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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

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## **HEARING REPORT – VOLUME ONE**

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

### **NORs 1,3,4,5,6 & 7 TE TUPU NGĀTAHI – SUPPORTING GROWTH ALLIANCE**

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#### **COMMISSIONERS**

**Chairperson**

**Dave Serjeant**

**Commissioners**

**Nigel Mark-Brown**

**Basil Morrison**

**Bevan Donovan**

**KAITOHUTOHU WHAKAWĀTANGA HEARINGS  
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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.

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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.

**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 NORs 1, 3, 4, 5, 6 & 7. 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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**Notices of requirement (NoR) under section 168 of the RMA by Auckland Transport for:**

- **NoR 1 Drury West Arterial,**
- **NoR 3 Paerata Connections,**
- **NoR 4 Pukekohe North-East Arterial,**
- **NoR 5 Pukekohe South-East Arterial,**
- **NoR 6 Pukekohe South-West Upgrade, and**
- **NoR 7 Pukekohe North-West Arterial.**

**To:** Hearing Commissioners

**From:** Annika Swanberg, Consultant Planner  
Karen Bell, Consultant Planner and  
Joe McDougall, Auckland Council

**Report date:** 15/12/2023

**Scheduled hearing date:** 11/03/2024

**Notes:**

This report sets out the advice of the reporting planners in relation to six Notices of Requirement.

Each Notice is assessed in one part of the report which allows it to be considered in its entirety by relevant submitters and the commissioners. This has resulted in repetition which has been minimised where possible.

This report has yet to be considered by the Hearing Commissioners delegated by Auckland Council (the 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.

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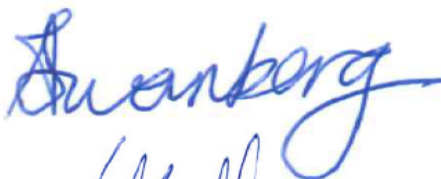


## Summary

Requiring authority	Auckland Transport
Notices of requirement references	<ul style="list-style-type: none"> <li>• NoR 1 Drury West Arterial</li> <li>• NoR 3 Paerata Connections</li> <li>• NoR 4 Pukekohe North-East Arterial</li> <li>• NoR 5 Pukekohe South-East Arterial</li> <li>• NoR 6 Pukekohe South-West Upgrade</li> <li>• NoR 7 Pukekohe North-West Arterial</li> </ul>
Resource consent applications	No resource consent applications have been lodged by the requiring authority for this project.
Reporting planners	Annika Swanberg, Senior Planner, Stantec
	Karen Bell, Senior Principal Planner, Stantec
	Joe McDougall, Policy Planner, Auckland Council
Site address	Refer to Form 18 Attachment A: Designation Plans and Attachment B: Schedule of Directly Affected Properties.
Lodgement date	2 October 2023
Notification date	13 <sup>th</sup> October 2023
Submissions close date	13 <sup>th</sup> November 2023
Number of submissions received	<p>NoR 1: 8</p> <p>NoR 3: 8</p> <p>NoR 4: 12</p> <p>NoR 5: 21</p> <p>NoR 6: 14</p> <p>NoR 7: 15</p>

Report prepared by:

Annika Swanberg,  
Senior Planner,  
Stantec



Karen Bell, Senior  
Principal Planner,  
Stantec



Joe McDougall, Policy  
Planner, Auckland  
Council



Date: 15/12/2023

Reviewed and  
approved for release  
by:

Craig Cairncross,  
Team Leader Central  
South, Auckland  
Council



Date: 15/12/2023

## Abbreviations

AMC	Active Modes Corridor
AEE	Pukekohe Transport Network Assessment of Effects on the Environment September 2023
AT	Auckland Transport
AUP:OP	Auckland Unitary Plan Operative in Part
AMP	Avifauna Management Plan
BMP	Bat Management Plan
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
DSI	Death or Serious Injuries
EMP	Ecological Management Plan
FUZ	Future Urban Zone
LVEA	Landscape and Visual Effects Assessment
LGA	Local Government Act 2009
LIP	Land use Integration Process
NIMT	North Island Main Trunk
NoR	Notice of requirement
NUMP	Network Utilities Management Plan
NPS-FM	National Policy Statement on Freshwater Management 2020
NPS-HPL	National Policy Statement on Highly Productive Land 2022
NPS-IB	National Policy Statement on Indigenous Biodiversity 2023
NPS-UD	National Policy Statement on Urban Development 2020
NZUP	NZ Upgrade Programme
OPW	Outline plan of works
PT	Public Transport
PPF	Protected Premises and Facilities
PWA	Public Works Act 1991
RMA	Resource Management Act 1991 and all amendments
RPS	Regional Policy Statement
SH22	State Highway 22 (Karaka and Paerata Road)
SSTMP	Site-Specific Traffic Management Plans
SCEMP	Stakeholder Communication and Engagement Management Plan
the council	Auckland Council
TAR	Threatened and At-Risk
ULDMP	Urban and Landscape Design Management Plan
UDE	Urban Design Evaluation

## **1 Introduction**

### **1.1 The notices of requirement**

Pursuant to section 168 of the RMA, Auckland Transport (AT) as the requiring authority, has lodged six notices of requirement (NoR) for a designation in the Auckland Unitary Plan (operative in part) (AUP:OP) as part of the proposed Pukekohe Transport Network.

Each NoR has been assessed by one or more of the reporting planners and is set out in specific sections of this report below:

- for NoR 1 Drury West Arterial, Section 4
- for NoR 3 Paerata Connections, Section 5
- for NoR 4 Pukekohe North-East Arterial, Section 6
- for NoR 5 Pukekohe South-East Arterial, Section 7
- for NoR 6 Pukekohe South-West Upgrade, Section 8 and
- for NoR 7 Pukekohe North-West Arterial, Section 9

NoRs 2 and 8 are part of the proposed Pukekohe Transport Network being delivered by Waka Kotahi and are being considered separately.

### **1.2 Locality plan**

The general location of the project is shown on Figure 1-1 below. The reader is also referred to the NoR plan set which outlines the extent of the existing designations and the extent of the NoR. The plan set is referenced as Attachment A: Designation Plans to Form 18.



**Figure 1-1 General location plan of designations being sought as part of the Pukekohe Transport Network)**

### 1.3 Notice of requirement documents

Each of the lodged NoR consists of the following documents:

#### **Volume 1: Form 18 for each of the nine notices**

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

#### **Volume 2: Assessment of Effects on the Environment (the AEE)**

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

#### **Volume 3: General Arrangement Layout Plans**

#### **Volume 4: Supporting Technical Assessments**

- 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.

#### **1.4 Section 92 requests and responses**

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

## 1.5 Specialist reviews

The assessment in this report takes into account reviews and advice from the following technical specialists engaged by the council:

Specialist	Specialty
Wes Edwards, Arrive Limited	Transport
Rebecca Skidmore, Skidmore Urban Design	Landscape and Visual, and Urban Design
Rhys Hegley, Hegley Acoustic	Noise and Vibration
Simon Chapman, Ecology NZ	Ecology
Trent Sunich, SLR (formerly 4 Sight)	Flooding/ Stormwater
Leon Saxon, Arborlab	Arboriculture
Myfanwy Eaves, Auckland Council	Heritage

These specialist reviews are included in Attachment 3.

## 1.6 Notification

All of the Notices of Requirement assessed in this report were publicly notified on 13<sup>th</sup> October 2023.

The closing date for submissions was 13<sup>th</sup> November.

## 1.7 Common content to all NoRs -Lapse period

Section 184 of the RMA provides for a designation to lapse five years after it is included in the District Plan unless:

- a) It has been given effect to; or
- b) Within three months of the designation lapsing, the territorial authority determines that substantial progress or effort has been and continues to be made towards giving effect to the designation, or
- c) The designation specifies a different lapse period

The SGA states that a key objective of the Te Tupu Ngātahi Supporting Growth Programme is to identify and protect land now for future transport networks to support growth. In line with this objective SGA has sought an extended lapse period for all of the other NoRs required for the Pukekohe Transport Network of 20 years.

The rationale for the lapse period is set out in Section 7.1 of the AEE and includes:

- 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 the Requiring Authority sufficient time to:
  - (1) Obtain funding;
  - (2) Undertake tendering / procurement;
  - (3) Undertake property and access negotiations and other processes associated with construction of the projects;
  - (4) Undertake the detailed design of the projects; and
  - (5) 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).

The AEE cites other examples of project with long lapse periods and the implications of extended lapse period.

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 table for reference purposes.

<b>Case</b>	<b>Requested lapse period</b>	<b>Court decision lapse period</b>
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 period is sought by both Waka Kotahi and AT for all of the NoR required to deliver the Pukekohe Transport Network. The reasons for this request are stated in section 7 of the AEE. The need for this in relation to all of the NoR's 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. It is also noted that people who move into the area as the FUZ urbanises, will do so with knowledge of where the network will be. The fact that the network is unlikely to be implemented until urbanisation is (at least) confirmed is also noted.

The issues are considered for each Notice in the section on Property and Land use effects in each of the NoRs however the following is common to them all and is mentioned once to avoid repetition.

## 2 Consultation

Section 10 of the AEE details the engagement that has been undertaken. This has included a range of parties and stakeholders described as partners, elected members; stakeholders, community and potentially affected landowners.

Section 10.2.1 of the AEE outlines the engagement with partners (Mana Whenua, KiwiRail and Auckland Council).

Section 10.2.2 of the AEE outlines the engagement with stakeholders (Local Boards; Developers; Grace James Road Focus Group; Pukekohe Business Association, Pukekohe Vegetable Growers Association, Birch Land Development Consultants, A&P Showgrounds, Network Utilities).

