council.

11.2 Many of the submissions had transport concerns. In some cases transport concerns were expressed generally, and other submissions provided significant detail. I have addressed these matters project by project and topic by topic noting that several of the topics are inter-related and overlap.

11.3 Submissions that did not raise specific transport matters are not addressed in this report. Submissions that are neutral or expressed support either in general or for a specific matter are not addressed unless there are submissions opposing the same matter.

NOR 1: Drury West Arterial

Submission Locations



11.4 The following figure shows the approximate location of location-specific transport-related submissions.

Figure 4: Approximate location of property-specific submissions



Management of Effects

- 11.5 Submission 4 (McKean Family Trust, 826 Runciman Road) requests that it is notified when the CTMP is prepared “to ensure the transport effects do not adversely affect the property”. The CTMP is reviewed by Council and the traffic management components must be approved by AT. In my view it is not appropriate for third party approval to be required, and I expect all property occupiers potentially affected by any road works would be consulted or notified. I do not support this submission.
- 11.6 Submission 6 (Ministry of Education) notes there are a number of schools in the area near each of the projects as shown on a map in the submission. In my view none of the schools are likely to be affected by construction of the 1:DWA Project, however the CTMP condition applied to multiple Projects so I am neutral with respect to this submission in relation to this Project.

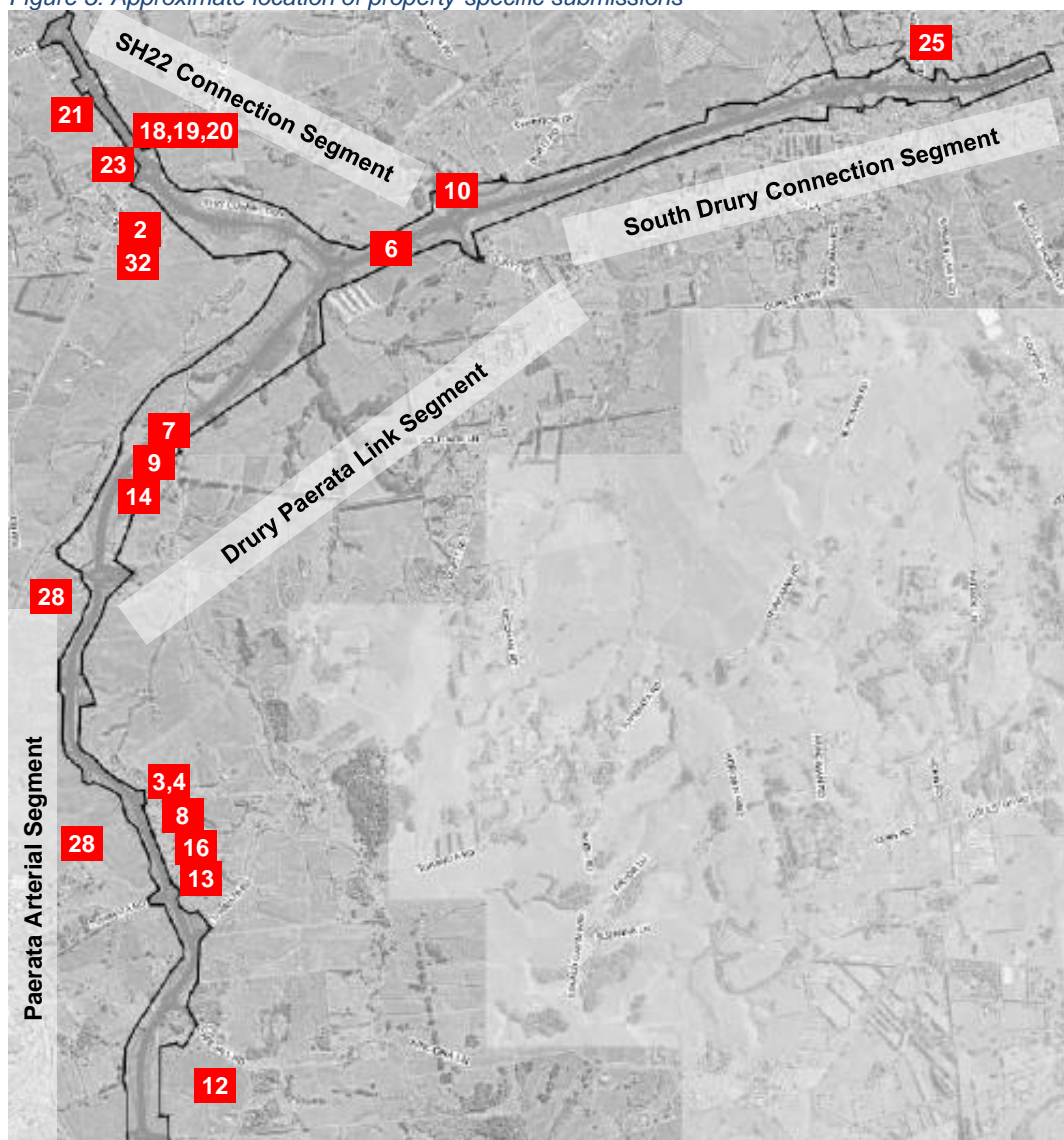
NOR 2: Drury-Pukekohe Link

Submission Locations



- 11.7 The following figure shows the approximate location of transport-related submissions.

Figure 5: Approximate location of property-specific submissions



Alternate Routes, Alignment, Extents

Whole of Project

- 11.8 Submission 3 on NOR 5 (Daroux C, 140 Pukekohe East Road) requests that the Notices be withdrawn or struck out. The submission suggests the best way of accommodating the expected growth is to build “*straight, direct, fast dual-lane expressways*” and that Package 4 providing a four-lane expressway along the DPL route should be preferred.
- 11.9 The AOA summarises the assessment of Package 4,³⁰ which was the option preferred in the 2018 South Indicative Business Case. The revised multi-criteria assessment found the four-lane expressway scored best on safety, equal on integration, poorer on access, best on resilience, and worst on travel choice. The package was scored poorly on travel choice as it was considered the expressway might “*induce light vehicle travel which undermines mode shift.*” It appears this (that people might drive instead of walking, cycling, or using public transport) was the primary reason this package was discarded. It is not apparent from the information provided if that conclusion was supported by modelling.
- 11.10 There have also been changes in government policy and RMA legislation since 2018, particularly requirements to have regard to emissions reduction plans.

³⁰ Pages 70-71, AOA

11.11 The RA is required to demonstrate that they have adequately considered alternative routes or methods, and that the work is reasonably necessary. They are not required to demonstrate the best or most efficient alternative has been selected, that some alternative might also be reasonably necessary, or that they would not need to expand the designation at some point in the future. For that reason, regardless of the merits or drawbacks of a four-lane expressway alternative, I am unable to support this submission.

South Drury Connection Segment

11.12 Submissions 6 and 10 raise issues about the alignment of this section. Submission 6 (Joyce C, 357 Burt Road³¹) requests the alignment be placed as close as possible to the NIMT railway to avoid severing their farm. Submission 10 (Brown T, 397 Burt Road) requests the alignment be moved further away from existing houses on Burt Road.

11.13 A range of options for the eastern end the DPL³² have been assessed by SGA and the AOA summarises the reasons for the adopted alignment at that end of the 2:DPL. Ten options were evaluated for the “North-South Corridor”³³, with none of the options being near these submitters, although none of the options shown in the notified material were located closer to the railway than Burt Road. Three options (3, 4, 10) were aligned along Burt Road, and option 3 was included in the short-list assessment as part of Package 3a. The school site, zoned Special Purpose – Education, located a short distance north east was one of the matters considered in assessing the alternative alignments.

Figure 6: Extract from AOA Figure 4-12 showing alignment options near Burt Rd



11.14 I do not have sufficient information to determine if an alignment abutting the railway is feasible, and I expect the alignment would need to move away from the railway near the SH22 Connection Segment to provide sufficient separation between the roundabout and the bridge over the railway. Relocating the alignment closer to the railway would be likely to have adverse effects on the school zone. I am of the view that the assessment of alternatives in relation to this matter meets the relevant test and do not support these submissions.

SH22 Connection Segment

11.15 Submissions 19 (Trevlyn Enterprises) and 20 (Sim P) are concerned that the proposed alignment would sever a farm and the proposed roundabout would have a significant impact on a home, farm buildings and a water bore. These submissions do not seek specific relief.

11.16 Options for the SH22 Connection are summarised in the AOA. Two options were considered in the Draft Business Case (DBC) and four options (6, 9, 10, SH22 Central) were considered

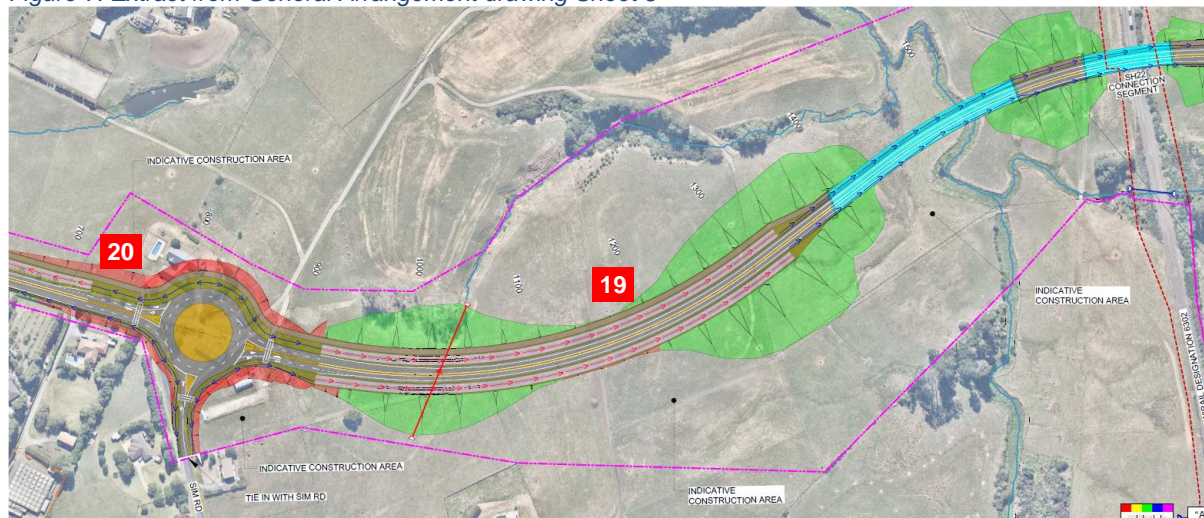
³¹ Auckland Council Geomaps and the Form 18 identify the property as 357 Burt Road, the submission provides a mailing address of 337 which appears to be the residence on this property.

³² Figure 4-4, page 38, AOA.

³³ Figure 4-12, page 59, AOA.

in later assessments (shown in Figure 6 above). Alignments along the northern part of Sim Rd were also considered in the Paerata Station connections (PS Option 4³⁴).

Figure 7: Extract from General Arrangement drawing Sheet 5



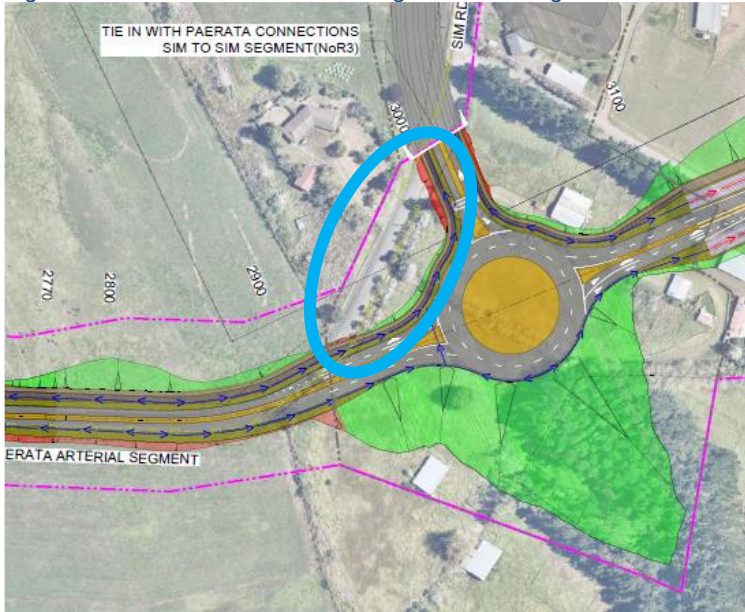
- 11.17 Most alignments propose using the northern part of Sim Road and then pass through farmland to cross the railway and connect with the other parts of the 2:DPL. The absence of the connection across the railway is not considered desirable and an alignment away from Sim Road would presumably involve similar severance of operating farms.
- 11.18 It appears feasible to relocate the roundabout further south away from the buildings to the north of Sim Road, but such a relocation would affect a greater number of other homes.
- 11.19 I consider the assessment of alternatives meets the relevant tests and do not support these submissions.

Drury-Paerata Link Segment

- 11.20 Submissions 7, 9, 14, and 28 raised issues about this segment. Submission 7 (Ro M, 319E Sim Road) opposes the formation of the link and requests the preservation of a tree and bat habitat. Submission 9 (Ruddell J, 319C Sim Road) considers alternative routes should be preferred, either along the Sim Road reserve to SH22, or along the eastern side of Sim Road. Submission 14 (XLU Ltd, 319B Sim Road) requests the extent of the designation be reduced.
- 11.21 Submission 28 (Paerata 5 Farms Ltd, 328 and 412 Sim Road) oppose the project for several reasons, including the efficient use of FUZ land and consider the area of FUZ land for the project should be reduced. The submission also notes the northern roundabout creates a portion of “no mans land” between the submitters land and the roundabout. I assume the submission is referring to the area of land circled in Figure 8. That land lies within the designation. If a post-construction review of the designation determined that land is no longer required it would be disposed of in the usual way. I do not support that submission point.

³⁴ Figure 4-6, page 46, AOA

Figure 8: Extract from General Arrangement drawing Sheet 2



11.22 Using the Sim Road reserve to reconnect both ends of the road would provide an alternate connection between Pukekohe, Paerata and SH22, but would not provide a new connection between Paerata and Drury which is needed to supplement SH22 as increasing the capacity of SH22 is challenging in light of the urbanisation planned to occur along that corridor. Based on the evidence to date I consider the assessment of alternatives is sufficient and do not support these submission points.

Paerata Arterial Segment

11.23 Submissions 3 and 4 (Beaurain R and Beaurain BJ, 469 Sim Road), 8 (Postles B and L, 479 Sim Road), 13 (Carpenter D and S, 491 Sim Road) and 16 (Berry R, 481 Sim Road) raise similar issues around the alignment north of Tuhimata Road where the route uses the existing Sim Road reserve. All of these submitters request the route be relocated, with four specifically requesting a move to the west, and one requesting the road be placed at a lower level to reduce noise and visual effects. One requests this section of road be moved west and straightened out.

11.24 Submission 12 (McCall G, 229 Cape Hill Road) is concerned the route divides a farm and requests the road be located closer to the railway. This property occupies much of the land west of Cape Hill Road south of Tuhimata Road and north of 4:PNEA.

11.25 Submission 28 (Paerata 5 Farms Ltd, 328 and 412 Sim Road) oppose this segment for the same reasons set out above.

Figure 9: Extract from General Arrangement drawing Sheet 1



11.26 The AOA report shows the options considered which includes three routes along Paerata Road (SH22), three alignments along this part of Sim Road, one east of but close to Sim Road, and one following Burt Road. It appears an option between Sim Road and the railway has not been considered to date.

Figure 10: Extract from AOA Figure 4-12



- 11.27 An option west of Sim Road would result in fewer dwellings being exposed to traffic noise and other effects, but is likely to involve significant increases in earthworks, and a new intersection with Tuhimata Road a short distance from the existing intersection. A relocation could increase the impact on Submitter 12 unless the route were to be relocated close to the railway.
- 11.28 Relocating the route to be close to the railway may be achievable for some of the route although I expect the route would need to move away from the railway to provide sufficient separation between the new bridge over the railway and a roundabout at the 2:DPL and 4:PNEA intersection. Such an alignment would remain with FUZ land.
- 11.29 Evidence on this matter would be useful to further examine the merits of such a realignment.