Section 10.2.3 of the AEE outlines the engagement with the community and Section 10.2.4 the engagement with potentially affected landowners.

## 3 Background

As set out in the AEE, Te Tupu Ngātahi Supporting Growth (Te Tupu Ngātahi) is a collaboration between AT and Waka Kotahi NZ Transport Agency (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 of the required strategic transport corridors/infrastructure. As a form of route protection, designations will identify and appropriately protect the land necessary to enable the future construction, operation and maintenance of these required transport corridors/infrastructure.

The current transport network in the Pukekohe area is described as already being under pressure and it is noted that future transport demands will exacerbate existing issues, limiting Pukekohe, Paerata and Drury West's (collectively referred to as Pukekohe in this report) growth potential. The current form of the transport network in these areas is not capable of supporting the significant growth anticipated.

The proposed Pukekohe Transport Network encompasses eight transport projects which together form a cohesive transport response for Pukekohe to respond to planned future growth. The Pukekohe Transport Network includes provision for improved walking and cycling, public transport, and general traffic connections. Overall, the AEE notes that the Pukekohe Transport Network seeks to improve connectivity and resilience providing high quality, safe and attractive transport environments.

The eight transport projects, involve nine different NoRs, six of the from AT and three from Waka Kotahi. Two NoRs have been issues by Waka Kotahi in relation to NoR 8 as part of the project is located within Auckland Council and part in Waikato District Council (thus having two NoRs). The table (taken from the AEE) below sets out a description of each of the eight NoRs. **This s42a report covers all NoR's submitted by AT (shaded in grey in the table below).**

As set out in the AEE, AT is financially responsible for Auckland's transport network and services (excluding state highways), including roads, footpaths, cycling, parking and public transport services such as rail. AT is a Council Controlled Organisation under the Local Government (Auckland Council) Act 2009 (LGA), which states that AT's purpose is to "contribute to an effective, efficient and safe Auckland land transport system in the public interest".

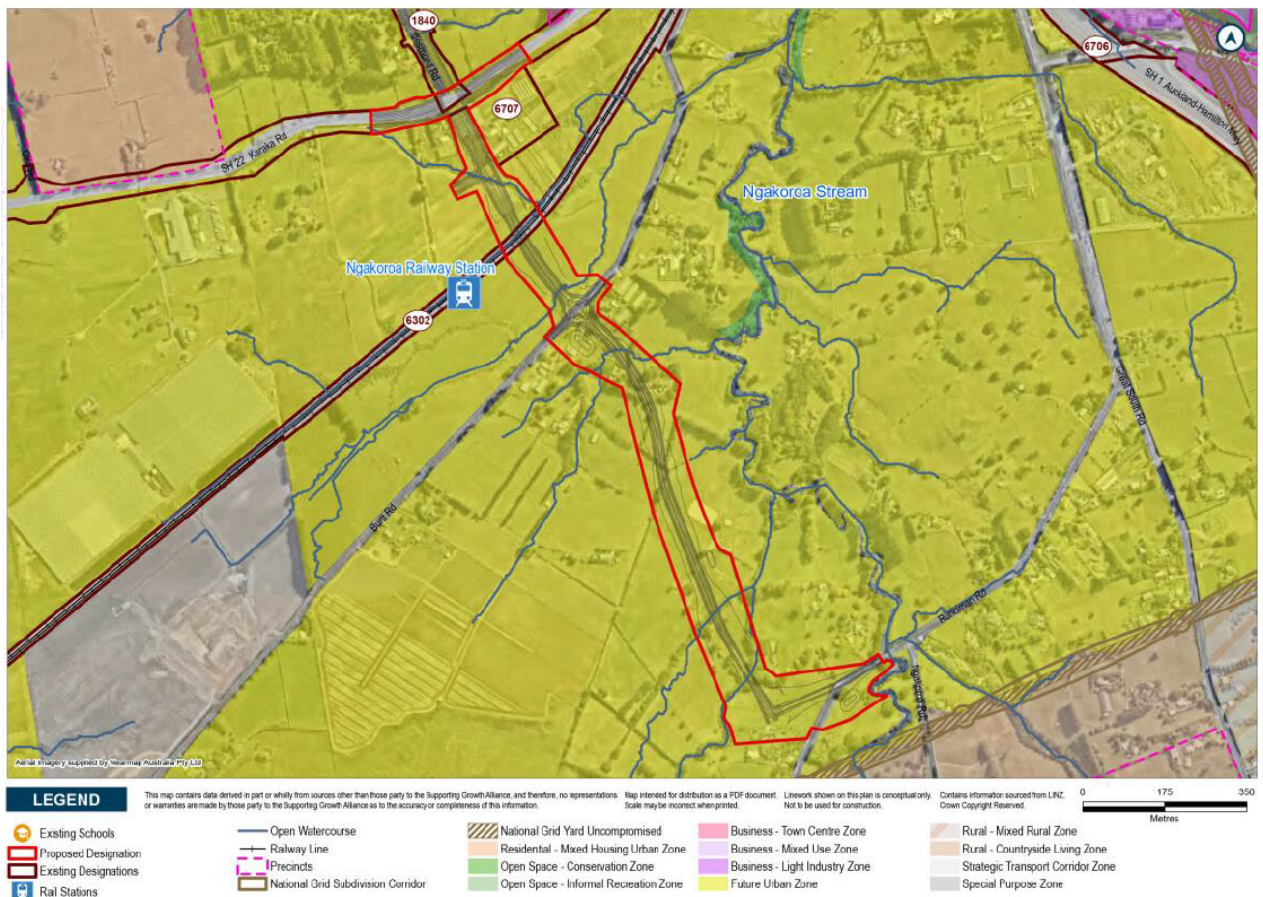
NoR	Project	Requiring Authority	Council	Description
NoR 1	Drury West Arterial	AT	Auckland Council	A new transport corridor with active mode facilities in Drury West extending south from the intersection of SH22 and Jesmond Road to the edge of the Future Urban Zone near Runciman Road, Drury.
NoR 2	Drury 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 3	Paerata Connections	AT	Auckland Council	Two new transport corridors including active mode facilities: <ul style="list-style-type: none"> <li>• One new connection between the existing Sim Road (south) and the Paerata Rail Station.</li> <li>• The second new connection between the two extents of Sim Road across the North Island Main Trunk (NIMT).</li> </ul>
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	Project	Requiring Authority	Council	Description
NoR 8	Mill Road and Pukekohe East Road Upgrade	Waka Kotahi	Auckland Council  Waikato District 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.

## 4 NoR 1 Drury West Arterial

### 4.1 Proposal

AT are proposing a new designation for the purpose of ‘Construction, operation and maintenance of a transport corridor’. This will be a 1.6km long designation between SH22 and Jesmond Road to the proposed NoR 2 Drury to Pukekohe Link designation at the edge of the Future Urban Zone (FUZ) in south Drury (refer to Figure 4-1 below). AT are requesting a 20 year lapse period.



**Figure 4-1 NoR 1 Drury West Arterial [Source: AEE]**

As stated in the AEE, the key features of the NoR 1 Drury West Arterial are:

- A four-lane arterial for bus priority lanes between SH22 and Burt Road with an indicative 30m wide cross-section and a two-lane arterial with an indicative 24m wide cross-section south of Burt Road with active transport facilities on both sides of the transport corridor.
- Three new bridges are proposed over existing NIMT rail line, and two tributaries of the Ngakoroa Stream.
- Three new stormwater wetlands are proposed and new culverts and swales.

## 4.2 Affected land

The designation plans are provided for in Volume 1 Form 18 Attachment A: Designation Plans and the schedule of directly affected properties are provided in Volume 1 Form 18 Attachment B: Schedule of Directly Affected Properties of the NoR's together with the schedule provided describes the land that will be directly affected and required for the project and associated works.

As noted in the AEE, there will be 16 properties directly affected (i.e. the designation boundary will extend across these properties). Of the 16, 15 properties are privately owned totalling approximately 183,858m<sup>2</sup> and one rail property totalling approximately 3,039m<sup>2</sup>. Land use on the properties includes working agriculture and horticulture and rural-residential.

## 4.3 Site, locality, catchment and environment description

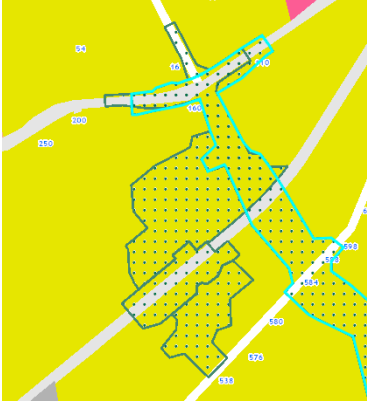

This report relies on the site and environment descriptions provided by the requiring authority as set out in sections 9.2.1 and 9.2.2 of the AEE supporting the NoR and within each of the technical assessments. The requiring authority has set out the approach to the likely receiving environment, as assessing the effects on the environment because 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 the land use today, zoning type, likelihood of change for the environment (ranging from low to high) and the likely future environment.



NoR 1 is wholly located within the Future Urban Zone (FUZ) except where it crosses State Highway 22 (SH22) and the North Island Main Trunk Line (NIMT), both of which are designated (designation number 6707 and 6302 respectively). The proposed designation boundary also crosses a number of overland flow paths, floodplains and flood prone areas.



#### 4.4 Other designations and notices of requirement, and consent applications

The AEE contains a table of the interface with other projects. The table below summarises those related to NoR 1.