Design

- 11.30 Submission 10 (Brown T, 397 Burt Road) expresses the view that there are too many roundabouts which will result in more congestion and emissions. The submission requests the roundabouts be replaced with grade-separated interchanges.
- 11.31 Submissions 2 (Owers S, 109 Sim Road), 21 (Roading and Asphalt Ltd, 36 Sim Road, 15 Gellert Road, 539 Karaka Road), 23 (Thompson, 72 Sim Road), 31 (Haddad P) and 32 (Ross H, 111A Sim Road) are also of the view that there are too many roundabouts in close proximity. In conjunction with steep grades and one of the roundabouts being located at the top of a hill, the submissions are critical of the design and consider drivers of (heavy) vehicles are likely to choose an alternate route.
- 11.32 The SH22 Connection General Arrangement drawings show a roundabout at SH22, another at Sim Road 800m away, and one at the southern end a further 1km away, and there are also roundabouts along the other segments of this Project at Burt Road (600m) or the two 3:PC roundabouts (500m apart) 2km to the south.
- 11.33 Information about the vertical design (including road gradients) has not been provided, but I note the requirements to connect with existing roads near existing levels, and the need to cross the NIMT railway via a grade-separated structure. The northern SH22 roundabout is cut down on some sides with a small fill on the other side. The Sim Road roundabout is in cut, and the southern roundabout is placed on fill, so I assume submissions are referring to the central Sim Road roundabout being on a hill. The existing grades along Sim Road are moderate and would be reduced by the proposal.
- 11.34 While multiple roundabouts in close proximity may be annoying and even unattractive for some drivers, and the grades may discourage some heavy vehicle drivers from using the connection, I consider the new route would still be sufficiently attractive to most drivers. In my view the RA has adequately considered alternatives and the Project would still fulfil its objectives. On that basis I do not support these submissions.

- 11.35 Submission 28 (Paerata 5 Farms Ltd, 328 and 412 Sim Road) says the design is poor as it provides for single lane roads and dual-lane roundabouts. I do not consider that to be poor design and do not support that submission point.

Property Access

- 11.36 Submissions 3 and 4 (Beaurain R and Beaurain BJ, 469 Sim Road) are concerned about the impact of the Project on the provision of access to properties in this section of Sim Road and request the Project be relocated to the west, as addressed above.
- 11.37 The General Arrangement drawings show a median along this section of road and I expect that median could be a form that would prevent right turns. As noted earlier detour distances could be up to 2.4km.

Figure 11: Extract from General Arrangement drawings



- 11.38 Submission 28 is critical of the design as it does not provide future road connections for development and results in level differences between the roads and adjoining land. I do not support this submission point as the location of future road connections will be determined at a later time.

Management of Effects

- 11.39 Submission 25 (McLean Family Trust, 826 Runciman Road) requests the same relief for 2:DPL as requested for 1:DWA. I do not support that submission point.
- 11.40 Submission 27 (Ministry of Education, MoE) notes there are a number of schools in the area near each of the projects as shown on a map in the submission and a few schools could be affected by construction of the 2:DPL Project. The submission requests amendments to the CTMP to include the Ministry and schools as a stakeholder, and to add references to educational facilities during pick up and drop off times. I support that submission.
- 11.41 The MoE submission also requests several other additions or amendments to the wording of the CTMP condition for every Project to provide consistency with the CTMP conditions adopted for the Warkworth NoR and Airport to Botany NoR. I support that submission.

NOR 3: Paerata Connections

Submission Locations



- 11.42 The following figure shows the approximate location of transport-related submissions.

Figure 12: Approximate location of property-specific submissions



Alternate Routes, Alignment, Extents

- 11.43 Submission 6 (Paerata 5 Farms Ltd, 328 and 412 Sim Rd) raises the same issues as for 2:DPL and I do not support those submission points.

Management of Effects

- 11.44 Submission 5 (Ministry of Education) requests changes to the CTMP as discussed above and I support that submission point.

NOR 4: Pukekohe North-East Arterial

Submission Locations



- 11.45 The following figure shows the approximate location of transport-related submissions.

Figure 13: Approximate location of property-specific submissions



Alternate Routes, Alignment, Extents

- 11.46 Submission 3 (Smith S, 70A and 70B Lisle Farm Drive) relates to a proposed private plan change where residential development is proposed to be located on both sides of the Project alignment and two new roads are proposed to connect to the Project. The submission supports the proposed alignment provided the route moves no further west within the site.

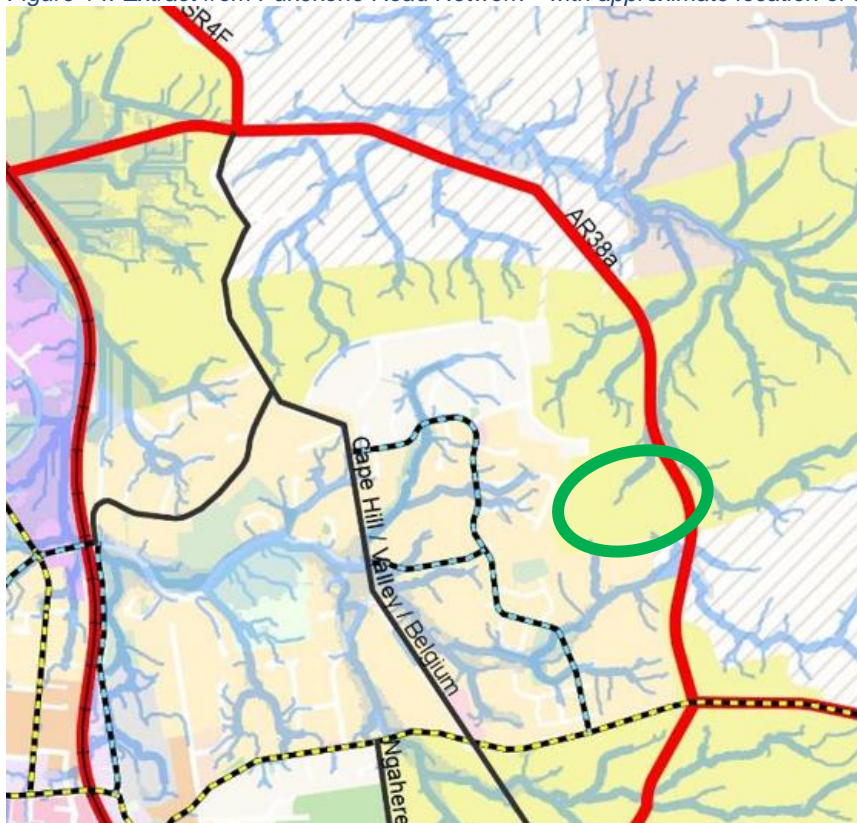
Design

- 11.47 Submission 4 (Pukekohe Industrial Park and Storage Ltd, 1199 Paerata Road) requests that some of a proposed fill batter be substituted for a retaining wall to reduce the area of land required in the long-term. I request the RA provide information on this matter at the hearing.

Property Access

- 11.48 Submission 1 (Baptist G, 1173 Paerata Road) is concerned that safe access with a clear view is provided at the driveway of the property. The property is located on the west side of Paerata Road (SH22) between Heights Road and the MBB railway bridge, and the driveway is located on the inside of a bend a short distance south of Heights Road.
- 11.49 None of the Notices require any part of that site and the General Arrangement drawings do not show any changes to Paerata Road near the driveway or other changes that might reduce the sight distances available at the driveway. For those reasons I do not support this submission.
- 11.50 Submission 3 requests at least one road connection is provided to the site described earlier and includes a concept of how the site may be developed. The development concept includes two side roads, one of which is a cul de sac providing access to 16 lots. The two side roads appear to be less than 70m apart.
- 11.51 The ATE explains that the general approach to providing road access to development areas is to have access between the Projects and properties occur via collector roads. I understand the intention with respect to development areas is that the Project would only provide intersections with collector roads. That is consistent with best practice and I expect the collector road network would be broadly similar to that shown in the DOSP and PPSP. The only collector roads shown in the PPSP are existing, with the nearest being Anselmi Ridge Road, Lisle Farm Drive and Twomey Drive to the east.

Figure 14: Extract from Pukekohe Road Network³⁵ with approximate location of submission 3 circled



- 11.52 I do not have sufficient vertical geometry information to determine if the proposed access roads would meet sight distance standards, or if right turn movements at one or both intersections would be feasible. Given the function of the Project and the volume of traffic likely to use the southern intersection I expect it would be undesirable for both intersections to have right turn movements. I expect it would not be possible to confirm the suitability of such access until the Project detailed design and OPW stage.
- 11.53 Based on the information currently available it may not be feasible or desirable to provide access to the western part of the submitters site directly from the Project. For those reasons I do not support this submission point.
- 11.54 Submission 4 (Pukekohe Industrial Park and Storage Ltd, 1199 Paerata Road) requests that an access be provided after construction in an agreed location. This land could be challenging to access once the Project is constructed and it may not be possible to provide an access agreeable to the property owner, so I do not support that submission point.
- 11.55 Submission 13 (Connors M and C, 1223 Paerata Road) raises a number of questions and concerns about various traffic matters, but no specific relief is requested. I consider the questions and concerns are addressed in the notified material and other hearing documentation.

Management of Effects

- 11.56 Submission 4 also requests that fit-for-purpose access is provided during construction. I consider the conditions should provide appropriate access for every property as far as possible so I support that submission point.
- 11.57 Submission 9 (Ministry of Education) requests changes to the CTMP as discussed above and I support that submission point.

³⁵ Figure 6-8, Southern ITA

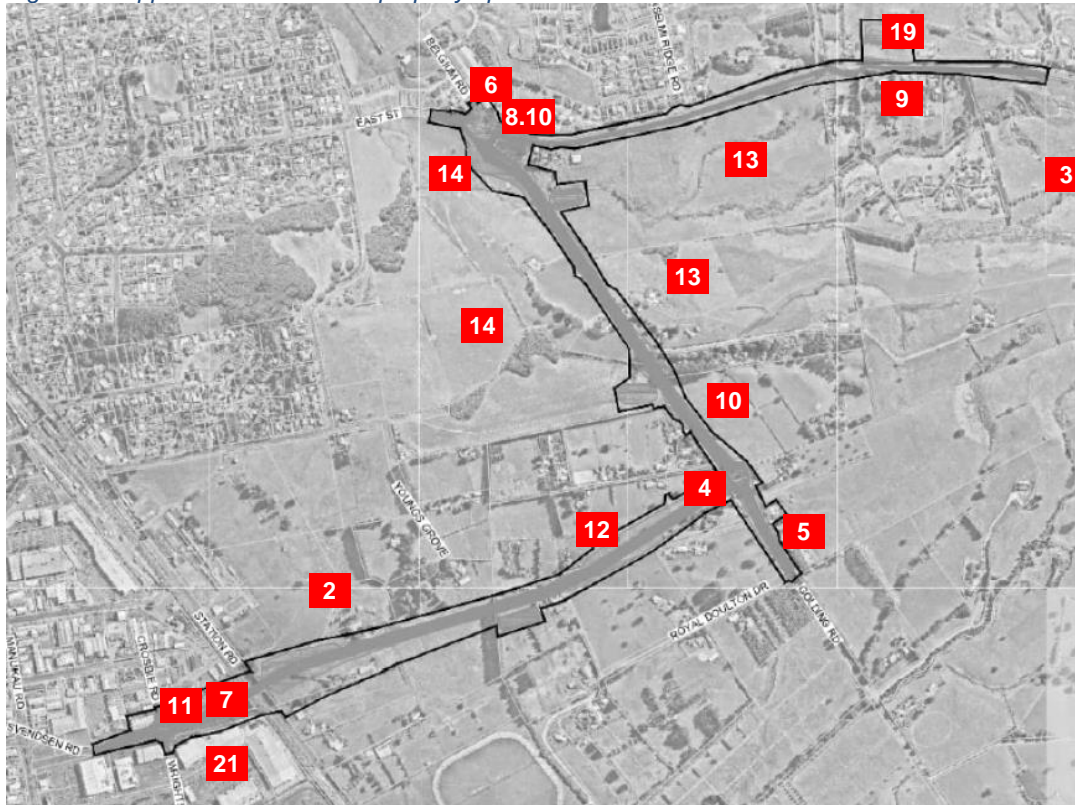
NOR5: Pukekohe South-East Arterial

Submission Locations

11.58 The following figure shows the approximate location of transport-related submissions.



Figure 15: Approximate location of property-specific submissions



Alternate Routes, Alignment, Extents

Pukekohe East Road

- 11.59 Submission 3 (Daroux C, 140 Pukekohe East Road) contains views on 2:DPL that are addressed above, and on 8:MPEU that are addressed below. Submission 3 considers there is sufficient space within the existing road reserve to provide a footpath, and the 6m wide area proposed for the cycle and foot paths is excessive.
- 11.60 The typical cross-section diagram shows the corridor being 24m wide for sections with paths on both sides and this section with paths on one side. Lane and path widths are not shown, but it is common to include 1m separation between properties and a path, a footpath at least 1.8m wide, some separation between a footpath and a cycle path, around 3.5m width for a two-way cycle path, and at least 1m separation between a path and traffic lanes, or around 3m separation if trees are to be planted. That would suggest a width in the order of 9m to 9.5m would be consistent with current design guidelines and standards if trees are proposed. Additional width would be required for batter slopes or retaining walls.
- 11.61 The dimensions above are the desirable dimensions for separated two-way paths on one side with tree planting. Given the road is proposed to have a 50km/h speed limit, I consider the minimum dimensions with a one-way cycle path and no tree planting could be as little as 6m plus allowance for earthworks, or as little as 5m if a shared path were used.
- 11.62 Dimensions smaller than those may also be practical. Two shared paths have been constructed as part of motorway widening works in recent years. The Southern Path runs along the western side of the Southern Motorway (SH1) between Papakura and Takanini. The North Western Cycleway (SH16) runs along the western side of the North-Western Motorway between Lincoln Road and Westgate. Both of those paths are 3m wide bi-directional shared paths.

- 11.63 The panel may wish to consider if the 9-9.5m dimension proposed for paths and planting in this section is reasonably necessary, and I invite the RA to provide more information on this at the hearing. My preliminary recommendation is to support the submission points requesting the width of the corridor be reduced.
- 11.64 Submission 3 also considers the lack of a proposed path on the north side of the road is poor given the development at Anselmi Ridge, the opportunity to provide a viewing platform for the tuff ring and crater, the Pukekohe East Hall, tennis centre, and development along Runciman Road. Other submissions on 8:MPEU make the same request.
- 11.65 As noted above, the generic 24m wide road corridor used by the RA is capable of accommodating separate paths on both sides of the road, so it appears that paths along the northern side might be possible, although that would depend on the removal of the eastbound passing lane or the designation of additional property.
- 11.66 Submission 9 (Kennelly B, 98B Pukekohe East Road) expresses the view that the area of land is excessive and requests the boundary be altered to run along the top of an embankment. The area is adjacent to the proposed 4:PNEA roundabout. Roundabout design guidelines include requirements for visibility at roundabouts, but the change proposed in the submission would not adversely affect that aspect of the design, and there is no apparent reason why the designation boundary could not be altered. As a result my pre-evidence recommendation is to support this submission.
- 11.67 Submission 13 (OMAC Limited and Next Generation Properties Limited, 47 Golding Road and 50 Pukekohe East Road) and Submission 14 (Aedifice Development No.1 Limited, 2 and 19 Golding Road) support the 24m wide cross section but oppose the extent of land, particularly features beyond the 24m corridor.
- 11.68 The 24m cross-section is a generic diagram that might apply on straight level mid-block sections. Additional land may be required to provide for batters or retaining walls, on curves or at intersections, or to accommodate ancillary features such as stormwater ponds. Further land may also be required to facilitate construction. I do not support these reasons given in the submissions. Submissions 13 and 14 also consider the designation footprint could be reduced through the use of retaining walls instead of batters. I request the RA provide information on this at the hearing.
- 11.69 Submission 19 (Ainsley S, 87 Pukekohe East Rd) supports the current location of the roundabout at the 5:PSEA and 4:PNEA intersection.
- 11.70 Submission 10 (TA Reynolds Holdings Ltd, 3 Pukekohe East Road) on NoR 8 relates to land on the north-eastern corner of the Pukekohe East Road/ Belgium Road/ Golding Road / East Street roundabout which is zoned Business – Neighbourhood Centre. The submission is concerned about the extent of land to be taken and the loss of two access points. The submission requests the roundabout be moved south.
- 11.71 Moving the roundabout to the south while maintaining acceptable roundabout geometry would require the realignment of East Street to the south and require more extensive fill batters on Golding Road. The land that would be affected by that change (Submitter 14) is zoned Rural-Countryside Living and is currently in pasture.
- 11.72 Alternatively, it may be possible to control this intersection with traffic signals, although that may result in some detours caused by the proposed median on Golding Road to be longer. I recommend the RA provide additional information on the options available to reduce the impact on the B-NC zoned land on the north-eastern corner of this intersection at the hearing.