Project	Interface with NoR 1	Status
<p>KiwiRail Drury West Rail Station Ngakoroa</p> 	<p>The Drury West Arterial (NoR 1) extends south from the Drury West Ngakoroa Rail Station upgrading the proposed station access way to provide for bus priority lanes. The Drury West Arterial will connect the FUZ south of SH22 with the rail station.</p>	<p>Drury West Ngakoroa Rail Station notice of requirement and resource consents lodged in 2021, publicly notified in 2022; direct referral to Environment Court in late 2023, funding through NZ Upgrade Programme (NZUP); construction timeframe proposed in 2024/2025. It is noted that this designation is a primary designation where it interfaces with NoR1.</p>
<p>Waka Kotahi SH22 Drury upgrade – reference 6707 in the AUP:OP</p> 	<p>NoR 1 extends south of SH22/Jesmond Road and Drury West Station access.</p>	<p>Alteration to designation confirmed in 2022. Project funded through the NZUP. Construction is due to commence in 2024.</p>
<p>KiwiRail / Auckland Transport NIMT four tracking and Active Modes Corridor (AMC)</p>	<p>NoR 1 crosses the NIMT where future four tracking and AMC are proposed. Space allocation was taken into consideration when designing structures over the NIMT.</p>	<p>KiwiRail and AT Programme Business Case is underway.</p>

Project	Interface with NoR 1	Status
<p>KiwiRail NIMT Railway Line – designation reference 6302</p> 	<p>NoR 1 crosses this designation.</p>	<p>Designation confirmed and the rail line is in place. It is noted that this designation is a primary designation where it interfaces with NoR1.</p>
<p>Auckland Transport Jesmond to Waihoehoe West FTN Upgrade – reference 1840</p> 	<p>NoR crosses this existing designation on SH22.</p>	<p>Designation confirmed. It is noted that this designation is a primary designation where it interfaces with NoR1.</p>
<p>10 Butcher Road – Roger Gill Agricultural</p>	<p>A consent has recently been granted for an agricultural machinery business on the site.</p> <p>NoR 1 interacts with the frontage of the property.</p>	<p>Resource consent has been granted.</p>

## 4.5 Submissions

Eight submissions were received from:

Submission number	Submitter Name	Position
1	Telecommunications Submitters	Oppose in Part
2	Fisher & Paykel Healthcare Limited	Support
3	KiwiRail Holdings Limited	Support
4	McKean Family Trust	Oppose in Part
5	Watercare Services Limited	Neutral
6	Ministry of Education	Neutral
7	Counties Energy Limited	Support with amendments
8	The Campaign for Better Transport Incorporated	Neutral

Copies of submissions are included in Attachment 1.

The issues raised in submissions are addressed throughout section 4.8 of this report.

## 4.6 Local Board Views

NoR 1 is located on land within the boundaries of the Franklin Local Board and so views were sought from them. The Board provided their view on information on Te Tupu Ngātahi Supporting Growth on Future Transport Networks Pukekohe-Paerata and south Drury provided to the local board prior to a meeting on 27 June 2023 as noted in the AEE and have more recently considered the NoRs after notification. The Local Board views in full are provided in Attachment 2 to this report. In relation to NoR 1 the Local Board has noted that it supports it as part of the new connection to the Ngaakoora Train Station.

## 4.7 Consideration of the notice of requirement 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 this NoR, 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 sections 4, 4, and 4 below. Section 171(1)(b) is addressed in section 4.28 below. Section 171(1)(c) is addressed in section 4.29 below. Section 171(1)(d) is addressed in section 4.30 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.<sup>1</sup>*

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. Refer to section 4.19 below for our recommendation.

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<sup>1</sup> See Estate of P.A. Moran and Others v Transit NZ (W55/99)

## **4.8 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. The relevant specialist reports are referred to and are included in Attachment 3. Submissions have also been considered and are referred to where relevant.

### **4.8.1 Effects to be disregarded - Trade competition**

I do not consider that there are any trade competition effects.

### **4.8.2 Effects that may be disregarded – Written approvals**

No written approvals were included with NoR 1.

### **4.8.3 Positive effects**

The AEE describes the positive effects of the project which are summarised as:

- 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.

The AEE also refers to positive landscape and visual, arboriculture, community and urban design effects.

#### Specialist Review

Wes Edwards of Arrive Ltd has reviewed the transport assessment 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 the requiring authority evaluates the benefits of the Projects assuming that all development would occur with or without the Projects however Mr 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 enabled through NoR 1 will have significant positive transport effects for the reasons outlined in the AEE. The positive community effects are similar to the transport effects and I agree with the AEE in terms of those.

The delivery of stormwater management measures and landscaping are identified in the AEE as having positive terrestrial ecology effects. Many of these measures will be delivered through future regional consents and will be mitigating the effects of the physical works. As outlined in the AEE and the Assessment of Ecological Effects specific assessments of the current conditions along the route have not been undertaken in relation to the current conditions of the ecological values present. It is not clear what additional or specific positive ecological effects will result.

It is assumed that the best practice measures that will be expected at the time that the resource consents are applied for, will deliver the claimed enhancements / positive effects on the existing environment. Therefore, it is agreed that there will be positive effects given the extent of brownfield, exotic grassland, scrub, tree land and planted vegetation that is within and adjacent to the NoR 1 designation extent and through the works will improve indigenous biodiversity. However, it is not clear how the works will affect the specific values that are present or the scale of the positive terrestrial ecology effects of the NoR at this time.

There are a number of matters listed under Landscape and Visual that are also linked to urban design benefits that I agree will be positive effects and contribute to the creation of an appropriate future urban environment. These include enhanced connectivity; integration of active travel routes and recreational paths and reduction in speed and new landscaping that will create attractive environments which can enhance the built character, especially considering NoR 1 is located in the FUZ.

Also listed as a positive effect is the addition of trees in the new cross sections to enhance the urban landscape where there is room. I agree that these are potential positive effects. The challenge in terms of the assessment of the scale of these positive arboriculture and landscape effects is the absence of detail referred to in Condition 1 for NoR 1 as submitted that states:

*Except as provided for in the in the conditions below and subject to final design and Outline Plans(s) works within the designation shall be undertaken in general accordance with the Project description and concept plan in Schedule 1....*

The Project Description for NoR 1 as set out in Schedule 1 of Form 18 is:

*“The proposed work is for the construction, operation and maintenance of a transport corridor between SH22 and Jesmond Road to the edge of the Future Urban Zone near Runciman Road, Drury including active transport facilities and associated infrastructure. The proposed work is shown in the following Concept Plan and includes:*

- (a) A new transport corridor to provide for public transport, general traffic lanes, and active mode facilities;*
- (b) Associated works including intersections, bridges, embankments, retaining walls, culverts, stormwater management systems;*
- (c) Changes to local roads, where the proposed work intersects with local roads; and*
- (d) Construction activities including construction areas, construction traffic management and the re-grading of driveways.”*

The Concept Plan in Form 18 is at such a level that there is no detail to be seen. There is also a requirement to deliver a concept plan under condition 11(g).

Therefore, it is not clear from condition 1 as drafted how the positive effects identified will be delivered so other conditions are important to ensure this.

The relevant condition in relation to many of these positive effects is Condition 11 related to the provision of the Urban and Landscape Design Management Plan (UDLPM) which uses terms like ‘where appropriate’ and ‘where practicable’ without reference to how this will be determined. More information on where the specific positive effects can be achieved would be useful.

#### **4.8.4 Māori culture, values, and aspirations**

##### Requiring Authority AEE

The AEE (in Section 11.3) notes that only Mana Whenua can speak to the impact that a project may have on their cultural values, heritage and aspirations. 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.

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, Sites of Significance under the AUP:OP or within the coastal environment under the Marine and Coastal Area (Takutai Moana) Act 2011.

The key matters raised by Mana Whenua as noted in the AEE 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. To avoid, remedy or mitigate these potential adverse effects, SGA are proposing a number of conditions which were collaboratively developed with Mana Whenua. These conditions include inviting Mana Whenua to prepare a Cultural Advisory Report (proposed condition 9), Mana Whenua will be invited to participate in the development of the Urban and Landscape Design Management Plan (ULDMP) (proposed condition 11), and prior to the start of construction works or enabling works Mana Whenua will be invited to prepare a Cultural Monitoring Plan (proposed condition 16).

##### Planning Review

NoR 1 is not within any ‘Sites and Places of significance to Mana Whenua’ as identified on the AUP:OP’s planning maps. There are no known archaeological sites within the NoR area.

As noted in the AEE the Pukekohe Transport Network and therefore NoR 1 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. 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.

It is noted that NoR 1 crosses four smaller tributaries and two main branches of the Ngakoroa Stream which eventually flows to the Pahurehure Inlet and ultimately the Manukau Harbour. The AEE notes that the CIA provided by Ngaati Te Ata Waiohua identifies the potential for adverse impacts on freshwater systems and receiving environments and that the CIA identified opportunities for riparian planting alongside the streams to restore and regenerate the environment and increase wetland areas as part of the Project.

No specialist review has occurred as the CIA was not provided and it is assumed. It is noted that no submissions have been received from Mana Whenua groups or from Heritage NZ Pouhere Taonga (HNZPT) in relation to the NoR. Nevertheless, I consider that the conditions for a Cultural Advisory Report, Urban and Landscape Development Management Plan, and Cultural Monitoring Plan are appropriate.

#### **4.8.5 Traffic and Transport**

##### Requiring Authority AEE

Effects on traffic and transport are addressed in section 11.4 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Transport Effects September 2023 by Subha Nair, Deborah Keary and Sharath Kotha. The AEE covers operational effects which relate to safety, walking and cycling, public transport, and general traffic and freight which are considered to have positive effects, and property access which is considered to have some adverse effects that will need to be managed. The AEE notes that due to the complexity of access arrangements changing over time, it's not currently possible to confirm a precise treatment for all individual accesses, particularly in areas that are transitioning from rural to urban. Therefore, AT proposes a condition (proposed condition 13) to demonstrate (in the Outline Plan) how safe access will be provided for each existing access that is altered by the project. The implementation of restricted turning movements due to the inclusion of a raised median or wire rope barrier (left in, left out) from existing accesses are anticipated to be minor, adding a maximum of 1 – 4 minutes to journey times (only for restricted right turn movements).

Specific effects which relate to NoR 1 that are discussed in the AEE relate to property access. An assessment of property access has been undertaken to inform the location of the designation boundary and concept design and to assess potential effects. There are a limited number of existing properties that will require direct access given this is largely a new alignment and that its current land use is predominantly rural. The AEE notes that there are opportunities to realign access points to surrounding local road such as Runciman Road and Burt Road if required. As the Drury West area develops, the existing property accesses are expected to be re-routed to the appropriate collector road network. Overall, less than 3 properties will be restricted to left-in and left-out vehicle access. Through assessing the re-routing time as a result the AEE notes that has been determined that the additional journey time for those needing to make right turns in or out of the 3 properties is minimal (less than 2 minutes based on the farthest distance) due to the number of roundabouts located along the corridor.

The AEE also covers construction effects which relate to traffic routing, property access, pedestrian and cyclist safety, road safety, on-street and public parking, parallel construction of projects and land use activities that will require further consideration. Condition 17 requires that Construction Traffic Management Plan (CTMP) be prepared prior to the start of construction for each stage of the work is included as proposed. The technical report recommends that if required, Site-Specific Traffic Management Plans (SSTMP) should be developed to manage constraints on access to affected properties.

### Specialist Review

Mr Edwards notes that a key issue for the NoRs that are delivering the Pukekohe Transport Network is the inter dependency of each of the Projects with each other and with other transport infrastructure projects in the area. He states that the two key issues for the hearing panel are if the consideration of alternatives is adequate and if the Projects are reasonably necessary. Mr Edwards agrees with the assessment of alternatives at a macro scale but notes that 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.

Mr Edwards has identified a number of gaps in the requiring authority's assessment which relates to all NoR's and are set out in his report under the following headings: design standards, management of effects, integration of transport and land use, assessment of operational effects, road safety, active modes, public transport, freight, generic traffic, travel and emissions, property access, parking, and management of effects.

Mr Edwards has assessed each NoR and in regard to NoR 1, he states that the section between the NIMT and Burt Road appears to have no impact on access to properties other than dividing a rural property in two. 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. Mr Edwards notes in relation to the extended travel time for the three properties that will have their access restricted to left in and left out, that if the intersections used to turn around were controlled by traffic lights this travel time would be extended. However, he considers this effect to be reasonably minor, particularly in the future when additional local roads may provide more routing options.

In regard to an assessment of submissions, Mr Edwards states:

*“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 point.*



*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<sup>2</sup> Project, however the CTMP condition applied to multiple Projects so I am neutral with respect to this submission point in relation to this Project.”*

The requiring authority proposes to manage effects through management plans. Mr Edwards considers that the provided purpose of the CTMP is adequately described, but he considers that some amendments are required to the list of matters the CTMPs should address. With regard to proposed condition 13 Existing Property Access, Mr Edwards considers this may not provide for movement of all vehicles used on that property such as a large truck and trailer or agriculture machinery. He recommends that the condition is amended to require the access to be fit for purpose or adequate. He also recommends that the replacement or altered access be reasonable efficient, particularly with respect to additional journey length and time but acknowledges it may be difficult to provide wording that does not rely on subjective assessment, but in that regard he noted that the term “safe” is also inherently subjective.

Overall, Mr Edwards supports NoR 1 with amendments to the conditions relating to Existing Property Access, and the conditions specifying CTMP requirements.

#### Planning Review

I rely on the expert opinion of Mr Edwards and the assessment in the AEE and technical report. I note that Mr Edwards is neutral on including reference to educational facilities and pick up and drop off times in the condition because there are no schools located along the proposed designation that would be affected. It would be helpful to hear more from the submitter on the reason for the change requested. I agree with the other recommendations by Mr Edwards which are also recommended through the Ministry of Education submission which relate to including public transport and all transport modes into the condition to be maintained and safely managed. This is important for NoR 1 as it overlaps the designation for Ngakoroa Railway Station and given its delivery programme as set out in section 4.4 above, management of public transport and walking and cycling within this area will be important.

It is noted that the technical report submitted by the requiring authority recommends a SSTMP is prepared if required however, there are no conditions that include provision of a SSTMP. It would be helpful if the requiring authority commented on why there are no conditions including a SSTMP despite the recommendation in the report.

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.

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<sup>2</sup> NoR 1 is referred to as 1:DWA in Mr Edwards report.

#### **4.8.6 Construction Noise and Vibration**

##### Requiring Authority AEE

Effects of construction noise and vibration are addressed in section 11.5 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Construction Noise and Vibration Effects September 2023 by Joshua Dunkel, Siiri Wilkening and Claire Drewery. The AEE in summarising the effects notes that the majority of works will be able to comply with the relevant construction noise standards following mitigation. Some receivers will still intermittently experience noise levels over 85 dB LAeq (predicted worst case scenario) after mitigation, if high noise construction activities (e.g. pavement works) occur on the edge of the designation boundary. The technical report states that the closest receiver is 10m from the potential works and if high generating noise activities occur at the designation boundary, around 6 receivers could experience noise levels that exceed the daytime noise criterion without mitigation. With mitigation in place, noise levels of up to 77 dB LAeq could still occur intermittently at the closest receivers, if high noise generating activities occur on the construction boundary. At this level the assessment notes that effects are likely to include loss of concentration, annoyance, and a reduction in speech intelligibility. The technical report acknowledges that future receivers located in residential structures constructed within 76m of the works could experience noise levels that exceed the 70 dB LAeq noise criterion during high noise generating activities such as the pavement works, without mitigation implemented.

The Assessment of Construction Noise and Vibration Effects notes that compliance with construction vibration Category B standards will be achieved for the majority of receivers in NoR 1. The technical report states that the Category B criteria would be met at future residential structures that are 8m or more from the proposed works and commercial structures that are 4m or more from the proposed works. However, the daytime Category A vibration amenity criteria could be exceeded in existing or future buildings if they are occupied during the works and within 21m of the roller compactor or within the emission radii identified for the other vibration generating equipment listed in Table 4-5 of the technical report.

It is recommended in the AEE that a Construction Noise and Vibration Management Plan (CNVMP) be prepared prior to construction and is included as proposed condition 20 and 21. There are also proposed conditions around what standards will be used to measure construction noise and vibration (proposed conditions 18 and 19).

##### Specialist Review

Mr Rhys Hegley, Hegley Acoustic Consultants has prepared a review of the construction and operational noise and vibration assessment. Mr Hegley states that the AEE and technical report contains a lot of generic information which 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.

For both construction noise and vibration he states that the Assessment of Construction Noise and Vibration Effects identified receivers where the criteria may be exceeded without defining the magnitude of the exceedance.



Mr Hegley recommends that Condition 19 is changed to reflect the Condition 18 in the Waka Kotahi NoRs (2 and 8) and add in requirements (18(b) and 18(c)) that sets out the assessment and monitoring requirements for a situation where vibration exceeds the Category B criteria. He also noted that there appears to be an inconsistency. Firstly, the noise (Condition 18) and construction (Condition 19) conditions both provide objective criteria to be complied with, where practicable. Where not complied with, 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. Mr Hegley recommends clarity in these conditions. He also recommends that the CNVMP and Schedule of conditions (Condition 20 and 21) 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.

#### Planning Review

It is noted in the AEE that construction of NoR 1 will take place over approximately 3 to 4 years. While it is noted that the current zoning of the land is FUZ, the zone is a transitional zone and that land may be used for a range of general rural activities but cannot be used for urban activities until the site is re zoned for urban purposes. As mapped in GeoMaps this area and surrounding FUZ area is earmarked to become a Future Urban Area between 2023 – 2027 under the Development Strategy Sequencing and Timing of Growth Map layers from FULSS, albeit soon to be superseded. This means that this area could become residential prior to or during the construction of NoR 1. It would be useful to understand the requiring authority’s view of the likelihood of this change occurring based on the consultation undertaken.

It would also 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 on the existing receivers in particular can be avoided, remedied, or mitigated.

### **4.8.7 Operational Noise**

#### Requiring Authority AEE

Effects of operational noise are addressed in section 11.6 of the AEE which refers to the requiring authority’s technical report Pukekohe Transport Network Assessment of Operational Noise Effects September 2023 by Joshua Dunkel, Siiri Wilkening, Shivam Jakhu and Vitalii Zaiets. Existing Protected Premises and Facilities (PPFs) within 100m from the proposed new road edge were assessed in urban areas, and 200m for rural areas, based on NZS6806.

There are 13 PPFs identified for NoR 1 under the altered roads criteria. However, all were predicted to receive noise levels within Category A (the desired noise criteria category) so no mitigation is proposed. Further, the AEE notes that ambient noise levels are likely to increase as the area urbanises, so the changes in noise levels due to the Project may not be as noticeable at the time.

### Specialist Review

Mr Rhys Hegley, Hegley Acoustic Consultants has prepared a review of the construction and operational noise and vibration assessment. Mr Hegley notes that the approach in the requiring authority's technical assessment is to adopt a low noise road surface across all NoRs for the control of noise to current and future receivers, however 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 6806:2010 Acoustics - Road-traffic noise - New and altered roads (NZS 6806) provides for a PPF. Mr Hegley notes that 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 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, he notes that those developing the land in the future could potentially end up providing a significant portion of the necessary mitigation. 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.

Mr Hegley recommends that the AT road surface Condition 27 be amended to match Waka Kotahi's Condition 26. Mr Hegley recommends 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. He also recommends 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) to Condition 28. The same changes are proposed for conditions 29 and 30 and changes to conditions 31 and 32.