New East-West Connection

- 11.73 Submissions 4 (Feng C, 104 Golding Road), 5 (DH and IM Mills Properties, 107 Golding Road), and 10 (Golding K, 97 Golding Road) are concerned about the proposed alignment of the roads and/ or the roundabout proposed at the intersection of Golding Road and the new east-west connection.

- 11.74 Submissions 5, 2 (Franklin Agricultural and Pastoral Society, 58 Station Road), 7 (Enviro NZ Services, 10 Austen Place), 11 (Crosten Investments Ltd, 6 Austen Place and 50 and 52 Crosbie Road), 12 (Zheng S, 180A Golding Road), and 21 (Pukekohe Mega Trustees Ltd and Wrightson Way Ltd, 12-18 Wrightson Way) raise concerns about the alignment and design of the new east-west section of the Project that passes over the NIMT railway to connect Golding Road with Svendsen Road.
- 11.75 Submission 4 requests the alignment be relocated to reduce or avoid the impact on 104 Golding Road which is on the western side of Golding Road. Submission 5 requests the alignment move further west to reduce or avoid the impact on 107 Golding Road which is on the eastern side of Golding Road, opposite 104. Submission 10 requests traffic signals be used instead of a roundabout to avoid removal of a 100-year-old kauri tree.
- 11.76 Relocating the Golding Road roundabout in any direction would appear to increase the impact of the Project on a number of other properties and dwellings, and there appear to be few alternatives that would impact fewer properties or dwellings, other than locating the roundabout and the east-west connection substantially further south.
- 11.77 Using traffic signals instead of a roundabout is an option open to the RA in detailed design, although that would not provide for the shortest detours for vehicles no longer able to turn right at driveways. I do not support those submission points.
- 11.78 Submissions 5 and 12 suggest the alignment should use part of the existing Royal Doulton Drive alignment to the south and pass over the NIMT railway at the same location, with Submission 12 noting that was the location shown in the PPSP. Submission 2 requests the road be moved south to reduce or avoid noise and vibration effects. Submission 7 requests the Notice be cancelled or modified so the Pukekohe Transfer Station Resource Recovery Centre site is not included as the site is the only waste transfer station in the area and would be difficult to replace. Submission 11 relating to adjoining land requests the route be located at Kitchener Road. Submission 21 requests the impacts on the Wrightson Way properties south of the transfer station be avoided or reduced and that both 5:PSEA and 6:PSWU be relocated to the north.
- 11.79 The AOA describes the options considered that include six options considered in the 2019 Indicative Business Case, and then four options for each of two segments, with routes similar to the PPSP alignment recommended for further assessment³⁶. The route refinement process considered three options in each of three segments³⁷.
- 11.80 One alignment was located north of the preferred alignment (S2_02) and one was located partly along Royal Doulton Drive before passing to the north. All three options connected to Svendsen Road, and the AOA records "*limited differentiation in options*" for transport outcomes. The southern option (S2_01) was discarded for topography and the likely impact on future urban development and Pukekohe Showgrounds. The northern option (S2_03) was discarded for effects on a greater number of properties, the Pukekohe Showgrounds, and a stand of indigenous trees.
- 11.81 I agree with the AOA in that there appears to be no strong traffic engineering reason to prefer one location or alignment over another east of the railway. For that reason, with respect to traffic engineering, I am neutral with respect to submission points relating to alignments east of the railway.
- 11.82 Four options for connection points west of the railway were evaluated in the IBC process. The option connecting via Svendsen Road was recommended for refinement. The AOA states three routes between Svendsen Road and the railway were considered during route refinement, again with "*limited differentiation in options*" for transport outcomes.
- 11.83 It appears the southern alignment (S3_01) would have the least impact on the waste transfer station and the adjoining site (Submitters 7 and 11) and the greatest impact on Submitter 21.

³⁶ Pages 83-91, AOA.

³⁷ Pages 167-175, AOA.

The AOA records that option was discarded due to “significant property impacts including on a large commercial centre including the access”³⁸.

- 11.84 A location further south than S3_01 would likely be impractical unless a greater extent of Svendsen Road were to be realigned to the south, with a more significant impact on other properties. Any change in alignment would improve the outcome for some submitters and make the impact worse for others.
- 11.85 Based on the information provided to date there appear to be sound traffic engineering reasons for selecting Svendsen Road as the western termination point for this route, and for the limited number of options assessed west of the railway. I agree with the AOA that there are few traffic-related reasons to prefer one of the three options over the other, but there are multiple property-related impacts from design choices, particularly the selection of batter slopes instead of retaining walls or a bridge structure supported by piers which may permit parking or vehicle manoeuvres beneath.
- 11.86 It also appears there may be an option that grade-separates the new arterial and the Svendsen Road/ Crosbie Road/ Wrightson Way intersection by extending the bridge over the NIMT to also pass over that intersection before descending prior to the intersection with Manukau Road. That option would disconnect Svendsen Road from Crosbie Road and Wrightson Way and would likely result in access to properties along Svendsen Road being removed. That option may not be practicable or within scope.
- 11.87 My preliminary recommendation, subject to additional information about other alternatives, is to not support the submissions requesting alignments in significantly different locations, and neutral with respect to the selection of the preferred alignment out of the three options considered.
- 11.88 I consider the assessment of alternatives at the alignment level to be appropriate; however, I recommend that additional consideration be given to using retaining walls or bridge structures instead of fill batters to reduce the impact on properties and request the RA provide more information on this at the hearing.

Property Access

- 11.89 Submissions 13 and 14 request that an intersection with traffic signals be provided at a planned collector road location. For reasons given above, I do not support those submission points.
- 11.90 Submission 21 requests that the service lane and loading areas at its Wrightson Way properties continue to operate efficiently, safely, and effectively, both during construction and operation. I consider that the conditions should ensure that outcome for all affected properties as far as practicable, so support that submission point.

Management of Effects

- 11.91 Submission 18 (Ministry of Education) requests changes to the CTMP as discussed above and I support that submission point.



NOR 6: Pukekohe South-West Upgrade

Submission Locations

- 11.92 The following figure shows the approximate location of transport-related submissions.

³⁸ Table 5-42, page 174, AOA.

Figure 16: Approximate location of property-specific submissions



Alternate Routes, Alignment, Extents

- 11.93 Submissions 2 (Mayor G, 111 Nelson Street), 3 (McIntyre E and B, 1 Ward Street) and 7 (Scott B, 99 Nelson Street) request the path is located on the opposite side of the road for various reasons, with Submission 3 also querying a proposed slip lane, requesting cyclists are diverted onto the road, and that the Ward Street/ Queen Street/ Nelson Street intersection be redesigned so additional land is not required.
- 11.94 The General Arrangement drawings do not show any changes to the geometry of the Ward Street/ Queen Street/ Nelson Street intersection, and no slip lane is proposed. Relocating the roundabout south would have adverse effects on properties on the south side of the road and is not supported. Replacing the roundabout with traffic signals is likely to be significantly less efficient unless additional lanes are provided which would probably require additional land.
- 11.95 Relocating the cycle path to the opposite side of the road would impact different properties in a similar way, so I am neutral with respect to traffic matters in relation to those submission points.
- 11.96 Submission 9 (Simpson R and Hickmont M, 60 Helvetia Road) requests that commercial and freight traffic should be routed along an alternate route to improve safety on Helvetia Road. I do not support that submission point.
- 11.97 Submission 13 (Pukekohe Mega Trustees Ltd and Wrightson Way Ltd, 12-18 Wrightson Way) opposes the route and considers it should be relocated to the north, together with 5:PSEA. This request is addressed above and I do not support this submission point.

Design

- 11.98 Submission 6 (McMahon C and B, 99 Nelson Street) considers the existing berm width of 3.93 to 4.5m is more than adequate. I consider a berm width of 3.9m is sufficient to accommodate a shared path of say 3.0m width, but that would result in a less than desirable

separation between the path and passing vehicles, and insufficient space to accommodate features such as lamp posts and service plinths clear of the path.

- 11.99 A path width of 2.5m would be feasible but is only recommended for use where the number of cyclists and pedestrians are both relatively low (fewer than 50 pedestrians and fewer than 580 cyclists per hour)³⁹. I expect the volumes on this route may be within the acceptable range for a narrower path, particularly for some shorter sections and invite the RA to provide more information on this at the hearing.
- 11.100 Submission 6 also opposes alterations to the West Street/ Harris Street/ Helvetia Road roundabout and suggest the roundabout be shifted towards the southeast. The proposal does not involve changes to the roundabout geometry, and shifting the roundabout as required would involve substantial additional land and impact on other properties. I do not support this submission point.

Safety

- 11.101 Submission 1 (Cole K, 117 Princes St) requests further consideration for improving safety such as traffic calming (speed bumps) or reducing traffic flows past schools. This Project involves the introduction of an active mode path along one side of the road and is not proposing to make changes to intersections that I would expect to increase the volume or speed of traffic along this route. As a result I do not support this submission point.
- 11.102 Submissions 2, 3, and 9 are concerned about adverse safety effects where driveways cross the proposed active mode path. In my view the safety concerns about the proposed path crossing driveways are valid. As noted earlier I have significant safety concerns where cycle or shared paths are proposed in areas with frequent driveways, and the risks are exacerbated where cyclists can approach from both directions, and where the path is located close to the property boundary. For those reasons I support the submission points in relation to safety but do not support the other points in these submissions.

Parking

- 11.103 Submission 9 is concerned about the loss of berm space they rely on for parking. The berm is controlled by Auckland Transport and parking could be prohibited at any time so I do not support that submission point.

Management of Effects

- 11.104 Submission 7 is concerned about the loss of access during construction. I consider this is adequately addressed by the conditions.
- 11.105 Submission 11 (Ministry of Education) requests changes to the CTMP as discussed above and I support that submission point.

NOR 7: Pukekohe North-West Arterial

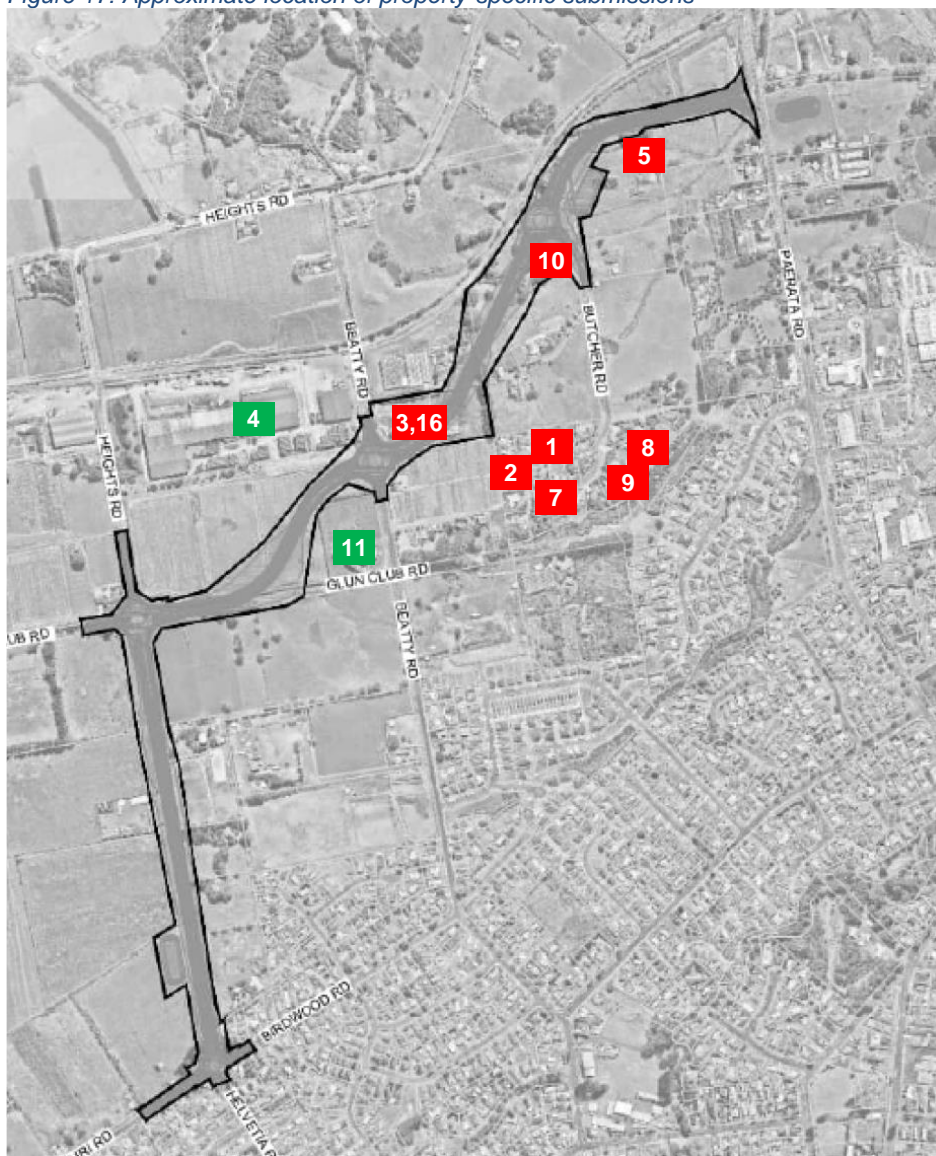


Submission Locations

- 11.106 The following figure shows the approximate location of transport-related submissions.

³⁹ Section 5.1.3, Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling, Austroads, 2016.

Figure 17: Approximate location of property-specific submissions



Alternate Routes, Alignment, Extents

- 11.107 Submissions 1 (Lawson S and P, 110 Butcher Road), 2 (Whiteman L, 112 Butcher Road), 3 (Cha S, 157 Beatty Road), 7 (Telfer J, 101 Butcher Road), 8 (Payne N, 97 Butcher Road), 9 (Lynch C and A, 99 Butcher Road), 10 (Polwart D and P, 36 and 62 Butcher Road), and 16 (Kim S, 157 Beatty Road) are of the view that Helvetia Road and Heights Road already provide a connection to SH22 in the north-west, and these roads should be upgraded instead of constructing a new road. Some submissions are of the view this option was not properly considered as an alternative.
- 11.108 The Assessment of Alternatives explains the earlier option assessment where four options, all using some part of Heights Road were considered⁴⁰. The more recent refinement and assessment process considered seven options in two segments with all but one option using part or all of Heights Road⁴¹. The preferred alignment was selected for a variety of reasons. I consider the assessment of alternatives is adequate at this scale so do not support these submission points.
- 11.109 Submission 5 (Morrison D and L, 17, 17A Butcher Road) request the active mode paths be located along the NZ Steel gas pipeline easement. The FirstGas pipeline is shown in Figure 18. There could be multiple issues associated with locating paths on that alignment including

⁴⁰ Pages 97-102, AOA.

⁴¹ Pages 180-187, AOA.

access to the pipeline for maintenance, severance of properties from fencing, lighting of the path, personal security issues and others. I do not support that submission point.

Figure 18: Gas Pipeline Location [data-firstgas.hub.arcgis.com]



- 11.110 Submission 3 (Cha 7, 157 Beatty Road) seeks that the boundary be modified so that only land essential for construction is purchased rather than the entire property. The reasons for requiring the entire property are not clear and I invite the RA to address this for the hearing.
- 11.111 Submission 11 (Burns R, 106 Beatty Road) requests the alignment is kept as far to the north-west as possible to enable the house and surrounds to be retained. The proposed alignment appears to be consistent with this request.

Safety

- 11.112 Submission 5 is concerned that the active mode paths on the northern side of the route would cross industrial driveways used by large and/ or heavy vehicles, and that this would be unsafe. The land is currently zoned Future Urban. While the PPSP shows some of the land as Business – Light Industrial Zone and some as Residential, the actual zoning of the land, and appropriate means of accessing any development are yet to be determined. It is expected that access across the proposed active mode paths would be minimised, so I do not support this submission point.
- 11.113 Submission 9 is concerned the right turn out of Butcher Road would be unsafe. This intersection is proposed to be controlled by a roundabout so I do not support that submission point.

Property Access

- 11.114 Submission 11 requests access from the 7:PNWA to both the north-western and south-eastern portions of a property for future development. As noted earlier property access on these roads is undesirable, particularly where alternate road access is available, as would be the case here. I do not support this submission point.

Management of Effects

- 11.115 Submission 13 (Ministry of Education) requests changes to the CTMP as discussed above and I support that submission point.

NOR 8: Mill Road and Pukekohe East Road Upgrade - Auckland



Submission Locations

- 11.116 The following figure shows the approximate location of transport-related submissions by Auckland Council. Submission 10 is addressed in 5:PSEA. Submission 9 is addressed with the Waikato submissions below.

Figure 19: Approximate location of property-specific submissions



Alternate Routes, Alignment, Extents

- 11.117 Submission 3 (Daroux C and C, 140 Pukekohe East Road) was addressed in conjunction with 5:PSEA and is not supported.
- 11.118 Submission 8 (Twentyman D, 100 Pukekohe East Road) is of the view that vehicles should travel south via Pokeno or north via Drury instead of using Mill Rd, and requests alternatives of a route along the NIMT railway alignment through Pukekohe or that 5:PSEA be realigned to the south-east. I do not support those submission points.

Design

- 11.119 Submission 16 (Campaign for Better Transport) generally supports the Project. The submission expresses the view the kerbside lanes could be restricted to heavy goods vehicles (trucks) and/ or higher-occupancy vehicles, a T2 lane for example. I consider this to be an operational decision for the RA rather than being relevant to this decision, so do not support that submission point.

Property Access

- 11.120 Submissions 1 (van Schalkwyk A, 165 Mill Road) and 17 (Singh H, 165C Mill Road) are both concerned about the access to these properties on the northern side of Mill Road. The common access to these properties is located approximately 150m west of the proposed roundabout at the eastern end of this project.
- 11.121 The submitters are unclear on the intention for the median and requests the provision of safe access noting that there is currently a high perceived risk of collision when turning right into this driveway. The ATE recommends that right turn property access in the four-lane section be restricted for safety reasons and states it is proposed *“that all accesses along this section to be changed to left-in and left-out on, with right turn movements prohibited.”*⁴²
- 11.122 I therefore expect that right turn movements into this property would instead need to detour to U-turn around the Harrisville Road roundabout about 1.65km away, an additional journey distance of 3.3km. Right turn movements out of the property would instead need to turn left and then U-turn around the new roundabout about 150m away, an additional journey length of 300m. I expect the crash risk associated with the new movements to be significantly less than the current right-turn movements. In my view the Project provides safe access and satisfies the submission request.
- 11.123 Submissions 4 (Maimere Properties, 197 Pukekohe East Road) and 5 (Johnstone M and L and Williams, 197 Pukekohe East Road) request the property access is relocated to provide safe access, and that the speed limit be lowered. The Project is not proposing changes to the geometry of the traffic lanes. Changes to speed limits are made through a different process, and the property owner could pursue a safer access location at any time. I do not support either submission point.

Management of Effects

- 11.124 Submission 14 (Ministry of Education) requests changes to the CTMP as discussed above and I support that submission point.

⁴² Pg 71, ATE

Submission Locations

- 11.125 The following figure shows the approximate location of transport-related submissions relating to properties in Waikato.

Figure 20: Approximate location of property-specific submissions



General

- 11.126 Submission 3 (Waikato District Council Roading Team) supports the Project as it supports safety and connectivity. The submission requests the roundabout at the Pukekohe East Road/ Mill Road/ Harrisville Road intersection is prioritised. While this is an intersection that can experience longer delays and has a poor crash record the prioritisation of projects or parts of projects is outside the scope of this process so I am unable to support that submission point.

Alternate Routes, Alignment, Extents

- 11.127 Submission 5 (Lawrie D and L, 52B Mill Road) consider separate pedestrian and cycle paths are excessive and request the width of the designation be reduced. Submissions 9 (Muir E, 86 Mill Road) and 10 (Muir L, 86 Mill Road) request the walking and cycling paths be combined and relocated to the north side of the road. Submission 4 (Roose A and K) is neutral but queries the amount of land taken.
- 11.128 The ATE has a cross-section diagram showing separate bi-directional paths on one side of the road and says the exact provision will be determined at the time of detailed design. The General Arrangement drawing shows a non-specific path 4.5m wide.
- 11.129 In my view shared active mode paths are most appropriate when the volume of pedestrians and/ or cyclists is low, and where the speed of cyclists is lower. Separated paths are most appropriate where the speed or volume of users is higher. Paths catering for two directions of cycle travel would desirably be wider, particularly where volumes or speeds are higher.
- 11.130 I would expect the volume of both pedestrians and cyclists on this route to be relatively low in comparison to other routes. Given the longer distances and alignment cyclists speeds may be relatively high in some locations; however, I expect cyclist speeds would be no higher than on the paths recently constructed along the Southern Motorway and North-Western Motorway. Both of those paths are 3m wide bi-directional shared paths, which is significantly narrower than the 4.5m width proposed here. I invite the RA to provide more information on this matter at the hearing. My preliminary recommendation is to support the submission points requesting a narrower combined path.
- 11.131 The matter of shifting the path to the north side are addressed with the 5:PSEA submissions.
- 11.132 Submission 2 (Whitley A, 250 Pukekohe East Road) considers the area of land required for earthworks batters could be reduced if the adjoining gully on this property was filled. The submission requests consent to fill the gully which cannot be addressed in this process so I am unable to support this submission.

Property Access

- 11.133 Submission Auckland 9 (Cunningham R, 80 Mill Road) requests that some form of traffic management system is installed at the roundabouts to provide for free-flowing U-turns at the

roundabouts to offset the additional travel time imposed by the median removing right turn movements at driveways. I do not know of any suitable system and do not support this submission point.

- 11.134 Submission 7 (Crane A, 248 Pukekohe East Road) requests the notice be declined for reasons including the “*current roadside area has been used to safely turn around when entering and exiting the property via vehicle*”. From inspection I take the roadside area in question to be a large “vehicle crossing” serving two driveways and located within the road reserve. As this is a relatively large lot I consider there should be sufficient space to develop an on-site turning area if desired and do not support this submission point.

Requested Amendments to Conditions

- 11.135 Some submitters have requested specific amendments to particular conditions, additional conditions, or have requested general amendments to achieve a particular outcome. Those relevant to transport matters are considered below.
- 11.136 The MoE submissions (1.6, 2.27, 4.9, 5.18, 6.11, 7.13 and 8A.14) request specific amendments to the conditions including amendments to provide consistency with conditions on other projects including the Warkworth NORs and Airport to Botany Bus Rapid Transit NORs, and to address construction traffic near schools.
- 11.137 I support these submission points where relevant to transport matters, and particularly the CTMP. I have adopted the MoE amendments in my recommended changes to the conditions below, except for the requested addition of clauses (ix) to (xi) as the notified conditions already include those clauses.

12 Proposed Conditions

- 12.1 The conditions proposed by the RAs are appended to the Form 18 notices. There is one set of conditions for the NZTA Projects (2:DPL: and 8:MPEU), and one set for the AT Projects.

Auckland Transport Projects

- 12.2 These conditions apply to 1:DWA, 3:PC, 4:PNEA, 5:PSEA, 6:PSWU and 7:PNWA.

Existing Property Access

- 12.3 Condition 13 Existing property access applies to all Projects. As proposed the condition requires consultation and requires the Outline Plan to demonstrate how safe access will be provided.
- 12.4 As proposed the condition wording could result in an access that may not provide for movement of all vehicles used on that property, such as large truck and trailer vehicles or agricultural machinery. I consider the condition should be amended to require the access to be fit for purpose or adequate.
- 12.5 I also consider that it would be desirable for the replacement or altered access to be reasonable efficient, particularly with respect to additional journey length and time. I acknowledge it may be difficult to provide wording that does not rely on subjective assessment, but in that regard the term “safe” is also inherently subjective.
- 12.6 Relevant submissions include 4.4, 5.21, and 6.13.
- 12.7 As noted earlier, the ATE recommends that a Site-Specific Traffic Management Plan (SSTMP) be provided to address access to properties, if required. No condition requires a SSTMP; however, the CTMP is required to include methods to provide access, and a SSTMP is one method that could be used.

- 12.8 I recommend the wording of this condition be amended as follows (the submission numbers in brackets are not intended to form part of the condition):

13. Existing property access

Prior to submission of the Outline Plan, consultation shall be undertaken with landowners and occupiers whose vehicle access to their property will be altered by the project. The Outline Plan shall demonstrate how safe, **adequate, and efficient** ^[4.4, 5.21, 6.13] reconfigured or alternate access will be provided, unless otherwise agreed with the landowner.

Construction Traffic Management Plan

- 12.9 All AT Project Outline Plans are required to include a Construction Traffic Management Plan (CTMP) via Condition 6, and the requirements for CTMPs are set out in Condition 17.
- 12.10 In my view the stated objective of the management plan is appropriate.
- 12.11 The equivalent condition for the two NZTA Projects has the same wording but in a slightly different structure. In the NZTA version condition (ix) relating to monitoring is included as condition (b) which I prefer as this relates to auditing, monitoring and reporting requirements which should apply to the CTMP rather than being a matter to be included.
- 12.12 I recommend the following changes, based on the notified conditions. I have included the changes requested in the MoE submissions except where noted above.

17. Construction Traffic Management Plan (CTMP)

- (a) A CTMP shall be prepared prior to the Start of Construction for a Stage of Work. The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects. To achieve this objective, the CTMP shall include:
- (i) methods to manage the effects of temporary traffic management activities on traffic;
 - (ii) measures to ensure the safety of all transport users;
 - (iii) the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours **(for example on roads servicing educational facilities during pick up and drop off times)** ^[MoE] to manage vehicular and pedestrian traffic near **educational facilities schools** ^[MoE] or to manage traffic congestion;
 - (iv) site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;
 - (v) identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, including **public transport service**, ^[MoE] pedestrians and cyclists, **on existing roads** ^[MoE];
 - (vi) methods to maintain **vehicle** ^[MoE] access to **and within** ^[MoE] property and/or private roads **for all transport modes** ^[MoE] where practicable, or to provide alternative access arrangements when it will not be;
 - (vii) the management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads;

(viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/_public/_stakeholders/emergency services);

~~(ix) auditing, monitoring and reporting requirements relating to traffic management activities shall be undertaken in accordance with the New Zealand Guide to Temporary Traffic Management or any subsequent version;~~ [consistency with NZTA conditions]

(ix) details of minimum network performance parameters during the construction phase, including any measures to monitor compliance with the performance parameters; and

(xi) details of any measures proposed to be implemented in the event of thresholds identified in (x) being exceeded.

(b) auditing, monitoring and reporting requirements relating to traffic management activities shall be undertaken in accordance with the New Zealand Guide to Temporary Traffic Management or any subsequent version; [consistency with NZTA conditions]

12.13 The list of matters includes a reference to the “New Zealand Guide to Temporary Traffic Management or any subsequent version”. It is possible that a different document could supersede that guide, rather than it being a later version of the same document, and a minor amendment to this wording could provide for that possibility, although no submission point requests that amendment.

(b) auditing, monitoring and reporting requirements relating to traffic management activities shall be undertaken in accordance with the New Zealand Guide to Temporary Traffic Management or any **subsequent version replacement**;

Waka Kotahi New Zealand Transport Agency Transport Projects

12.14 These conditions apply to 2:DPL and 8:MPEU.

Existing Property Access

12.15 Condition 12 Existing property access applies to both Projects. As proposed the condition requires consultation and requires the Outline Plan to demonstrate how safe access will be provided.

12.16 I recommend the wording of this condition be amended to be the same as AT Condition 13 as described above for consistency, although no submission point requested that specific relief for the NZTA Projects.

Construction Traffic Management Plan

12.17 Both NZTA Project Outline Plans are required to include a Construction Traffic Management Plan (CTMP), and the requirements for CTMPs are set out in Condition 16.

12.18 In my view the stated objective of the management plan is appropriate. I recommend the same changes I recommended for the AT conditions.

12.19

17. Construction Traffic Management Plan (CTMP)

(a) A CTMP shall be prepared prior to the Start of Construction for a Stage of Work. The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable,

adverse construction traffic effects. To achieve this objective, the CTMP shall include:

- (i) methods to manage the effects of temporary traffic management activities on traffic;
 - (ii) measures to ensure the safety of all transport users;
 - (iii) the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours **(for example on roads servicing educational facilities during pick up and drop off times)** ^[MoE] to manage vehicular and pedestrian traffic near **educational facilities schools** ^[MoE] or to manage traffic congestion;
 - (iv) site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;
 - (v) identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, including **public transport service**, ^[MoE] pedestrians and cyclists, **on existing roads** ^[MoE];
 - (vi) methods to maintain **vehicle** ^[MoE] access to **and within** ^[MoE] property and/or private roads **for all transport modes** ^[MoE] where practicable, or to provide alternative access arrangements when it will not be;
 - (vii) the management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads;
 - (viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/_public/_stakeholders/ emergency services);
 - (ix) details of minimum network performance parameters during the construction phase, including any measures to monitor compliance with the performance parameters; and
 - (x) details of any measures proposed to be implemented in the event of thresholds identified in (x) being exceeded.
- (b) auditing, monitoring and reporting requirements relating to traffic management activities shall be undertaken in accordance with the New Zealand Guide to Temporary Traffic Management or any **subsequent version replacement**;

13 Conclusions and Recommendations

Areas of Concern

- 13.1 I have significant concerns in relation to cyclist safety on the proposed 6:PSWU shared path as that is a bi-directional path in an urban area with a high number of driveways and the path is relatively close to the property boundary.
- 13.2 I have moderate concerns about detours and U-turn movements caused by the introduction of medians that prevent right turns at driveways and side roads in the event that some of the intersections proposed to be controlled by roundabouts are instead constructed in some other form.

- 13.3 I have moderate concerns that an appropriate range of alternate methods have not been considered for reducing the impact on some properties. These include options for dealing with height differences including embankments, retaining walls and other structures. These also include combining separate active mode paths into shared paths and reducing the width of roadside features to less than ideal widths.

Additional Information

- 13.4 I recommend that additional information be provided for the hearing in relation to:
- a) Safety in relation to the conflicts between shared path users (predominantly cyclists) at driveways where the path is located close to the property boundary and visibility between cyclists and drivers may not be sufficient to provide satisfactory stopping distances. This should include all Projects in general, and 6:PSWU in particular.
 - b) How detours and U-turn manoeuvres generated by the removal of right turns at driveways and side roads could be safely and efficiently managed in the event some of the intersections proposed to be controlled by roundabouts are constructed with an alternate form.
 - c) How detours U-turn movements on Pukekohe East Road west of Harrisville Road could be safely and efficiently managed, including a safety assessment of U-turns occurring in a variety of locations including Runciman Road.
 - d) The necessity of including active mode facilities on all sections of 2:DPL given the regional AMC and active mode facilities on SH22 would run broadly parallel a relatively short distance away.
 - e) Options for realigning the Paerata Arterial Segment of 2:DPL between Sim Road and the NIMT railway.
 - f) Options for reducing the extent of the designation and the impact on the following properties including substituting retaining walls or other structures for embankments:
 - i) 4:PNEA: 1199 Paerata Road
 - ii) 5: PSEA: properties west of the NIMT, 2, 19, and 47 Golding Road and 50 Pukekohe East Road;
 - g) Refinement of the designation boundaries at:
 - i) 5: PSEA: 3 Pukekohe East Road and 98B Pukekohe East Road;
 - ii) 7:PNEA: 157 Beatty Road;
 - h) Options for reducing the extent of the designation and the impact on properties by providing a shared path instead of separate active mode paths and/ or reducing the width of the path(s) and other roadside features, particularly on 5:PSEA, 6:PSWU and 8:MPEU.