### Planning Review

Considering that this land is currently zoned FUZ and is expected to become 'development ready' between 2023 – 2027 (Auckland Council GeoMaps Auckland Plan Sequencing and Timing of Growth from FULSS, albeit soon to be superseded) it would be helpful if the requiring authority reassesses the noise effects on activities that may arrive between designation and construction as stated by Mr Hegley.

It is also noted that the McKean Family Trust (Submission 4) seeks changes to the noise conditions proposed to address residential amenity and commercial interest due to the potential to have temporary (construction) effects.

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by submitters and the changes to conditions outlined by Rhys Hegley and the McKean Family Trust as it is not clear at this time that the potential adverse operational effects in particular can be avoided, remedied, or mitigated.

#### **4.8.8 Flood Hazard**

##### Requiring Authority AEE

Effects on flood hazard are addressed in section 11.7 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Flood Hazard Effects 12/09/2023 by Justin Kirkman. The AEE states that there may be some flood hazard effects during the construction phase (refer to section 11.7.1 of the AEE for the full list of effects) however the details of the construction approach will be confirmed at detailed design and mitigation measures are included in the Construction Environmental Management Plan (CEMP) outlined in condition 14.

NoR 1 crosses six overland flow paths, four smaller tributaries and two main branches of the Ngakoroa Stream. The flood hazards associated with NoR 1 are predominantly due to interaction with the existing floodplains surrounding the Ngakoroa Stream and crossings over the streams. While some existing moderate risk was identified on land at 110 Karaka Road, this is at the location of the proposed Drury West Rail Station and the AEE assumes that flood risks will be mitigated through that development. There is high existing and future risk within the Ngakoroa Stream floodplain and negligible existing and future risk out of the floodplain. The effects of using a 3.8° climate change adjusted rainfall pattern compared to the 2.1° climate change pattern shows deeper flood depths in all six flow path crossings for the NoR 1 road alignment. The changes in flood depth are relatively small with the change range of 0.1m to 0.3m.

Specific mitigation for NoR 1 include appropriately sized culverts and bridges, no attenuation in wetlands as attenuation will increase flow coincidence downstream, providing diversion channels at the toe of fill embankments to prevent ponding, and maintaining 1200mm freeboard to new bridge soffits using the 100-year ARI flood level with 3.8° C climate change hydrology. Proposed condition 12 sets out flood risk outcomes which the project shall be designed to achieve.

##### Specialist Review

Mr Trent Sunich from SLR has prepared a stormwater and flood hazard technical assessment. Mr Sunich agrees with the approach undertaken in the Assessment of Flood Hazard Effects 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. He assessed the submissions and noted that there were no relevant submissions for NoR 1. Mr Sunich has reviewed the proposed conditions with Auckland Council Healthy Waters staff and has recommended changes to the flood hazard condition and an inclusion of an advice note. These changes relate to simplifying condition outcomes, referencing the relevant code of practice, the introduction of overland flow specific conditions for new and existing overland flows, and requiring AT to consult Auckland Council Healthy Waters when developing the Outline Plan.

Mr Sunich acknowledges that the Assessment of Flood Hazard Effects assesses construction effects in relation to stormwater and proposes a consent condition 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 changes are recommended to the CEMP conditions.

## Planning Review

It is noted that none of the submitters raised concern about flood effects and that the impact of earthworks on flood risk will be considered as part of the regional consent process. Therefore, based on the comments from Mr Sunich I consider that the potential adverse effects on flooding during construction can be avoided, remedied, or mitigated, subject to the above, as the CEMP condition requirement for flood hazard to be assessed during construction and the requirements of the regional consent provisions in the AUP:OP will ensure that this effect is adequately addressed.

With regard to operational effects of flooding, there is nothing to suggest that the extent of the designation is not sufficient to provide for the alignment construction and operation and any associated works for flood mitigation techniques however, given that this is a changing space it is assumed that AT will prior to the Outline Plan stage review the effects of climate change in terms of the best information available at that time. It would be useful to hear from AT on whether it is proposing a condition to that effect or considers existing conditions capture this situation.

It would be helpful for the requiring authority to provide a response at the hearing on changes to conditions suggested by Mr Sunich. I consider that subject to the above, and the proposed conditions as recommended to be amended the potential adverse effects on flooding can be avoided, remedied, or mitigated.

### **4.8.9 Terrestrial Ecology**

#### Requiring Authority AEE

Effects on ecology are addressed in section 11.8 of the AEE which refers to the technical report Pukekohe Transport Network Assessment of Ecological Effects September 2023 by Ian Bredin and Sahar Firoozkoochi. The AEE states a number of positive effects which are improved blue/ green infrastructure, landscape planting and the proposed bat mitigation in association with the landscape planting berms, embankments, and stormwater wetlands is likely to improve ecological connectivity for other native fauna.

The AEE discusses construction and operation effects of/ on vegetation clearance, long-tailed bats, birds, and herpetofauna. Potential construction effects that relate to the activities authorised by the designation include the disturbance and displacement of roosts/ nests and individual (existing) long-tail bats, avifauna and herpetofauna due to construction activities (noise, light, dust etc). The effects of vegetation removal have been assessed as low and therefore do not require any impact management. The effects on long-tail bats for NoR 1 is assessed as moderate and requiring mitigation in the form of a Bat Management Plan (BMP) which is included within the Ecological Management Plan (EMP) with the level of effect post mitigation being assessed as low. The AEE notes that there are a number of Threatened and At-Risk (TAR) species of birds within NoR 1 and the effects on these birds are considered moderate so require mitigation by an Avifauna Management Plan (AMP) which is included within the Ecological Management Plan (EMP). There are two herpetofauna species which are identified as TAR however, the magnitude of effects on these was assessed as negligible due to the skinks being considered habitat generalists and the local extent of construction related effects so there is no mitigation proposed.

The potential operational effects on ecological features are the loss in connectivity for indigenous fauna and disturbance and displacement of indigenous fauna and their nests/ roosts. The effects on the long tail bat and birds were assessed as moderate so require mitigation in the form of a BMP and AMP which are included within the EMP as proposed condition 24. The effects on herpetofauna were assessed as low so no mitigation is proposed.

### Specialist Review

Mr Simon Chapman, Ecology New Zealand has prepared a technical memo assessing the adequacy of the information submitted by the requiring authority. Mr Chapman agrees with a lot of the assessment and management plan approach provided for in the Assessment of Ecological Effects. However, he noted that 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. Mr Chapman recommends that a BMP is provided and certified in advance of surveys commencing. This should include information regarding how the survey design is 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.

With regard to birds, Mr Chapman notes that the assessment suggests as New Zealand falcon are a transient species, they do not need to be considered. 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.

With regard to invertebrates, Mr Chapman notes that 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, he considers that there is information is lacking on how the conclusion was reached that native invertebrates are unlikely to be present and do not warrant further consideration.

Mr Chapman has reviewed the proposed designation conditions for NoRs 1, in particular, conditions 23 and 24, and considers that the potential ecological effects resulting from the proposed expressway project are likely to be adequately managed by those conditions.

### Planning Review

There are no SEA's within the proposed designation boundary and there are no submissions that mention ecology. 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 with the assessment and any changes to conditions suggested. I also note that there is no specific reference to BMP or AMP in the designation conditions as currently drafted. 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.

#### **4.8.10 Landscape and Visual and Urban Design Evaluation**

##### Requiring Authority AEE

Effects on landscape and visual values are addressed in section 11.9 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Landscape and Visual Effects Assessment September 2023 by Matthew Jones (LVEA). The AEE highlights a number of positive effects such as enhanced connectivity, landscape mitigation planting, and integration of active travel routes and recreational paths with Pukekohe's 'green network' of bush and vegetated riparian margins.

The adverse construction effects on landscape and visual values are summarised in the AEE as the construction footprint, waterbodies, exposed earthworks, reduced amenity, reduced visual amenity, and temporary effects. The landscape character temporary effects and visual amenity effects resulting from the construction of NoR 1 are anticipated to be low – moderate. Moderate temporary effects are anticipated for properties immediately adjacent to the alignment (being retained), and low temporary effects for properties within the wider setting and from public viewpoints.

The operational effects on landscape character included in the AEE are noted in the context that while the project adds a new road element through this area, the area is expected to change due to the current zoning of FUZ. The proposed designation will form a complementary element as the FUZ land develops and any adverse effects on landscape character are assessed as low. It is anticipated that visual amenity effects for the operation of the project and its alignment (post-construction) will be low, which is based on the design working with and integrating into the surrounding topography (including the raised topography for the bridge access), and visual amenity and user experience associated with the streetscape design, street trees, berm planting and active modes enabled along the route.

Effects on urban design are addressed in section 11.15 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Urban Design Evaluation September 2023 by Sam Foster (UDE). The technical report identified specific commentary for NoR 1 under the following headings: environmental, social, built form, and movement.

Mitigation in the form of an Urban and Landscape Design Management Plan (ULDMP) is recommended and included as proposed condition 11.



### Specialist Review

Ms Rebecca Skidmore from RA Skidmore Urban Design Limited has assessed the adequacy of the landscape and visual effects assessment and urban design evaluation submitted by the requiring authority and has responded to relevant submissions and recommended changes to the proposed conditions. Ms Skidmore notes that she generally considers the NoRs are supported by robust urban design and landscape analysis. 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 scale. She notes 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 NIMT and the extent and configuration of land proposed to tie into the Runciman Road roundabout.

She notes that the proposed alignment crosses multiple intermittent and permanent streams. The general arrangement plan indicates three bridge crossings. In Ms Skidmore's 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. She agrees with the assessment of landscape character and visual effects set out in relation to both the construction phase and the operational phase.

Ms Skidmore considers the requirements of these conditions do not convey the specificity of recommendations made in both the UDE and the LVEA and she recommends a number of changes to address recommendations set out in the UDE.

In relation to the submissions, Ms Skidmore states:

*"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.*

*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."*

### Planning Review

It is noted that KiwiRail (submitter number 3) supports the conditions relating to the preparation of an UDLMP in the NoR. However, the McKean Family Trust (submission number 4) has concerns relating to landscape and visual effects both during construction and operation of the new road from their property at 826 Runciman Road. In particular, they seek that Auckland Council recommends that the landscape and visual effects at the time of construction and operation, is not inconsistent with the FUZ and the appropriate mitigation measures will be implemented.

It is noted that the effects assessment is predicated on the basis that there is going to be a change in relation to the FUZ land from rural to an urbanised environment. It would be helpful for the requiring authority to provide a response at the hearing on changes to conditions suggested by Ms Skidmore and to the points raised in the submissions. I consider that subject to the above, and the proposed conditions as recommended to be amended the potential adverse effects on flooding can be avoided, remedied, or mitigated.

#### **4.8.11 Historic Heritage and Archaeology**

##### Requiring Authority AEE

Effects on historic heritage are addressed in section 11.10 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Effects on Historic Heritage September 2023 by Matthew Campbell. The AEE states that there are no known historic heritage or archaeological sites in relation to NoR1. However, there may be risks during construction of uncovering unrecorded archaeological and historic heritage sites.

It is recommended that further research and survey should be undertaken to support applications for authority under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) before construction commences. Damage or destruction of any previously unrecorded archaeological sites that are exposed during the works can be mitigated under the provisions of the authority, and the means of mitigation detailed in an Archaeological Management Plan prepared for the HNZPTA authority application.

##### Specialist Review

Ms Myfanwy Eaves, Auckland Council's specialist advisor in her assessment notes that other than for NoR 6 and NoR 8 from a historic heritage perspective, she is satisfied that all matters have been addressed in the technical assessment submitted by the requiring authority.

##### Planning Review

No submissions were received in relation to historic heritage for NoR 1. As there are no known archaeological sites within the NoR 1 designation, it is considered that adequate information has been received and no condition is relevant for NoR 1.

It is noted that the requiring authority has stated that applications for HNZPTA authority will be made before construction commences so that the potential risk of damage or destruction of any previously unrecorded archaeological sites that are exposed during the works can be mitigated under the provisions of the authority. It is understood that an Archaeological Management Plan will be prepared for the HNZPTA authority application.

I consider that the potential adverse effects on historic heritage can be avoided, remedied, or mitigated.



#### **4.8.12 Arboricultural Effects**

##### Requiring Authority AEE

Effects on arboriculture are addressed in section 11.11 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Arboricultural Effects September 2023 by Craig Webb. The AEE notes the positive effect of allowing sufficient space to plant new trees.

There are a number of trees located within the proposed designation. However, there are no trees in NoR 1 that are protected under the relevant District Plan provisions of the AUP:OP. No mitigation is proposed.

##### Specialist Review

Mr Leon Saxon, from Arborlab has prepared a memo covering his assessment of the submitted documents, response to relevant submissions and recommendations. Mr Saxon notes that there are no trees protected by the District Plan provisions affected within or adjacent to the designation boundary. However, he also notes that 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. As such, Mr Saxon recommends that the condition for preparing a Tree Protection Management Plan should apply to all of the designations.

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.

Mr Saxon notes that none of the submissions raised any significant issues regarding trees currently protected by District Plan rules.

##### Planning Review

There are no submissions that relate to trees. I note that vegetation removal in FUZ land is subject to regional rules however I also recognise that the land is potentially able to be rezoned and that this would mean that the issue raised by Mr Saxon is relevant. It would be useful to hear from the requiring authority on this matter. I consider that subject to the above in response to the proposed conditions as recommended to be amended the potential adverse effects on arboriculture can be avoided, remedied, or mitigated, subject to the above.

#### **4.8.13 Community Effects**

##### Requiring Authority AEE

Effects on the community are addressed in Section 11.12 of the AEE. The AEE recognises that NoR 1 will provide a connection between the Drury West Town Centre and the proposed KiwiRail Drury West Rail Station and provides access to the wider strategic transport network including SH1 and SH22. NoR 1 also connects future urban areas from Burt Road and to Runciman Road in the south. This NoR will also provide direct access to the proposed Drury West Rail Station train station, creating a continuous multi-modal link to planned communities in Drury West. The Project will also provide community benefits through improving connections to public transport and rapid transit networks.

The AEE notes that a number of the NoRs are new roads in undeveloped greenfield areas, resulting in less community impacts during construction. However, the acquisition of land will sever some properties and may prompt changes to some rural operations. Prior to construction, there may be a reduction in the existing rural community within the greenfield areas of the Project, as AT acquires properties and those properties become vacant. Notwithstanding this, the FUZ is planned to urbanise and the proposed transport networks will be implemented at the time that greenfield areas start to urbanise. Therefore, the AEE considers that this is anticipated to be a temporary effect as the community transitions into an urban area once the land is live (urban) zoned. The amenity values in both the existing and future urban areas could also be disrupted during construction due to dust and noise generated from construction. No adverse operational effects on the community are anticipated from the Project.

It is anticipated that all community effects during the construction of the Project will be temporary and can be minimised. 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 with throughout the construction works which is described in proposed condition 8. Access and trip disruption will be managed by the CTMP (proposed condition 17) and the SCEMP proposed as conditions of the designation. Construction effects on amenity values of property can be managed by engagement with stakeholders identified through the SCEMP, as well as through the development and implementation of the CVNMP (proposed condition 20) and the CEMP (proposed condition 14).

No adverse community impacts are anticipated from the operation of the Project and therefore no mitigation is required. However, through the implementation of the ULDM (proposed condition 11), a range of measures will be implemented to ensure the Project is appropriately integrated into the surrounding landscape and urban context.

## Planning Review

It is noted that no specific Council specialist assessment has been sought for effects on the community. I agree with the assessment undertaken by the requiring authority. By providing safe and efficient connections throughout the growth area, the Project will positively impact on the health and well-being of the existing and future community. This positive effect is expressed in the submission by Fisher and Paykel (submission number 2) which outlines the intention to develop land at 300-458 Karaka Road, Drury (located approximately 500m to the west of the proposed new intersection with Karaka Road) as a research and development and manufacturing campus over the next 30-40 years. Overall, Fisher and Paykel support the Project as it will support the future urbanisation and development of Drury West and provide existing and future residents and employees with improved connections, including walking and cycling connections, to Karaka Road and the planned Drury West Railway Station.

The Ministry of Education (MoE) submission (submission number 6) is the only submission received in relation to potential direct effects on community or recreational facilities. The MoE submission is primarily in response to the number of existing schools located proximate to the NoRs, but also any future schools that will be developed in the area. As outlined in the MoE submission, there is potential for schools located near to the Project to be affected by traffic, noise and other nuisance effects arising from future construction works of the transportation network. The MoE is therefore seeking to ensure that appropriate conditions are included in the designations to mitigate any potential adverse effects associated with the construction of the proposed transport network. Those conditions relating to transport have been addressed in Section 4.7.5 above. The other requested changes to the proposed conditions relate to the MoE and schools being included as part of the Stakeholder Communication and Engagement Management Plan (SCEMP) and being included as a stakeholder in the Construction Traffic Management Plan (CTMP). As a component of a community that is potentially sensitive to the Project, particularly during the construction phase, inclusion of the MoE and schools as part of the SCEMP and CTMP is supported. Refer to the recommended amended conditions in Attachment 5 of this report.

It would be helpful to hear from the requiring authority on any potential impacts on schools and the changes to the conditions requested by the MoE as noted above.

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 requiring authority's response to the MoE's requested changes to the conditions.

### **4.8.14 Property and Land Use**

#### Requiring Authority AEE

Direct effects on property and land use are addressed in Section 11.13 of the AEE. The AEE notes that potential adverse effects on existing private properties have been reduced where practicable through the development of the Project concept design and the proposed designation boundary.

The AEE notes that potential adverse effects on the development of private property may arise. However, it is noted in the AEE that development is not precluded within the proposed designated area. AT will work with landowners and developers under the process in s176(1)(b) of the RMA to provide written consent for development within the proposed designations, provided those works will not prevent or hinder the work authorised by the proposed designation.

For the AT NoRs, a Land use Integration Process (LIP) is included in the conditions (proposed condition 10). This sets out a process where developers can request information from AT to inform land use development adjacent to the transport corridors. This will support development that may go ahead of the proposed transport corridors and provides opportunities to co-ordinate and integrate infrastructure and development.

Section 11.13.1 of the AEE notes that land required for the permanent work will be acquired prior to construction and if temporary occupation is required, then the land 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 such as the development and implementation of a SCEMP, CTMP, Construction Noise and Vibration Management Plan (CNVMP) and Construction Environment Management Plan (CEMP) prior to the start of construction are noted in the AEE as appropriately minimising disruption to affected properties and allow the continued use of the properties where practicable. Potential construction effects will generally be temporary.

The post construction effects are noted in section 11.13.2 of the AEE where it is noted that following the Completion of Construction, the designation boundary will be reviewed, and any land not required for the permanent work or for the ongoing operation, maintenance or mitigation of effects of the Project will be reinstated and reintegrated in coordination with directly affected landowners or occupiers. The timing for this process occurring is unstated in the AEE and there are no conditions related to this process.

### Planning Review

The appropriateness of the proposed lapse date in relation to NoR 1 is assessed in section 4.8.14 Property and land use effects of this report.