Planning Framework

- 13.5 In my view the projects are consistent with, support, and give effect to the relevant National Policy Statements, and the Auckland Unitary Plan including the Regional Policy Statement. The projects are consistent with, support, and give effect to other relevant documents including the Auckland Plan, Climate Plan, and Draft Future Development Strategy, with the exception of 6:PSWU.
- 13.6 In my view there are no additional management methods that could ensure greater consistency with the higher order planning documents.

Adequacy of Assessment of Transport Effects

- 13.7 The Assessment of Transport Effects (ATE) has evaluated the adverse and beneficial effects of the Projects based on all Projects being implemented in full. This approach has some limitations:
- a) It does not consider a possible outcome where some projects, or some stages of some projects are not implemented;
 - b) It does not allow for the effects of each individual project to be evaluated separately.
- 13.8 The ATE assessment has also evaluated the effects by assuming that all planned growth would occur with or without the Projects. This approach does not align well with development in the growth areas being conditional on some of the Projects being implemented as required by the FDS. As a result, the beneficial transport effects of the Projects may be overstated.
- 13.9 The ATE assessment also assumes that no other significant projects, such as works to improve safety on existing routes would occur in the absence of these projects, and that may also result in the safety benefits of the Projects being overstated.
- 13.10 I consider it would have been onerous for the ATE to have assessed the effects of each stage of each Project individually, and unduly onerous for the assessment to have considered every logical combination of various project stages; however it would have been desirable for some of the Projects which are more independent of the others to have been assessed separately.
- 13.11 It would have also been possible for the ATE assessment to have excluded development in growth areas that are dependent on a Project being implemented; however it is acknowledged that those dependencies have only recently been established in the new FDS.
- 13.12 I consider the assessment of effects on road safety with respect to 6:PSWU does not adequately consider the risk of crash and injury where the proposed active mode path intersects with multiple and frequent driveways.
- 13.13 I consider the assessment of transport effects to be adequate for the other Projects.

Adequacy of Assessment of Alternatives

- 13.14 The AOA has outlined the extensive process that has been undertaken to consider, prioritise, and select the proposed overall type of Project, the alignment of each Project, and the general design parameters of each Project.
- 13.15 The assessment of alternatives undertaken to date has considered the Projects at a sub-regional level and has considered some more localised issues such as the presence of particular environmental features. It is possible that further investigation and design work may uncover currently unknown issues, and that may require some further consideration of alternative means and methods of undertaking the work.
- 13.16 There are some locations where alternative alignments requested by submitters have apparently not been considered in the assessment of alternatives to date. It is possible that these alternatives were considered in earlier work and discarded without being documented. It would be useful to have additional information on these alternatives provided for the hearing, but my preliminary view based on a RA not having to have investigated every alternative is that the assessment of alternate routes and alignments is sufficient.
- 13.17 The assessment of alternatives has not considered alternative means and methods at a localised per-property level. Considering alternative methods such as choosing between an embankment or a retaining wall is likely to occur during the detailed design stage and in consultation with affected property owners; however, in some cases that decision has a significant impact on effects and I recommend that additional consideration be given to alternate methods of undertaking the work for some submitter properties as described above.

- 13.18 Overall I consider the assessment of alternatives is adequate for the stated purpose and objectives at the macro scale, but that further consideration is warranted for some individual properties.

Necessity

- 13.19 I consider each of the Projects, or at the very least substantially similar projects, are necessary in order to provide for the planned growth that is forecast to occur. I am therefore satisfied that at a macro level in relation to transport matters that the Projects are reasonably necessary, with the exception of 6:PSWU in the form proposed.
- 13.20 As noted above, the assessment of alternatives means and methods has not yet been undertaken at the micro per-property level or considered detailed design choices such as the use of an embankment or a retaining wall at each individual cut or fill site. As a result, I cannot confirm that the proposed extents of the designation on each individual property are reasonably necessary with respect to some properties in the absence of additional information.
- 13.21 In relation to overall transport matters I consider the Projects as a whole are reasonably necessary, with the exception of 6:PSWU and with respect to the extent of land required in some specific instances.

Recommendations

- 13.22 The following recommendations are preliminary prior to the receipt of evidence including any items of additional information listed above.
- 13.23 I support 1: Drury West Arterial with amendments to the conditions relating to existing property access, and the conditions specifying CTMP requirements.
- 13.24 I provisionally support 2: Drury-Pukekohe Link with amendments to the conditions relating to existing property access, and the conditions specifying CTMP requirements, subject to further information and consideration of alternative alignments for the Paerata Arterial section.
- 13.25 I support 3: Paerata Connections with amendments to the conditions relating to existing property access, and the conditions specifying CTMP requirements
- 13.26 I provisionally support 4: Pukekohe North-East Arterial with amendments to the conditions relating to existing property access, and the conditions specifying CTMP requirements, subject to further refinement of the design and assessment of alternative methods to reduce the impact on properties including retaining walls or bridge structures instead of embankments, particularly at 1199 Paerata Road.
- 13.27 I provisionally support 5: Pukekohe South-East Arterial with amendments to the conditions relating to existing property access, and the conditions specifying CTMP requirements, subject to further refinement of the design and assessment of alternative methods to reduce the impact on properties including:
- a) the use of retaining walls or bridge structures instead of embankments, particularly for properties west of the NIMT, 2, 19, and 47 Golding Road and 50 Pukekohe East Road;
 - b) refinement of the designation boundary at 3 Pukekohe East Road;
 - c) refinement of the designation boundary at 98B Pukekohe East Road;
 - d) the provision of one shared active mode path rather than separate paths and the reduction in width of the path and other roadside features.
- 13.28 Provisionally, I do not support 6: Pukekohe South West Upgrade on the grounds of adverse effects on cyclist safety which is contrary to the stated purpose of the Project. In the event

that this Project is supported by the panel I recommend amendments to the conditions as for the other Projects.

- 13.29 I provisionally support 7: Pukekohe North-West Arterial with amendments to the conditions relating to existing property access, and the conditions specifying CTMP requirements, subject to further information about the extent of land required at 157 Beatty Road.
- 13.30 I provisionally support 8: Mill Road and Pukekohe East Road Upgrade in Auckland and in Waikato with amendments to the conditions relating to existing property access, and the conditions specifying CTMP requirements, subject to:
- a) further refinement of the design and assessment of alternative methods to reduce the impact on properties including the provision of one shared active mode path rather than separate paths, and the reduction in width of the path and other roadside features;
 - b) further consideration of the safety and efficacy of right turn movements displaced by any median for properties west of Harrisville Road.

Appendix A: Glossary of Terms and Abbreviations

Term	Description
1:DWA	Project 1: Drury West Arterial
2:DPL	Project 2: Drury-Paerata Link
3:PC	Project 3: Paerata Connections
4:PNEA	Project 4: Pukekohe North-East Arterial
5:PSEA	Project 5: Pukekohe South-East Arterial
6:PSWU	Project 6: Pukekohe South-West Upgrade
7:PNWA	Project 7: Pukekohe North-West Arterial
8:MPEU	Project 8: Mill Road and Pukekohe East Road Upgrade
AC	Auckland Council
Active Mode	Non-motorised means of transport including walking, cycling, scooting, skateboarding
AEE	Assessment of Environmental Effects prepared by SGA
AFC	Auckland Forecasting Centre, an AC, AT and NZTA partnership that operates transport models
AMC	Active Mode Corridor
AOA	Assessment of Alternatives prepared by SGA
AT	Auckland Transport
ATE	Assessment of Transport Effects prepared by SGA
AUP	Auckland Unitary Plan (Operative in Part)
CTMP	Construction Traffic Management Plan – a document that manages traffic during construction, will include a number of TTMPs
DBC	Detailed Business Case
DOSP	Drury-Opāheke Structure Plan
DSI	Death and Serious Injury road crashes
ERP	Emissions Reduction Plan
FDS	Auckland Future Development Strategy (2023)
FTN	Frequent Transit Network – public transport services running frequently, usually buses in bus lanes
FULSS	Auckland Future Land Supply Strategy (2017) superseded by FDS
FUZ	Future Urban Land – a zoning applied to land expected to be rezoned for future development
GPS-LT	Government Policy Statement – Land Transport
IBC	Indicative Business Case
ITA	Integrated Transport Assessment
LAR	Limited Access Road
LCSIA	Level Crossing Safety Impact Assessment
MBB	Mission Bush Branch railway
MDRS	Medium Density Residential Standards – a government initiative to increase housing provision
MSM	Macro Strategic Model – a transport demand software model of the Auckland Region
MoE	Ministry of Education
NIMT	North Island Main Trunk railway
NOR	Notice of Requirement
NPS-UD	National Policy Statement – Urban Development, a policy that planning decisions must give effect to
NZTA	Waka Kotahi New Zealand Transport Agency
OPW	Outline Plan of Works – plans provided by the RA to the Councils prior to commencing work
PC	Plan Change – a process to change a Unitary or District Plan, usually to rezone land
PC78	An Auckland Council Plan Change to implement the MDRS and related requirements
PPSP	Pukekohe-Paerata Structure Plan
PT	Public Transport
RA	Requiring Authority
RCA	Road Controlling Authority
RPS	Regional Policy Statement – a regional statement that planning decisions must give effect to
RTN	Rapid Transit Network – public transport services running frequently on a dedicated way, includes passenger rail services and North Shore Busway
SGA	Te Tupu Ngātahi Supporting Growth Alliance
SH1	State Highway 1, Southern Motorway and Waikato Expressway
SH22	State Highway 22, Paerata Road and Karaka Road
TERP	Auckland's Transport Emissions Reduction Plan – a document planning decisions must have regard to
TTMP	Temporary Traffic Management Plan – a plan and drawings for the temporary management of traffic (may include hours of work, road closures and detours, temporary speed limits, the location of signs and cones), to be approved by the RCA.
VKT	Vehicle Kilometres Travelled – a measure of vehicle travel on roads
WDC	Waikato District Council

Appendix B: Summary of Recommended Response to Submissions

1: Drury West Arterial

Submission	Submitter	Response
1	Telecommunications Submitters	Not transport related
2	Fisher and Paykel Healthcare	Supported in part
3	KiwiRail Holdings	Not transport related
4	McKean Family Trust	Not supported
5	Watercare Services Ltd	Not transport related
6	Ministry of Education	Neutral
7	Counties Energy Ltd	Not transport related
8	The Campaign for Better Transport Inc	Supported in part

2: Drury-Pukekohe Link

Submission	Submitter	Response
1	Harrison L and Ah-Wong E	Not supported
2	Owers S	Not supported
3	Beaurain R	More information required
4	Beaurain BJ	More information required
5	Telecommunications Submitters	Not supported
6	Joyce C	Not supported
7	Ro M	Not supported
8	Postles B and L	More information required
9	Ruddell J	Not supported
10	Brown T	Not supported
11	Farley R	Unclear
12	McCall G	More information required
13	Carpenter D and S	More information required
14	XLU	Not supported
15	Dane M	Not transport related
16	Berry R	More information required
17	Fisher and Paykel Healthcare	Not supported
18	D and K Sim Ltd	Not supported
19	Trevlyn Enterprises	Not supported
20	Sim P	Not supported
21	Roding and Asphalt Ltd	Not supported
22	Public Works Advisory Ltd	Not transport related
23	Thompson J	Not supported
24	KiwiRail Holdings	Not transport related
25	McKean Family Trust	Not supported
26	Watercare Services Ltd	Not transport related
27	Ministry of Education	Supported
28	Paerata 5 Farms Ltd	More information required
29	Counties Energy Ltd	Not transport related
30	The Campaign for Better Transport Inc	Neutral
31	Haddad P	Not supported
32	Ross H	Not supported

3: Paerata Connections

Submission	Submitter	Response
1	Telecommunications Submitters	Not transport related
2	YWMP Ltd	Not transport related
3	KiwiRail Holdings	Not transport related
4	Watercare Services Ltd	Not transport related
5	Ministry of Education	Supported
6	Paerata 5 Farms Ltd	Not supported
7	Counties Energy Ltd	Not transport related
8	The Campaign for Better Transport Inc	Neutral

4: Pukekohe North-East Arterial

Submission	Submitter	Response
1	Baptist G	Not supported
2	Telecommunications Submitters	Not transport related
3	Smith S	Neutral
4	Pukekohe Industrial Park and Storage Ltd	More information required Not Supported
5	Heritage NZ	Not transport related
6	Burgoyne S	Not transport related
7	KiwiRail Holdings	Not transport related
8	Watercare Services Ltd	Not transport related
9	Ministry of Education	Supported
10	Ainsley S	Not transport related
11	Counties Energy Ltd	Not transport related
12	The Campaign for Better Transport Inc	Neutral
13	Connors M and C	Neutral

5: Pukekohe South-East Arterial

Submission	Submitter	Response
1	Holy Properties Ltd	Not transport related
2	Franklin A & P Soc	Not supported
3	Daroux C and C	Supported in part (preliminary)
4	Feng C	More information required
5	DH and IM Mills Properties	More information required
6	Telecommunications Submitters	Not transport related
7	Enviro NZ Services	More information required
8	Chen X	Not transport related
9	Kennelly B	Supported (preliminary)
10	Golding K	More information required
11	Crosten Investments Ltd	More information required
12	Zheng S	Not supported
13	OMAC Limited and Next Generation Properties Limited	Not supported
14	Aedifice Development No.1 Limited	Not supported
15	KiwiRail Holdings	Not transport related
16	The Campaign for Better Transport Inc	Neutral
17	Watercare Services Ltd	Not transport related
18	Ministry of Education	Supported
19	Ainsley S	Not transport related
20	Counties Energy Ltd	Not transport related
21	Pukekohe Mega Trustees Limited and Wrightson Way Limited	More information required Supported in part

6: Pukekohe South-West Upgrade

Submission	Submitter	Response
1	Cole K	Not supported
2	Mayor G	Supported in part
3	McIntyre E and B	Supported in part
4	Baker J	Not transport related
5	Telecommunications Submitters	Not transport related
6	McMahon C and B	More information required Not supported
7	Scott B and Farrer P	Neutral
8	Heritage NZ	Not transport related
9	Simpson R and Hickmont M	Supported in part
10	Watercare Services Ltd	Not transport related
11	Ministry of Education	Supported
12	Counties Energy Ltd	Not transport related
13	Pukekohe Mega Trustees Limited and Wrightson Way Limited	Not supported
14	The Campaign for Better Transport Inc	Not supported

7: Pukekohe North-West Arterial

Submission	Submitter	Response
1	Lawson S and P	Not supported
2	Whiteman L	Not supported
3	Cha S	Not supported More information required
4	Balle Bros Fresh Produce	Supported
5	Morrison D and L	Not supported
6	Telecommunications Submitters	Not transport related
7	Telfer J	Not supported
8	Payne N	Not supported
9	Lynch C and A	Not supported
10	Polwart D and P	Not supported
11	Burns R	Neutral
12	Watercare Services Ltd	Not transport related
13	Ministry of Education	Supported
14	Counties Energy Ltd	Not transport related
15	The Campaign for Better Transport Inc	Neutral
16	Kim S	Not supported More information required

8: Mill Road - Pukekohe East Road Upgrade - Auckland

Submission	Submitter	Response
1	van Schalkwyk A	Neutral
2	AMJG Investment	Unclear
3	Daroux C and C	Not supported
4	Maimere Properties	Not supported
5	Johnstone M and L and Williams L	Not supported
6	Telecommunications Submitters	Not supported
7	Jeon C	Unclear
8	Twentyman D	Not supported
9	Cunningham R	Not supported
10	TA Reynolds Holdings Ltd	Supported in part (preliminary)
11	Heritage NZ	Not transport related
12	FirstGas Ltd	Not transport related
13	Watercare Services Ltd	Not transport related
14	Ministry of Education	Supported
15	Counties Energy Ltd	Not transport related
16	The Campaign for Better Transport Inc	Not supported
17	Singh H	Neutral

8: Mill Road - Pukekohe East Road Upgrade – Waikato

Submission	Submitter	Response
1	Telecommunications Submitters	Not transport related
2	Whitley A	Not supported
3	WDC Roading Team	Supported in part
4	Roose A and K	Supported in part (preliminary)
5	Lawrie D and L	Supported (preliminary)
6	Neumann D	Not transport related
7	Crane A	Not supported
8	FirstGas Ltd	Not transport related
9	Muir E	Supported in part (preliminary)
10	Muir L	Supported in part (preliminary)
11	Heritage NZ	Not transport related

ATTACHMENT D

CONDITIONS

Pukekohe Transport Network - Proposed Conditions for Waka Kotahi NoRs

NoR 8 (WDC) – Mill Road – Pukekohe East Road Upgrade

Amended (~~deletions~~ and additions)

Abbreviations and definitions

Acronym/Term	Definition
Activity sensitive to noise	Any dwelling, visitor accommodation, boarding house, marae, papakāinga, integrated residential development, retirement village, supported residential care, care centre, lecture theatre in a tertiary education facility, classroom in an education facility and healthcare facility with an overnight stay facility.
BPO or Best Practicable Option	Has the same meaning as in section 2 of the RMA 1991.
CEMP	Construction Environmental Management Plan
Certification	Confirmation from the Manager that a material change to a management plan has been prepared in accordance with the condition to which it relates. A material change to a management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that the material change to the management plan is certified; (b) ten working days from the submission of the material change to the management plan where no written confirmation of certification has been received; or (c) five working days from the submission of the material change to a CNVMP Schedule where no written confirmation of certification has been received.
CNVMP	Construction Noise and Vibration Management Plan
CNVMP Schedule or Schedule	A schedule to the CNVMP
Completion of Construction	When construction of the Project (or part of the Project) is complete and it is available for use.
Confirmed Biodiversity Areas	Areas recorded in the Identified Biodiversity Area Schedule where the ecological values and effects have been confirmed through the ecological survey under Condition 22.
Construction Works	Activities undertaken to construct the Project excluding Enabling Works.
Council	Waikato District Council
CTMP	Construction Traffic Management Plan
<u>Educational facilities</u>	<u>Facility used for education to secondary level.</u> <u>Includes:</u> <u>▪Schools and outdoor education facilities; and</u> <u>▪Accommodation, administrative, cultural, religious, health, retail, and communal facilities accessory to the above.</u> <u>Excludes:</u> <u>▪Care centres; and</u> <u>▪Tertiary education facilities</u>
EMP	Ecological Management Plan
EIANZ Guidelines	Ecological Impact Assessment: EIANZ guidelines for use in New Zealand: terrestrial and freshwater ecosystems, second edition, dated May 2018.

Acronym/Term	Definition
Enabling works	Includes, but is not limited to, the following and similar activities: <ul style="list-style-type: none"> • geotechnical investigations (including trial embankments) • archaeological site investigations • formation of access for geotechnical investigations • establishment of site yards, site entrances and fencing • constructing and sealing site access roads • demolition or removal of buildings and structures • relocation of services • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and planting)
HHMP	Historic Heritage Management Plan
HNZPT	Heritage New Zealand Pouhere Taonga.
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Identified Biodiversity Area	Means an area or areas of ecological value where the Project ecologist has identified that the project will potentially have a moderate or greater level of ecological effect, prior to implementation of impact management measures, as determined in accordance with the EIANZ guidelines.
Manager	The Manager – Resource Consents of the Waikato District Council, or authorised delegate.
Mana Whenua	Mana Whenua as referred to in the conditions are considered to be the following (in no particular order), who at the time of Notice of Requirement expressed a desire to be involved in the Project: <ul style="list-style-type: none"> • Ngaati Te Ata Waiohau • Ngāti Tamaoho • Te Ākitai Waiohau • Ngāti Whanaunga Note: other iwi not identified above may have an interest in the project and should be consulted.
Network Utility Operator	Has the same meaning as set out in section 166 of the RMA.
NUMP	Network Utilities Management Plan
NOR	Notice of Requirement
NZAA	New Zealand Archaeological Association
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA.
Project Liaison Person	The person or persons appointed for the duration of the Project's Construction Works to be the main point of contact for persons wanting information about the Project or affected by the Construction Works.
Protected Premises and Facilities (PPF)	Protected Premises and Facilities as defined in New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i> .
Requiring Authority	Has the same meaning as section 166 of the RMA and, for this Designation is New Zealand Transport Agency.
RMA	Resource Management Act (1991)
SCEMP	Stakeholder Communication and Engagement Management Plan

Acronym/Term	Definition
Stakeholders	<u>Stakeholders to be identified in accordance with Condition [x], which may include as appropriate:</u> a) <u>Adjacent owners and occupiers;</u> b) <u>Adjacent business owners and occupiers;</u> c) <u>Central and local government bodies;</u> d) <u>Community groups;</u> e) <u>Developers;</u> f) <u>Development agencies;</u> g) <u>Educational facilities; and</u> h) <u>Network utility operators.</u>
Stage of Work	Any physical works that require the development of an Outline Plan.
Start of Construction	The time when Construction Works (excluding Enabling Works) start.
Suitably Qualified Person	A person (or persons) who can provide sufficient evidence to demonstrate their suitability, experience and competence in the relevant field of expertise.
LMP	Landscape Design Management Plan
WDP	Waikato District Plan

No.	Condition
General Conditions	
1.	Activity in General Accordance with Plans and Information (a) Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation shall be undertaken in general accordance with the Project description and concept plan in Schedule 1: (b) Where there is inconsistency between: (i) the Project description and concept plan in Schedule 1 and the requirements of the following conditions, the conditions shall prevail; (ii) the Project description and concept plan in Schedule 1, and the management plans under the conditions of the designation, the requirements of the management plans shall prevail.
2.	Project Information (a) A project website, or equivalent virtual information source, shall be established within 12 months of the date on which this designation is included in the AUP. All directly affected owners and occupiers shall be notified in writing once the website or equivalent information source has been established. The project website or virtual information source shall include these conditions and shall provide information on: (i) the status of the Project; (ii) anticipated construction timeframes; (iii) contact details for enquiries; (iv) the implications of the designation for landowners, occupiers and business owners and operators within the designation and information on how/where they can receive additional support following confirmation of the designation; (i) a subscription service to enable receipt of project updates by email; and (ii) when and how to apply for consent for works in the designation under s176(1)(b) of the RMA. (b) At the start of detailed design for a Stage of Work, the project website or virtual information source shall be updated to provide information on the likely date for Start of Construction, and any staging of works.
3.	Designation Review

No.	Condition
	<p>(a) The Requiring Authority shall within 6 months of Completion of Construction or as soon as otherwise practicable:</p> <ul style="list-style-type: none"> (i) review the extent of the designation to identify any areas of designated land that it no longer requires for the on-going operation, maintenance or mitigation of effects of the Project; and (ii) give notice to Waikato District Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified above.
4.	<p>Lapse</p> <p>(a) In accordance with section 184(1)(c) of the RMA, this designation shall lapse if not given effect to within 20 years from the date on which it is included in the AUP.</p>
5.	<p>Network Utility Operators (Section 176 Approval)</p> <p>(a) Prior to the start of Construction Works, Network Utility Operators with existing infrastructure located within the designation will not require written consent under section 176 of the RMA for the following activities:</p> <ul style="list-style-type: none"> (i) operation, maintenance and urgent repair works; (ii) minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations; (iii) minor works such as new service connections; and (iv) the upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility. <p>(b) To the extent that a record of written approval is required for the activities listed above, this condition shall constitute written approval.</p>
Pre-construction Conditions	
6.	<p>Outline Plan</p> <p>(a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA.</p> <p>(b) Outline Plans (or Plan) may be submitted in parts or in stages to address particular activities (e.g. design or construction aspects), or a Stage of Work of the Project.</p> <p>(c) Outline Plans shall include any management plan or plans that are relevant to the management of effects of those activities or Stage of Work, which may include:</p> <ul style="list-style-type: none"> (i) Construction Environmental Management Plan; (ii) Construction Traffic Management Plan; (iii) Construction Noise and Vibration Management Plan; (iv) Landscape Management Plan; (v) Historic Heritage Management Plan; (vi) Ecological Management Plan; (i) Tree Management Plan; and (vii) Network Utilities Management Plan.
7.	<p>Management Plans</p> <p>(a) Any management plan shall:</p> <ul style="list-style-type: none"> (i) Be prepared and implemented in accordance with the relevant management plan condition; (ii) Be prepared by a Suitably Qualified Person(s); (iii) Include sufficient detail relating to the management of effects associated with the relevant activities and/or Stage of Work to which it relates. (iv) Summarise comments received from Mana Whenua and other stakeholders as required by the relevant management plan condition, along with a summary of where comments have: <ul style="list-style-type: none"> a. Been incorporated; and b. Where not incorporated, the reasons why. (v) Be submitted as part of an Outline Plan pursuant to s176A of the RMA, with the exception of SCEMPs and CNVMP Schedules. (vi) Once finalised, uploaded to the Project website or equivalent virtual information source. <p>(b) Any management plan developed in accordance with Condition 7 may:</p>

No.	Condition
	<ul style="list-style-type: none"> (i) Be submitted in parts or in stages to address particular activities (e.g. design or construction aspects) a Stage of Work of the Project, or to address specific activities authorised by the designation. (ii) Except for material changes, be amended to reflect any changes in design, construction methods or management of effects without further process. (iii) If there is a material change required to a management plan which has been submitted with an Outline Plan, the revised part of the plan shall be submitted to the Council as an update to the Outline Plan or for Certification as soon as practicable following identification of the need for a revision; <p>(c) Any material changes to the SCEMPs, are to be submitted to the Council for information.</p>
8.	<p>Stakeholder and Communication and Engagement Management Plan (SCEMP)</p> <ul style="list-style-type: none"> (a) A SCEMP shall be prepared in consultation with stakeholders, community groups and organisations prior to any Outline Plan being submitted (b) The objective of the SCEMP is to identify how the public and stakeholders (including directly affected and adjacent owners and occupiers of land) will be engaged with prior to and throughout the Construction Works. To achieve the objective of the SCEMP: <ul style="list-style-type: none"> (i) At least 18 months prior to any Outline Plan being submitted, the Requiring Authority shall identify: <ul style="list-style-type: none"> A. The properties whose owners will be engaged with; B. A list of key stakeholders, community groups, organisations and businesses who will be engaged with; C. Methods and timing to engage with landowners and occupiers whose access is directly affected. (ii) The SCEMP shall include: <ul style="list-style-type: none"> A. Details of (b)(i)A to C; B. the contact details for the Project Liaison Person. These details shall be on the Project website, or equivalent virtual information source, and prominently displayed at the main entrance(s) to the site(s); C. the procedures for ensuring that there is a contact person available for the duration of Construction Works, for public enquiries or complaints about the Construction Works; D. methods for engaging with Mana Whenua, to be developed in consultation with Mana Whenua; E. methods to communicate key project milestones and the proposed hours of construction activities including outside of normal working hours and on weekends and public holidays, to the parties identified in (b)(i)A and B; and F. linkages and cross-references to communication and engagement methods set out in other conditions and management plans where relevant. (c) Any SCEMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.
9.	<p>Cultural Advisory Report</p> <ul style="list-style-type: none"> (a) At least six (6) months prior to the start of detailed design for a Stage of Work, Mana Whenua shall be invited to prepare a Cultural Advisory Report for the Project. (b) The objective of the Cultural Advisory Report is to assist in understanding and identifying Ngā Taonga Tuku Iho ('treasures handed down by our ancestors') affected by the Project, to inform their management and protection. To achieve the objective, the Requiring Authority shall invite Mana Whenua to prepare a Cultural Advisory Report that: <ul style="list-style-type: none"> (i) Identifies the cultural sites, landscapes and values that have the potential to be affected by the construction and operation of the Project; (ii) Sets out the desired outcomes for management of potential effects on cultural sites, landscapes and values; (iii) Identifies traditional cultural practices within the area that may be impacted by the Project; (iv) Identifies opportunities for restoration and enhancement of identified cultural sites, landscapes and values within the Project area; (v) Taking into account the outcomes of (i) to (iv) above, identify cultural matters and principles that should be considered in the development of the Landscape Management Plan, Historic Heritage Management Plan and the Cultural Monitoring Plan referred to in Conditions 10, 15 and 21.

No.	Condition
	<ul style="list-style-type: none"> (vi) Identifies and (if possible) nominates traditional names along the Project alignment. Noting there may be formal statutory processes outside the project required in any decision-making. (c) The desired outcomes for management of potential effects on cultural sites, landscapes and values identified in the Cultural Advisory Report shall be discussed with Mana Whenua and those outcomes reflected in the relevant management plans where practicable. (d) Conditions 9(b) and (c) above will cease to apply if: <ul style="list-style-type: none"> (i) Mana Whenua have been invited to prepare a Cultural Advisory Report by a date at least 6 months prior to start of Construction Works; and (ii) Mana Whenua have not provided a Cultural Advisory Report within six months prior to start of Construction Works.
<p>10.</p>	<p>Landscape Management Plan (LMP)</p> <ul style="list-style-type: none"> (a) A LMP shall be prepared prior to the Start of Construction for a Stage of Work. The objective of the LMP is to manage potential adverse landscape and visual effects as far as practicable. (b) Mana Whenua shall be invited to participate in the development of the LMP to provide input into relevant cultural landscape and design matters including how desired outcomes for management of potential effects on cultural sites, landscapes and values identified and discussed in the Cultural Advisory Report in Condition 9 may be reflected in the LMP. (c) The LMP shall be prepared in general accordance with: <ul style="list-style-type: none"> (i) Waka Kotahi Urban Design Guidelines: Bridging the Gap (2013) or any subsequent updated version; (ii) Waka Kotahi Landscape Guidelines (2013) or any subsequent updated version; and (iii) Waka Kotahi P39 Standard Specification for Highway Landscape Treatments (2013) or any subsequent updated version. (d) To achieve the objective, the LMP shall provide details of the following: <ul style="list-style-type: none"> (i) Landscape treatments which reflect cultural values and heritage landforms, and integrate with the surrounding topography, natural environment, and landscape character. Where practicable, mature trees and native vegetation should be retained. (ii) Landscape treatments which support road safety, consider visual and acoustic amenity for adjacent residential dwellings, and integrate biodiversity and ecology, and stormwater management. (iii) Planting zones and layouts. (iv) Site preparation, subsoil and topsoil and mulch treatments. (v) Plant sourcing and planting, including hydroseeding and grassing, and use of eco-sourced species. (vi) Pest plant and animal management (to support plant establishment). (e) The LMP shall be: <ul style="list-style-type: none"> (ii) Appropriately aligned with the Urban and Landscape Design Management Plan prepared in accordance with Condition 10 of the adjoining designation number [insert designation number of NoR 8 (Auckland Council)] in the Auckland Unitary Plan; and (iii) Integrated with planting requirements required by conditions of any resource consents granted for the project.
<p>Specific Outline Plan Requirements</p>	
	<p>Flood Hazard</p> <p>For the purpose of Condition 11:</p> <ul style="list-style-type: none"> (a) ARI – means Average Recurrence Interval (b) Existing authorised habitable floor – means the floor level of any room (floor) in a residential building which is authorised by building consent and exists at the time the outline plan is submitted, excluding a laundry, bathroom, toilet or any room used solely as an entrance hall, passageway or garage.