Submission 8 (Campaign for Better Transport Incorporated) has included the following in regard to the lapse period:

*“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.”*

It is noted that no specific Council specialist assessment has been sought for effects on property and land use. Since the NoRs were served on Auckland Council, pursuant to Section 178(2) of the RMA, the proposed designations have had adverse effects on normal property and land use activity on both adjacent land and particularly directly affected land as no person may do anything that would prevent or hinder the public work, project, or work to which the designation relates unless the person has the prior written consent of the requiring authority.

In terms of the effects on the directly affected land, while I note that the Public Works Act 1991 (PWA) is the legislative framework under which entitled landowners will receive compensation and that this is a non-RMA process, the restrictions imposed on private property is an adverse land use effect. This is because the uncertainty that the NoRs can create for landowners can result in some landowners being reluctant to actively manage their land. Given the rural/ farming land use and private plan changes located close to the NoRs, this uncertainty could result in unmanaged land and a loss in production that results in negative physical changes to the land along with a reluctance to invest in the land. The proposed 20 year lapse period of the NoRs adds to the uncertainty and this potential outcome. The LIP condition goes some way to assist with this however only when and if a landowner is planning to urbanise their land. It may be helpful to go further and alleviate the effect of needing to obtain approval under the RMA from AT over the next 20 years for permitted activities.

The submission by the McKean Family Trust (MFT) (submission number 4) seeks to ensure that the conditions imposed on the resulting designations are adequate to protect MFT's interests from both a residential amenity and commercial perspective. Accordingly, MFT requests that the conditions of consent ensure, as a minimum, the following:

*(a) Noise effects during construction will not exceed 70 dB LAeq;*

*(b) Vibration effects during construction do not exceed the limit of 5 mm/s PPV (Peak Particle Velocity);*

*(c) The long-term operational noise effects will be adequately mitigated where required to ensure the Property does not exceed a dB LAeq(24h) of 47, in accordance with the Operational Noise Assessment; and*

*(d) The landscape and visual effects at the time of the construction and operation, is not inconsistent with the Future Urban Zone and the appropriate mitigation measures will be implemented.*

*(e) When the CTMP is prepared prior to construction, that MFT is notified when this has been prepared to ensure the transport effects do not adversely affect its property (826 Runciman Road).*

It would be helpful to hear from the requiring authority in response to the issues raised in relation to the property and land use effects by the submitter and raised above about the impact of the lapse period. While it is noted that 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 Auckland Transport to undertake work on their own land. Providing some certainty on what can be done on the land without needing to seek approval from Waka Kotahi given the long lapse period would assist many landowners and occupiers potentially.

The timing for the process of removing the designation occurring is unstated in the AEE and there are no conditions related to this process. It would be useful to understand why not.

It would also be useful to hear from the requiring authority as to whether potential impacts on properties and businesses raised in the above-mentioned submission are also appropriately addressed through the Project design and alignment and proposed conditions.

At this time, I consider that the potential adverse effects on property and land use can potentially be appropriately remedied or mitigated, but this assessment is subject to the above information being provided and potentially changes to the Project design and alignment and conditions to address how the ongoing use of the directly affected land will be enabled given the long lapse period sought.

#### **4.8.15 Network Utility Effects**

##### Requiring Authority AEE

Effects on network utilities are addressed in section 11.14 of the AEE. The following network utilities are identified as being affected by NoR 1:

- Waka Kotahi New Zealand Transport Agency – SH22 (Designations 6704, 6705, 6707)
- KiwiRail – North Island Main Trunk Railway Line (Designation 6302) and Notices of Requirement - Drury West – Station and Drury West-Interchange
- Auckland Transport – Jesmond to Waihoehoe West FTN Upgrade (Designation 1840).
- Watercare – Watermain, sewer main and pipe assets.
- Counties Energy – ADSS fibre optic cable and medium and high voltage cables.

To undertake work in accordance with a designation on land where there is an existing designation in place, the written consent of the requiring authority for the earlier designation is required under section 177(1)(a) of the RMA. This written approval has not been obtained at this stage but will be obtained at a later date during the detailed design stage of the Project.

Where works are required by others on land subject to a designation or notice of requirement sections 176 and 178 apply. To mitigate any potential adverse effects on network utilities, a Network Utilities Management Plan (NUMP) (proposed condition 26) will be prepared prior to the construction of the Project. The NUMP will set out a framework for protecting, relocating and working in proximity to existing network facilities. The NUMP 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. Submissions to NoR 1 have been received from the following requiring authorities and network utilities:

- Telecommunication submitters (Aotearoa Towers Group (ATG), Chorus New Zealand Limited (Chorus), Connexa Limited (Connexa), One New Zealand (One NZ) (formally Vodafone New Zealand Ltd) and Spark New Zealand Trading Limited (Spark));
- KiwiRail Holdings Limited (KiwiRail);
- Watercare Services Limited (Watercare); and
- Counties Energy Limited (CEL).

The Telecommunication submitters (submission number 1) group point out that none of its group are listed in Section 11.14 of the AEE despite having existing infrastructure within and around the proposed designated boundaries. The Telecommunication submitters group therefore seek to ensure that existing and potential future telecommunications infrastructure in the Project corridors are adequately addressed and oppose the NoRs if their concerns are not addressed. The submission by the Telecommunication submitters group highlights that 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. This integration is provided for through the proposed Land Use Integration Process (LIP) condition although as currently drafted this only applies to a Developer or Development Agency as defined in the conditions not to a network utility operator.

However, the Telecommunications Submitters group seek amendment to the proposed NUMP condition 26(d) and an advice note to be added to the NUMP conditions as shown in italics and underlined below:

*(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.*

### 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).*

Subject to the requiring authority's (Auckland Transport's) proposed conditions, including in particular Conditions 5 (Network Utility Operators (Section 176 Approval), 10 (Land use Integration Process (LIP), 11 (Urban and Landscape Design Management Plan (ULDMP) and 26 (Network Utility Management Plan (NUMP), KiwiRail's submission supports NoR 1 and seeks ongoing dialogue and engagement before detailed design starts thus enabling better planning and integration between network utility providers through greater communication and collaboration.

Watercare Services Limited's (Watercare's) submission states that Watercare neither supports or opposes NoR 1 but seeks to ensure that any decisions made respond to the issues raised in this

submission. In particular, that the works provided for under the NoR avoids, remedies or mitigates potential adverse effects on Watercare's ability to provide water and wastewater services now and in the future. In relation to NoR 1, Watercare acknowledges the engagement to date and seeks early engagement to enable opportunities to plan and future proof the delivery of assets to provide for well-functioning urban environments. In addition, 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. While supporting the proposed NUMP, SCEMP and Land use Integration Process (LIP) conditions, Watercare seeks that a new condition requiring the preparation of a "Network Utility Strategic Outcomes Plan" (NUSOP) be added to the NoR to futureproof assets in consultation with network utility operators such as Watercare. If the NUSOP condition is not included in the NoRs, Watercare seeks amendment to the proposed NUMP condition.

The CEL submission indicates general support for the NoR but notes omissions in terms of the information about its existing overhead and underground infrastructure provided in the drawings submitted with the NoR. In addition, CEL require further consultation and detailed planning concerning parts of NoR which may impact the location and safe operation of its assets and 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.

There is no specific discussion about effects on the above utilities or assets in section 11 of the AEE.

Works within the existing road reserves (SH22, Burt Road and Runciman Road) 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. Access to the local road network subject to the NoR is managed through a Corridor Access Request process to Auckland Transport currently as the region's road controlling authority. Therefore, a network utility would need to seek written consent from Auckland Transport and obtain a Works Approval Permit from Auckland Transport before undertaking works within the proposed designated land. Notwithstanding, proposed Condition 5 sets out when such works do not need Auckland Transport approval under section 176(1)(b) of the RMA.

As there is no further discussion on the effects on network utilities in the AEE, it is not clear if the mitigation proposed in the form of the NUMP (condition 26) and condition 5 is adequate. As noted above, the Telecommunication Group seeks amendment to proposed Condition 26 and Watercare seeks a new condition requiring the preparation of a Network Utility Strategic Outcomes Plan. It would be useful to hear from the requiring authority in relation to the changes sought.

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.



#### **4.8.16 Effects conclusion**

In regard to the overall effects of NoR 1, I consider that subject to the further amendments to the conditions recommended above and included in Attachment 5 to this report, the potential adverse effects on the environment from the construction and operation of the NoR 1 can be appropriately avoided, remedied or mitigated.

#### **4.9 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.

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

Highly productive land is defined in the National Policy Statement for Highly Productive Land 2022 (NPS-HPL) as:

*...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 land within NoR 1 does not come within the transitional definition of highly productive land as it is not mapped and is FUZ within the AUP:OP. Therefore, the NPS-HPL is not relevant to NoR 1.

##### **4.9.2 National Policy Statement on Urban Development 2020 (NPS-UD)**

The National Policy Statement on Urban Development (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 (Objective 1). As stated in the AEE, within the NPS-UD Auckland is recognised as a Tier 1 urban environment and is therefore subject to a greater policy direction in terms of intensification and density of urban form. The NPS-UD directs that urban development is integrated with infrastructure planning and funding decisions and is strategic over the medium to long term.

The requiring authority has assessed the Project against the relevant provisions of the NPS-UD in Table 12-1 of the AEE. The AEE states that the Pukekohe Transport Network will support and enable growth by protecting improved and new transport corridors that will support Auckland Council's growth aspirations for the growth areas of Drury West, Paerata and Pukekohe area, including intensification or density of growth resulting in more efficient urban land development. This is becoming increasingly important as a result of private plan changes being lodged with Auckland Council, and developer interest around Pukekohe identified via engagement with developers and landowners. It will also support transformational mode shift from private vehicles to public transport, walking and cycling. In particular, the network provides direct connections to the rapid transit network (rail stations and rail network) and provides walking and cycling and new bus routes for existing and future communities.