No.	Condition
	<p>(c) Flood prone area – means a potential ponding area that relies on a single culvert for drainage and does not have an overland flow path.</p> <p>(d) Maximum Probable Development – is the design case for consideration of future flows allowing for development within a catchment that takes into account the maximum impervious surface limits of the current zone or if the land is zoned Future Urban in the AUP, the probable level of development arising from zone changes.</p> <p>(e) Pre-Project development – means existing site condition prior to the Project (including existing buildings and roadways).</p> <p>(f) Post-Project development – means site condition after the Project has been completed (including existing and new buildings and roadways).</p>
11.	<p>Flood Hazard</p> <p>(a) The Project shall be designed to achieve the following flood risk outcomes:</p> <ul style="list-style-type: none"> (i) <u>no increase in flood levels for existing authorised habitable, community, commercial, industrial floors that are already subject to flooding or have a freeboard less than 150mm;</u> (ii) no more than a 10% reduction in freeboard for existing authorised habitable floors with a freeboard of over 150mm; (iii) no increase of more than 50mm in flood level on land zoned for urban or future urban development where there is no existing dwelling; (iv) <u>Maintain the minimum freeboard requirement outlined in the relevant code of practice at time the Outline Plan is submitted;</u> (v) <u>No increase in flood plain extent unless there is a site-specific flood assessment to show there is no reduction in developable land in urban or land zoned for urban development in the future;</u> (vi) <u>New overland flow paths shall be diverted away from habitable floors and discharge to a suitable location with no increase in flood levels in a 1% AEP event downstream;</u> (vii) <u>No loss in conveyance capacity or change in alignment of existing overland flow paths, unless provided by other means;</u> (viii) no new flood prone areas; and (ix) <u>no more than a 10% average increase of flood hazard (defined as flow depth times velocity) for classification for main vehicle and pedestrian access to authorised habitable dwellings existing at time the Outline Plan is submitted. The assessment of flood hazard shall be undertaken for the 10% and 1% AEP rainfall events.</u> <p>(b) Compliance with this condition shall be demonstrated in the Outline Plan, which shall include flood modelling of the pre-Project and post-Project 100-year AR <u>1% AEP</u> flood levels (for Maximum Probable Development land use and including climate change).</p> <p>(c) Where the above outcomes can be achieved through alternative measures outside of the designation such as flood stop banks, flood walls, raising existing authorised habitable floor level and new overland flow paths or varied through agreement with the relevant landowner, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work or alternative outcome.</p> <p><u>Advice Note:</u></p> <p><u>Consultation with Auckland Council Healthy Waters (or its equivalent) to identify opportunities for collaboration on catchment improvement projects is encouraged at the detailed design stage.</u></p>
12.	<p>Existing property access</p> <p>Prior to submission of the Outline Plan, consultation shall be undertaken with landowners and occupiers whose vehicle access to their property will be altered by the project. The Outline</p>

No.	Condition
	Plan shall demonstrate how safe, <u>adequate, and efficient</u> reconfigured or alternate access will be provided, unless otherwise agreed with the landowner.
Construction Conditions	
13.	<p>Construction Environmental Management Plan (CEMP)</p> <p>(a) A CEMP shall be prepared prior to the Start of Construction for a Stage of Work. The objective of the CEMP is to set out the management procedures and construction methods to be undertaken to, avoid, remedy or mitigate any adverse effects associated with Construction Works as far as practicable. To achieve the objective, the CEMP shall include:</p> <ul style="list-style-type: none"> (i) the roles and responsibilities of staff and contractors; (ii) details of the site or project manager and the Project Liaison Person, including their contact details (phone and email address); (iii) the Construction Works programmes and the staging approach, and the proposed hours of work; (iv) details of the proposed construction yards including temporary screening when adjacent to residential areas, locations of refuelling activities and construction lighting; (v) methods for controlling dust and the removal of debris and demolition of construction materials from public roads or places; (vi) methods for providing for the health and safety of the general public; (vii) measures to mitigate flood hazard effects such as siting stockpiles out of floodplains, minimising obstruction to flood flows, actions to respond to warnings of heavy rain; (viii) procedures for incident management; (ix) procedures for the refuelling and maintenance of plant and equipment to avoid discharges of fuels or lubricants to Watercourses; (x) measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean up; (xi) procedures for responding to complaints about Construction Works; and (xii) methods for amending and updating the CEMP as required. <p><u>Advice Note:</u></p> <p><u>The assessment of the potential for contaminated land had not been undertaken at the time of submitting the notice of requirement and will need to be completed to determine if a resource consent under the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 is required prior to earthworks commencing.</u></p>
14.	<p>Complaints Register</p> <p>(a) At all times during Construction Works, a record of any complaints received about the Construction Works shall be maintained. The record shall include:</p> <ul style="list-style-type: none"> (i) The date, time and nature of the complaint; (ii) The name, phone number and address of the complainant (unless the complainant wishes to remain anonymous); (iii) Measures taken to respond to the complaint (including a record of the response provided to the complainant) or confirmation of no action if deemed appropriate; (iv) The outcome of the investigation into the complaint; (v) Any other activities in the area, unrelated to the Project that may have contributed to the complaint, such as non-project construction, fires, traffic accidents or unusually dusty conditions generally. <p>(b) A copy of the Complaints Register required by this condition shall be made available to the Manager upon request as soon as practicable after the request is made.</p>
15.	<p>Cultural Monitoring Plan</p> <p>(a) Prior to the start of Construction Works, a Cultural Monitoring Plan shall be prepared by a Suitably Qualified Person(s) identified in collaboration with Mana Whenua. The objective of the Cultural Monitoring Plan is to identify methods for undertaking cultural monitoring to assist with management of any cultural effects during Construction works. The Cultural Monitoring Plan shall include:</p>

No.	Condition
	<ul style="list-style-type: none"> (i) Requirements for formal dedication or cultural interpretation to be undertaken prior to start of Construction Works in areas identified as having significance to Mana Whenua; (ii) Requirements and protocols for cultural inductions for contractors and subcontractors; (iii) Identification of activities, sites and areas where cultural monitoring is required during particular Construction Works; (iv) Identification of personnel to undertake cultural monitoring, including any geographic definition of their responsibilities; and (v) Details of personnel to assist with management of any cultural effects identified during cultural monitoring, including implementation of the Accidental Discovery Protocol <p>(b) If Enabling Works involving soil disturbance are undertaken prior to the start of Construction Works, an Enabling Works Cultural Monitoring Plan shall be prepared by a Suitably Qualified Person identified in collaboration with Mana Whenua. This plan may be prepared as a standalone Enabling Works Cultural Monitoring Plan or be included in the main Construction Works Cultural Monitoring Plan.</p> <p>Advice Note: Where appropriate, the Cultural Monitoring Plan shall align with the requirements of other conditions of the designation and resource consents for the Project which require monitoring during Construction Works.</p>
16.	<p>Construction Traffic Management Plan (CTMP)</p> <p>(a) A CTMP shall be prepared prior to the Start of Construction for a Stage of Work. The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects. To achieve this objective, the CTMP shall include:</p> <ul style="list-style-type: none"> (i) methods to manage the effects of temporary traffic management activities on traffic; (ii) measures to ensure the safety of all transport users; (iii) the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours (<u>for example on roads servicing educational facilities during pick up and drop off times</u>) to manage vehicular and pedestrian traffic near schools <u>educational facilities</u> or to manage traffic congestion; (iv) site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors; (v) identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, including <u>public transport service</u>, pedestrians and cyclists; (vi) methods to maintain vehicle access to <u>and within</u> property and/or private roads <u>for all transport modes</u> where practicable, or to provide alternative access arrangements when it will not be; (vii) the management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads; (viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/public/stakeholders/emergency services). (ix) details of minimum network performance parameters during the construction phase, including any measures to monitor compliance with the performance parameters. These could include maximum increases in journey time and traffic volumes along key routes; and (x) details of any measures proposed to be implemented in the event of thresholds identified in (ix) being exceeded. <p>(b) Auditing, monitoring and reporting requirements relating to traffic management activities shall be undertaken in accordance with the New Zealand Guide to Temporary Traffic Management or any subsequent version <u>replacement</u>.</p>
17.	<p>Construction Noise Standards</p> <p>(a) Construction noise shall be measured and assessed in accordance with NZS6803:1999 Acoustics – Construction Noise and shall comply with the noise standards set out in the following table as far as practicable:</p> <p>Table 17.1: Construction noise standards</p>

No.	Condition			
	Day of week	Time period	L _{Aeq} (15min)	L _A F _{max}
	Occupied activity sensitive to noise			
	Weekday	0630h - 0730h	55 dB	75 dB
		0730h - 1800h	70 dB	85 dB
		1800h - 2000h	65 dB	80 dB
		2000h - 0630h	45 dB	75 dB
	Saturday	0630h - 0730h	55 dB	75 dB
		0730h - 1800h	70 dB	85 dB
		1800h - 2000h	45 dB	75 dB
		2000h - 0630h	45 dB	75 dB
	Sunday and Public Holidays	0630h - 0730h	45 dB	75 dB
		0730h - 1800h	55 dB	85 dB
		1800h - 2000h	45 dB	75 dB
		2000h - 0630h	45 dB	75 dB
	Other occupied buildings			
	All	0730h – 1800h	70 dB	
		1800h – 0730h	75 dB	
	(b) Where compliance with the noise standards set out in Table 17.1 is not practicable, the methodology in Condition 20 shall apply.			

18. Construction Vibration Standards

(a) Construction vibration shall be measured in accordance with ISO 4866:2010 'Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures' and shall comply with the vibration standards set out in the following table as far as practicable.

Table 18.1: Construction vibration criteria

Receiver	Details	Category A	Category B
Occupied Activities sensitive to noise	Night-time 2000h – 0630h	0.3mm/s ppv	1mm/s ppv
	Daytime 0630h – 2000h	1mm/s ppv	5mm/s ppv
Other occupied buildings	Daytime 0630h – 2000h	2mm/s ppv	5mm/s ppv
All other buildings	At all other times Vibration transient	5mm/s ppv	BS 5228-2* Table B2
	At all other times Vibration continuous	5mm/s ppv	BS 5228-2* 50% of Table B2 values

** Refer to Waka Kotahi State highway construction and maintenance noise and vibration guide for further explanation regarding Category A and B criteria*

No.	Condition
	<p>**BS 5228-2:2009 'Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration'</p> <p>(a) Where compliance with the vibration standards set out in Table 18.1 is not practicable, the methodology in Condition 20 shall apply</p> <p>(b) If measured or predicted vibration from construction activities exceeds the Category A criteria, a Suitably Qualified Person shall assess and manage construction vibration during those activities.</p> <p>(c) If measured or predicted vibration from construction activities exceeds the Category B criteria those activities must only proceed if vibration effects on affected buildings are assessed, monitored and mitigated by a Suitably Qualified Person.</p>
<p>19.</p>	<p>Construction Noise and Vibration Management Plan (CNVMP)</p> <p>(a) A CNVMP shall be prepared prior to the Start of Construction for a Stage of Work.</p> <p>(b) A CNVMP shall be implemented during the Stage of Work to which it relates.</p> <p>(c) The objective of the CNVMP is to provide a framework for the development and implementation of the Best Practicable Option for the management of construction noise and vibration effects to achieve the construction noise and vibration standards set out in Conditions 17 and 18 to the extent practicable. To achieve this objective, the CNVMP shall be prepared in accordance with Annex E2 of the New Zealand Standard NZS6803:1999 'Acoustics – Construction Noise' (NZS6803:1999) and the Waka Kotahi State highway construction and maintenance noise and vibration guide (version 1.1, 2019), and shall as a minimum, address the following:</p> <ul style="list-style-type: none"> (i) Description of the works and anticipated equipment/processes; (ii) Hours of operation, including times and days when construction activities would occur; (iii) The construction noise and vibration standards for the project; (iv) Identification of receivers where noise and vibration standards apply; (v) A hierarchy of management and mitigation options including any requirements to limit night and works during other sensitive times, including Sundays and public holidays as far as practicable; (vi) Methods and frequency for monitoring and reporting on construction noise and vibration; (vii) Procedures for communication and engagement with nearby residents and stakeholders, including notification of proposed construction activities, the period of construction activities, and management of noise and vibration complaints; (viii) Contact details of the Project Liaison Person; (ix) Procedures for the regular training of the operators of construction equipment to minimise noise and vibration as well as expected construction site behaviours for all workers; (x) Procedures and requirements for the preparation of a Schedule to the CNVMP (Schedule) for those areas where compliance with the noise [Condition 17] and/or vibration standards [Condition 18] Category A or Category B will not be practicable; (xi) Identification of trigger levels for undertaking building condition surveys, which shall be below Category B day time levels; (xii) Procedures for undertaking building condition surveys before and after works to determine whether any cosmetic or structural damage has occurred as a result of construction vibration. (xiii) Methodology and programme of desktop and field audits and inspections to be undertaken to ensure that CNVMP, Schedules and the best practicable option for management of effects are being implemented (xiv) Requirements for review and update of the CNVMP.

No.	Condition
20.	<p>Schedule to a CNVMP</p> <p>(a) Unless otherwise provided for in a CNVMP, a Schedule to the CNVMP (Schedule) shall be prepared prior to the start of the construction activity to which it relates by a Suitably Qualified Person, in consultation with the owners and occupiers of sites subject to the Schedule to the CNVMP, when:</p> <ul style="list-style-type: none"> (i) Construction noise is either predicted or measured to exceed the noise standards in Condition 17; (ii) Construction vibration is either predicted or measured to exceed the Category A standard at the receivers in Condition 18. <p>(b) The objective of the Schedule is to set out the Best Practicable Option measures to manage noise and/or vibration effects of the construction activity beyond those measures set out in the CNVMP. The Schedule shall include details such as:</p> <ul style="list-style-type: none"> (i) Construction activity location, start and finish times; (ii) The nearest neighbours to the construction activity; (iii) The predicted noise and/or vibration level for all receivers where the levels are predicted or measured to exceed the applicable standards in Conditions 17 and 18 and the predicted duration of the exceedance; (iv) For works proposed between 2000h and 0630h, the reasons why the proposed works must be undertaken during these hours and why they cannot be practicably undertaken during the daytime; (v) The proposed mitigation options that have been selected, and the options that have been discounted as being impracticable and the reasons why; (vi) A summary of the consultation undertaken with owners and occupiers of sites subject to the Schedule, and how consultation has and has not been taken into account; and (vii) Location, times and types of monitoring. <p>(c) The Schedule shall be submitted to the Manager for information at least 5 working days (except in unforeseen circumstances) in advance of Construction Works that are covered by the scope of the Schedule and shall form part of the CNVMP. If any comments are received from the Manager, these shall be considered by the Requiring Authority prior to implementation of the Schedule.</p> <p>(d) Where material changes are made to a Schedule required by this condition, the Requiring Authority shall consult the owners and/or occupiers of sites subject to the Schedule prior to submitting the amended Schedule to the Manager for information in accordance with (c) above. The amended Schedule shall document the consultation undertaken with those owners and occupiers, and how consultation outcomes have and have not been taken into account.</p>
21.	<p>Historic Heritage Management Plan (HHMP)</p> <p>(a) A HHMP shall be prepared in consultation with Council, HNZPT and Mana Whenua prior to the Start of Construction for a Stage of Work.</p> <p>(b) The objective of the HHMP is to protect historic heritage and to remedy and mitigate any residual effects as far as practicable. To achieve the objective, the HHMP shall identify:</p> <ul style="list-style-type: none"> (i) Any adverse direct and indirect effects on historic heritage sites and measures to appropriately avoid, remedy or mitigate any such effects, including a tabulated summary of these effects and measures; (ii) Methods for the identification and assessment of potential historic heritage places within the Designation to inform detailed design; (iii) Known historic heritage places and potential archaeological sites within the Designation, including identifying any archaeological sites for which an Archaeological Authority under the HNZPTA will be sought or has been granted; (iv) Any unrecorded archaeological sites or post-1900 heritage sites within the Designation, which shall also be documented and recorded; (v) Roles, responsibilities and contact details of Project personnel, Council and HNZPT representatives, Mana Whenua representatives, and relevant agencies involved with heritage and archaeological matters including surveys, monitoring of Construction Works, compliance with AUP accidental discovery rule, and monitoring of conditions; (vi) Specific areas to be investigated, monitored and recorded to the extent these are directly affected by the Project; (vii) The proposed methodology for investigating and recording post-1900 historic heritage sites (including buildings) that need to be destroyed, demolished or

No.	Condition
	<p>relocated, including details of their condition, measures to mitigate any adverse effects and timeframe for implementing the proposed methodology, in accordance with the HNZPT Archaeological Guidelines Series No.1: Investigation and Recording of Buildings and Standing Structures (November 2018), or any subsequent version;</p> <p>(viii) Methods to acknowledge cultural values identified through Condition 9 where archaeological sites also involve ngā taonga tuku iho (treasures handed down by our ancestors) and where feasible and practicable to do so;</p> <p>(ix) Methods for avoiding, remedying or mitigation adverse effects on historic heritage places and sites within the Designation during Construction Works as far as practicable. These methods shall include, but are not limited to:</p> <ul style="list-style-type: none"> A. security fencing or hoardings around historic heritage places to protect them from damage during construction or unauthorised access; B. measures to mitigate adverse effects on historic heritage sites that achieve positive historic heritage outcomes such as increased public awareness and interpretation signage; C. Training requirements and inductions for contractors and subcontractors on historic heritage places within the Designation, legal obligations relating to unexpected discoveries, the AUP Accidental Discovery Rule (E11.6.1). The training shall be undertaken prior to the Start of Construction, under the guidance of a Suitably Qualified Person and Mana Whenua representatives (to the extent the training relates to cultural values identified under Condition 15; and <p>(c) Electronic copies of all historic heritage reports relating to historic heritage investigations (evaluation, excavation and monitoring), shall be submitted to the Manager within 12 months of completion.</p> <p>Accidental Discoveries</p> <p>Advice Note:</p> <p><i>The requirements for accidental discoveries of heritage items are set out in Rule E11.6.1 of the AUP and in the Waka Kotahi Minimum Standard P45 Accidental Archaeological Discovery Specification, or any subsequent version.</i></p>
22.	<p>Pre-Construction Ecological Survey</p> <p>(a) At the start of detailed design for a Stage of Work, an updated ecological survey shall be undertaken by a Suitably Qualified Person. The purpose of the survey is to inform the detailed design of ecological management plan by:</p> <ul style="list-style-type: none"> (i) Confirming whether the species of value within the Identified Biodiversity Areas recorded in the <i>Identified Biodiversity Area Schedule 2</i> are still present; (ii) Confirming whether the project will or may have a moderate or greater level of ecological effect on ecological species of value, prior to implementation of impact management measures, as determined in accordance with the EIANZ guidelines. <p>(b) If the ecological survey confirms the presence of ecological features of value in accordance with Condition 22(a)(i) and that effects are likely in accordance with Condition 22(a)(ii) then an Ecological Management Plan (or Plans) shall be prepared in accordance with Condition 23 for these areas (Confirmed Biodiversity Areas).</p>
23.	<p>Ecological Management Plan (EMP)</p> <p>(a) An EMP shall be prepared for any Confirmed Biodiversity Areas (confirmed through Condition 22) prior to the Start of Construction for a Stage of Work. The objective of the EMP is to minimise effects of the Project on the ecological features of value of Confirmed Biodiversity Areas as far as practicable. The EMP shall set out the methods that will be used to achieve the objective which may include:</p> <ul style="list-style-type: none"> (i) If an EMP is required in accordance with Condition 22(b) for the presence of long tail bats: <ul style="list-style-type: none"> A. Measures to minimise as far as practicable, disturbance from construction activities within the vicinity of any active long tail bat roosts (including maternity) that are discovered through survey until such roosts are confirmed to be vacant of bats.

No.	Condition
	<p>B. How the timing of any construction work in the vicinity of any maternity long tail bat roosts will be limited to outside the bat maternity period (between December and March) where reasonably practicable;</p> <p>C. Details of areas where vegetation is to be retained where practicable for the purposes of the connectivity of long tail bats;</p> <p>D. Details of how bat connectivity will be provided and maintained (e.g. through the presence of suitable indigenous or exotic trees or artificial alternatives);</p> <p>E. Details of measures to minimise operational disturbance from light spill; and</p> <p>F. Details of where opportunities for advance restoration / mitigation planting have previously been identified and implemented.</p> <p>(ii) If an EMP is required in accordance with the Condition 22(b) for the presence of Threatened or At-Risk birds (excluding wetland birds):</p> <p>A. How the timing of any Construction Works shall be undertaken outside of the bird breeding season (September to February) where practicable; and</p> <p>B. Where works are required within the area identified in the Confirmed Biodiversity Area during the bird breeding season, methods to minimise adverse effects on Threatened or At-Risk birds.</p> <p>(iii) If an EMP is required in accordance with Condition 22(b) for the presence of Threatened or At-Risk wetland birds:</p> <p>A. How the timing of any Construction Works shall be undertaken outside of the bird breeding season (September to February) where practicable;</p> <p>B. Where works are required within the Confirmed Biodiversity Area during the bird season, methods to minimise adverse effects on Threatened or At-Risk wetland birds;</p> <p>C. Undertaking a nesting bird survey of Threatened or At-Risk wetland birds prior to any Construction Works taking place within a 50m radius of any identified Wetlands (including establishment of construction areas adjacent to Wetlands). Surveys should be repeated at the beginning of each wetland bird breeding season and following periods of construction inactivity;</p> <p>D. What protection and buffer measures will be provided where nesting Threatened or At-Risk wetland birds are identified within 50m of any construction area (including laydown areas). Measures could include:</p> <ol style="list-style-type: none"> i. a 20m buffer area around the nest location and retaining vegetation. The buffer areas should be demarcated where necessary to protect birds from encroachment. This might include the use of marker poles, tape and signage; ii. monitoring of the nesting Threatened or At-Risk wetland birds by a Suitably Qualified Person. Construction works within the 20m nesting buffer areas should not occur until the Threatened or At-Risk wetland birds have fledged from the nest location (approximately 30 days from egg laying to fledging) as confirmed by a Suitably Qualified Person; iii. minimising the disturbance from the works if construction works are required within 50 m of a nest, as advised by a Suitably Qualified Person; iv. adopting a 10m setback where practicable, between the edge of Wetlands and construction areas (along the edge of the stockpile/laydown area); and v. minimising light spill from construction areas into Wetlands. <p>(iv) If an EMP is required in accordance with Condition 22(b) for the presence of native lizards:</p> <p>A. A description of the methodology and timing for survey, trapping and relocation of lizards rescued;</p> <p>B. A description of the relocation site(s), including:</p> <ol style="list-style-type: none"> i. any measures to ensure the relocation site remains available; ii. any weed and pest management to ensure the relocation site is maintained as appropriate habitat. <p>C. A post vegetation clearance search for remaining lizards; and</p> <p>D. Any proposed monitoring.</p>

No.	Condition
	<p>(v) The EMP shall be consistent with any ecological management measures to be undertaken in compliance with conditions of any regional resource consents granted for the Project.</p> <p>Advice Note: <i>Depending on the potential effects of the Project, the regional consents for the Project may include the following monitoring and management plans:</i></p> <p>(i) <i>Stream and/or wetland restoration plans;</i> (ii) <i>Vegetation restoration plans; and</i> (i) <i>Fauna management plans (eg avifauna, herpetofauna, bats).</i></p>
24.	<p>Tree Management Plan</p> <p>(a) Prior to the Start of Construction for a Stage of Work, a Tree Management Plan shall be prepared. The objective of the Tree Management Plan is to avoid, remedy or mitigate effects of construction activities on trees identified in <i>Schedule 3: Trees to be included in the Tree Management Plan</i>.</p> <p>(b) The Tree Management Plan shall:</p> <p>(i) confirm that the trees listed in Schedule 3 still exist; and</p> <p>(ii) demonstrate how the design and location of project works has avoided, remedied or mitigated any effects on any tree listed in Schedule 3. This may include:</p> <p>A. planting to replace trees that require removal (with reference to the Landscape Management Plan planting design details in Condition 10);</p> <p>B. tree protection zones and tree protection measures such as protective fencing, ground protection and physical protection of roots, trunks and branches; and</p> <p>C. methods for work within the rootzone of trees that are to be retained in line with accepted arboricultural standards.</p> <p>(iii) demonstrate how the tree management measures (outlined in A – C above) are consistent with conditions of any resource consents granted for the project in relation to managing construction effects on trees.</p>
25.	<p>Network Utility Management Plan (NUMP)</p> <p>(a) A NUMP shall be prepared prior to the Start of Construction for a Stage of Work.</p> <p>(b) The objective of the NUMP is to set out a framework for protecting, relocating and working in proximity to existing network utilities. The NUMP shall include methods to:</p> <p>(i) provide access for maintenance at all reasonable times, or emergency works at all times during construction activities;</p> <p>(ii) protect and where necessary, relocate existing network utilities;</p> <p>(iii) manage the effects of dust and any other material potentially resulting from construction activities and able to cause material damage, beyond normal wear and tear to overhead transmission lines in the Project area; and</p> <p>(iv) demonstrate compliance with relevant standards and Codes of Practice including, where relevant, the NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances 2001; AS/NZS 4853:2012 Electrical Hazards on Metallic Pipelines; and AS/NZS 2885 Pipelines – Gas and Liquid Petroleum.</p> <p>(c) The NUMP shall be prepared in consultation with the relevant Network Utility Operator(s) who have existing assets that are directly affected by the Project.</p> <p>(d) The development of the NUMP shall consider opportunities to coordinate future work programmes with other Network Utility Operator(s) where practicable.</p> <p>(e) The NUMP shall describe how any comments from the Network Utility Operator in relation to its assets have been addressed.</p> <p>(f) Any comments received from the Network Utility Operator shall be considered when finalising the NUMP.</p> <p>(g) Any amendments to the NUMP related to the assets of a Network Utility Operator shall be prepared in consultation with that asset owner.</p>
Operational Conditions	
24.	Low Noise Road Surface

No.	Condition
	<p>(a) Asphaltic mix surface shall be implemented within twelve months of completion of construction of the Project.</p> <p>(b) The asphaltic mix surface shall be maintained to retain the noise reduction performance as far as practicable.</p>
	<p>Traffic Noise</p> <p>For the purposes of Conditions 25 to 38:</p> <p>(a) Building-Modification Mitigation – has the same meaning as in NZS 6806;</p> <p>(b) Design year has the same meaning as in NZS 6806;</p> <p>(c) Detailed Mitigation Options – means the fully detailed design of the Selected Mitigation Options, with all practical issues addressed;</p> <p>(d) Habitable Space – has the same meaning as in NZS 6806;</p> <p>(e) Identified Noise Criteria Category – means the Noise Criteria Category for a PPF identified in <i>Schedule 4: Identified PPFs Noise Criteria Categories</i>;</p> <p>(f) Mitigation – has the same meaning as in NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;</p> <p>(g) Noise Criteria Categories – means the groups of preference for sound levels established in accordance with NZS 6806 when determining the Best Practicable Option for noise mitigation (i.e. Categories A, B and C);</p> <p>(h) NZS 6806 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;</p> <p>(i) P40 – means Transport Agency NZTA P40:2014 Specification for noise mitigation;</p> <p>(j) Protected Premises and Facilities (PPFs) – means only the premises and facilities identified in green, orange or red in <i>Schedule 4: Identified PPFs Noise Criteria Categories</i>; <u>(update to NZS 6806 definition of PPF)</u></p> <p>(k) Selected Mitigation Options – means the preferred mitigation option resulting from a Best Practicable Option assessment undertaken in accordance with NZS 6806; and</p> <p>(l) Structural Mitigation – has the same meaning as in NZS 6806.</p>
25.	<p>The Noise Criteria Categories identified in <i>Schedule 4: Identified PPFs Noise Criteria Categories</i> at each of the PPFs shall be achieved where practicable and subject to Conditions 24 to 38 (all traffic noise conditions). <u>In addition, noise to all PPFs shall not exceed the Predicted noise levels for all PPFs in Schedule [x] plus 2dB. Where PPFs are not identified in Schedules (3) or [x], the design shall be in accordance with the Best Practicable Option.</u></p> <p>The Noise Criteria Categories above criteria at the PPFs identified in <i>Schedule 4: Identified PPFs Noise Criteria Categories</i> do not need to be complied with where:</p> <p>(a) the PPF no longer exists; or</p> <p>(b) agreement of the landowner has been obtained confirming that the Noise Criteria Category level does not need to be met.</p> <p>Achievement of the <u>design criteria</u> for PPFs shall be by reference to a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed opening of the Project.</p> <p><u>(The above condition will require Appendix A of the AONE to be added to the condition set as Schedule [x].)</u></p>
26.	<p>As part of the detailed design of the Project, a Suitably Qualified Person shall determine the Selected Mitigation Options for the PPFs. identified on Schedule 4: Identified PPFs Noise Criteria Categories</p> <p><u>For the avoidance of doubt, the low noise road surface implemented in accordance with Condition 24 may be (or be part of) the Selected Mitigation Option(s).</u></p>

No.	Condition
	<p><u>In situations where the project passes through future residential areas, noise barriers shall be included in the Selected Mitigation Options where they can be demonstrated to provide the Best Practicable Option for the control of road traffic noise having regard to its intended future residential use.</u></p>
27.	<p>Prior to construction of the Project, a Suitably Qualified Person shall develop the Detailed Mitigation Options for the PPFs identified in Schedule 4: Identified PPFs Noise Criteria Categories, taking into account the Selected Mitigation Options.</p> <p><u>In situations where the project passes through future residential areas, noise barriers shall be included in the Detailed Mitigation Options where they can be demonstrated to provide the Best Practicable Option for the control of road traffic noise having regard to its intended future residential use.</u></p>
28.	<p>If the Detailed Mitigation Options would result in the Identified Noise Criteria Category changing to a less stringent Category, e.g. from Category A to B or Category B to C, an increase in noise level at any relevant PPF, <u>compared to the design criteria of condition AT 26</u>, a Suitably Qualified Person shall provide confirmation to the Manager that the Detailed Mitigation Option would be consistent with adopting the Best Practicable Option in accordance with NZS 6806 prior to implementation.</p>
29.	<p>Prior to the Start of Construction, a Noise Mitigation Plan written in accordance with P40 shall be provided to the Manager for information.</p>
30.	<p>The Detailed Mitigation Options shall be implemented prior to completion of construction of the Project and, <u>where practicable and effective, prior to the commencement of construction.</u> with The exception of any low-noise road surfaces, which shall be implemented within twelve months of completion of construction.</p>
31.	<p>Prior to the Start of Construction, a Suitably Qualified Person shall identify those PPFs which, following implementation of all the Detailed Mitigation Options, will not be Noise Criteria Categories A or B and where Building-Modification Mitigation might be required to achieve 40 dB L_{Aeq(24h)} inside Habitable Spaces ('Category C Buildings').</p>
32.	<p>Prior to the Start of Construction in the vicinity of each Category C Building, the Requiring Authority shall write to the owner of the Category C Building requesting entry to assess the noise reduction performance of the existing building envelope. If the building owner agrees to entry within three months of the date of the Requiring Authority's letter, the Requiring Authority shall instruct a Suitably Qualified Person to visit the building and assess the noise reduction performance of the existing building envelope.</p>
33.	<p>For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition 32 above if:</p> <ul style="list-style-type: none"> (a) The Requiring Authority's Suitably Qualified Person has visited the building and assessed the noise reduction performance of the building envelope; or (b) The building owner agreed to entry, but the Requiring Authority could not gain entry for some reason (such as entry denied by a tenant); or (c) The building owner did not agree to entry within three months of the date of the Requiring Authority's letter sent in accordance with Condition 32 above (including where the owner did not respond within that period); or (d) The building owner cannot, after reasonable enquiry, be found prior to completion of construction of the Project. <p>If any of (b) to (d) above apply to a Category C Building, the Requiring Authority is not required to implement Building-Modification Mitigation to that building.</p>
34.	<p>Subject to Condition 33 above, within six months of the assessment undertaken in accordance with Conditions 32 and 33, the Requiring Authority shall write to the owner of each Category C Building advising:</p> <ul style="list-style-type: none"> (a) If Building-Modification Mitigation is required to achieve 40 dB L_{Aeq(24h)} inside habitable spaces; and (b) The options available for Building-Modification Mitigation to the building, if required; and

No.	Condition
	(c) That the owner has three months to decide whether to accept Building-Modification Mitigation to the building and to advise which option for Building-Modification Mitigation the owner prefers, if the Requiring Authority has advised that more than one option is available.
35.	Once an agreement on Building-Modification Mitigation is reached between the Requiring Authority and the owner of a Category C Building, the mitigation shall be implemented, including any third party authorisations required, in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.
36.	<p>Subject to Condition 33, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition 35 if:</p> <ul style="list-style-type: none"> (a) The Requiring Authority has completed Building Modification Mitigation to the building; or (b) An alternative agreement for mitigation is reached between the Requiring Authority and the building owner; or (c) The building owner did not accept the Requiring Authority's offer to implement Building-Modification Mitigation within three months of the date of the Requiring Authority's letter sent in accordance with Condition 33 (including where the owner did not respond within that period); or (d) The building owner cannot, after reasonable enquiry, be found prior to completion of construction of the Project.
37.	Within twelve months of completion of construction of the Project, a post-construction review report written in accordance with P40 Specification for Noise Mitigation 2014 shall be provided to the Manager.
38.	The Detailed Mitigation Options shall be maintained so they retain their noise reduction performance as far as practicable.