I concur with these conclusions and consider that the NoRs, including NoR 1, will support and enable future growth that is proposed while also promoting and providing for active modes of transport. NoR 1 in particular will provide a connection to the proposed KiwiRail Drury West Rail Station from the new Waka Kotahi road (NoR 2) and provides a connection across the NIMT to SH22. In addition, I consider that the conditions, as recommended to be amended, will give effect to the NPS-UD.

#### **4.9.3 National Policy Statement on Freshwater 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.

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.

However, in the AEE the relevant matters have been screened to inform the concept design, options assessment, the designation boundary, and future resource consents. The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-FW because:

- The options assessment assessed the ecological impacts of a variety of options including extent of effects on stream/ waterway ecology as well as the consideration of natural wetlands under the NPS-FM.
- Through the alternatives assessment and design refinement process the requiring authority have sought to avoid wetland areas and minimise impacts on rivers and waterbodies where practicable. Where avoidance is not practicable, design refinements have looked at ways to minimise effects.
- Stormwater discharge quality will be managed through the use of soft stormwater infrastructure where possible such as swales and stormwater wetlands. An integrated stormwater network will be designed at the detailed design/ regional consenting stage that is sensitive to receiving environments, recognising capacity constraints of streams and the importance of maintaining or enhancing the quality of freshwater.

I concur with this assessment under the NPS-FW and Council's ecology specialist also agrees with the management approach. It is noted that the rules relating to freshwater are subject to regional rules. In that regard, I agree that the NoRs give effect to the NPS-FW, subject to the conditions.

#### **4.9.4 National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB)**

The National Policy Statement for Indigenous Biodiversity (NPS-IB) is an essential part of our response to biodiversity decline in Aotearoa. It provides direction to councils to protect, maintain and restore indigenous biodiversity requiring at least no further reduction nationally.

The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-IB because:

- The options development and assessment considered existing and likely sensitive ecological features and environments and sought to locate the designation boundary outside the Significant Natural Areas (mapped as Significant Ecological Areas (SEAs) in the AUP:OP).
- The Project seeks to maintain indigenous biodiversity through the implantation of the EMP as required by proposed condition 24.

I concur with this assessment and note that there are no SEA's which are within the proposed designation boundary.

#### **4.10 Regional Policy Statement (Chapter B of the AUP:OP) (RPS)**

The RPS sets the strategic direction for managing the use and development of natural and physical resources throughout Auckland. The following sections of the RPS are considered relevant to NoR 1:

- Chapter B2 Tāhuhu whakaruruhau-ā-taone – Urban Growth and Form
- Chapter B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao – Infrastructure, transport and energy
- Chapter B4 Te tiaki taonga tuku iho – Natural heritage
- Chapter B5 Ngā rawa tuku iho me te āhua – Historic heritage and special character
- Chapter B6 Mana Whenua
- Chapter B7 Toitū te whenua, toitū te taiao – Natural resources
- Chapter B10 Ngā tūpono ki te taiao – Environmental risk

The requiring authority has assessed the Project against the relevant provisions of the RPS in Section 12 Table 12-1. Table 4-1 below sets out the RPS Chapters in the AUP:OP and the theme set out in table 12-1 of the AEE in which the RPS is addressed.

**Table 4-1 AUP:OP RPS Chapter and Table 12-1 themes**

<b>Chapter</b>	<b>Theme identified in table 12-1 of AEE</b>
B2 Tāhuhu whakaruruhau ā-taone - Urban growth and form	Urban growth and development capacity
	Natural hazards
	Urban form and quality design
B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy	Urban growth and development capacity
	Enabling infrastructure and transport
	Enabling infrastructure within an overlay and in addition to the above
	Urban form and quality design
B6 Mana Whenua	Manawhenua
B7 Toitū te whenua, toitū te taiao - Natural resources	Manawhenua
	Indigenous biodiversity and ecological values
	Freshwater
B9 Toitū te tuawhenua - Rural environment	Urban growth and development capacity
B10 Ngā tūpono ki te taiao - Environmental risk	Natural hazards

I generally agree with the requiring authority's assessment under the RPS provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

#### **4.11 Auckland Unitary Plan**

The AUP:OP provisions are addressed in Section 12 Table 12-1 of the requiring authority's AEE.

#### 4.11.1 Chapter D overlays

NoR 1 is subject to a range of overlays in the AUP:OP including the following:

- D1: High Use Aquifer Management Areas Overlay [rp]
- D3: High-use Stream Management Areas Overlay [rp]

The provisions of Chapters D1 and D3 are regional provisions. Therefore, an assessment of these will be required at the regional resource consent stage. I concur with the assessment of the requiring authority in the AEE in relation to the objectives and policies of these overlays and have no further comments to add.

#### 4.11.2 Chapter E Auckland-wide

NoR 1 is subject to a range of Auckland-wide provisions in the AUP:OP and the requiring authority has assessed the following:

- E1: Water quality and integrated management
- E11: Land disturbance – Regional
- E12: Land disturbance – District
- E15: Vegetation management and biodiversity
- E17: Trees in Roads
- E25: Noise and vibration
- E26: Infrastructure
- E27: Transport
- E36: Natural hazards and flooding

I generally agree with the requiring authority's assessment in section 12 and Table 12-1 of the AEE in relation to the provisions above subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

I note that Table 12 -1 did not consider the following Auckland-Wide Chapters:

- E2 Water quantity, allocation and use
- E3 Lakes, rivers, streams and wetlands
- E8 Stormwater - Discharge and diversion
- E9 Stormwater quality - High contaminant generating car parks and high use roads
- E24 Lighting

While I recognise that the effects of stormwater discharges (quality and quantity) are the subject of regional consents, it would be helpful if these had also been considered in Table 12.1. I also note

that lighting effects have been recognised there is no assessment in terms of relevant objectives and policies.

#### **4.11.3 Chapter H Zones**

NoR 1 is wholly located within the Future Urban Zone (H18 of the AUP:OP) except where it crosses into the Strategic Transport Corridor Zone (Karaka Road and the NIMT).

I generally agree with the requiring authority's assessment under the RPS provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

#### **4.12 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 Appendix A to the AEE. Sections 5.1 of Appendix A to the AEE discuss the nature of the alternative assessment and design refinements that have taken place in relation to NoR 1.

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'<sup>3</sup>.

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.

#### **4.13 Necessity for work and designation – section 171(1)(c)**

The requiring authority has set out its specific project objectives for NoR 1 in Form 18 and section 6 of the AEE Table 6.1 of the AEE. These are listed in the AEE as follows:

- Provides connectivity in Drury West.
- Supports Vision Zero and road safety outcomes.
- Supports resilience by providing an additional strategic transport corridor.

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<sup>3</sup> Waimairi District Council v Christchurch City Council C30/1982

- Supports planned urban growth and the existing and future transport network by providing a spine for the future collector road network and an additional connection to the existing strategic network.)
- Supports travel choice by providing for all modes of transport.
- Contributes to mode shift and the transition to a low carbon transport network by providing for active modes, a key connection to public transport (planned Drury West Station and FTN network) and additional capacity for further public transport services.
- The method of designation is reasonably necessary to achieve the objectives because it enables the identification and protection of the land required for the Project for an extended duration.

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.

#### **4.14 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. In this case the non-RMA documents are considered relevant.

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 Table 12.1 of the AEE. I generally concur with the assessments and conclusions of the AEE on any other matter and the range of other documents listed.

I consider that the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 NES (Soil) is a relevant other matter that has not been considered or given regard to specifically.

The NES (Soil) provides a nationally consistent set of planning controls and soil contaminant values to ensure that land affected by contaminants in soil is appropriately identified and assessed before it is developed and, if necessary, the land is remediated or the contaminants contained to make the land safe for human use.

In Form 18 the requiring authority has listed resource consent under the NES (soil) as being required but are not sought at this time. It is considered the addition of an advice note to state this is appropriate, to ensure this is captured as part of the designation.

I also note that the AEE refers to the Draft Future Development Strategy (FDS) which is considered an 'other matter'. It would be helpful for the requiring authority to advise if, now that the FDS has been finalised, the assessment would change.

#### **4.15 Designation lapse period extension – section 184(1)(c)**

As outlined in section 4.8.14 it would also be helpful to hear from the requiring authority in response to the issues raised on how the impact of the requested 20 year lapse period could be mitigated. 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.

#### **4.16 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 There is nothing specific terms of NoR 1 that has been addressed. 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 in relation to NoR 1.

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.

#### **4.17 Conclusions**

The requiring authority has lodged NoR 1 under section 168 of the RMA for the new Drury West Arterial.

I consider that subject to the provision of the requested information and subject to conditions and with modifications as set out in this report that it is recommended to the requiring authority that NoR 1 should be confirmed for the following reasons:



- The notice 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 notice of requirement is generally consistent with the relevant AUP:OP provisions.
- The notice of requirement is 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.

## **4.18 Recommendation and conditions**

### **4.18.1 Recommendation**

Subject to new or contrary evidence being presented at the hearing, it is recommended that NoR 1 be confirmed by the requiring authority, subject to the amended and additional conditions, set out in Attachment 5 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 of requirement is consistent with and give effect to the relevant national environmental standards, national policy statements and the AUP:OP.
- 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 of requirement is reasonably necessary to achieve the requiring authority's objectives.
- Restrictions, by way of conditions attached to the notice of requirement have been recommended to avoid, remedy or mitigate adverse environmental effects associated with the works.

### **4.18.2 Recommended conditions**

The conditions set recommended by the reporting planner for NoR 1 are set out in Attachment 5 to this report.

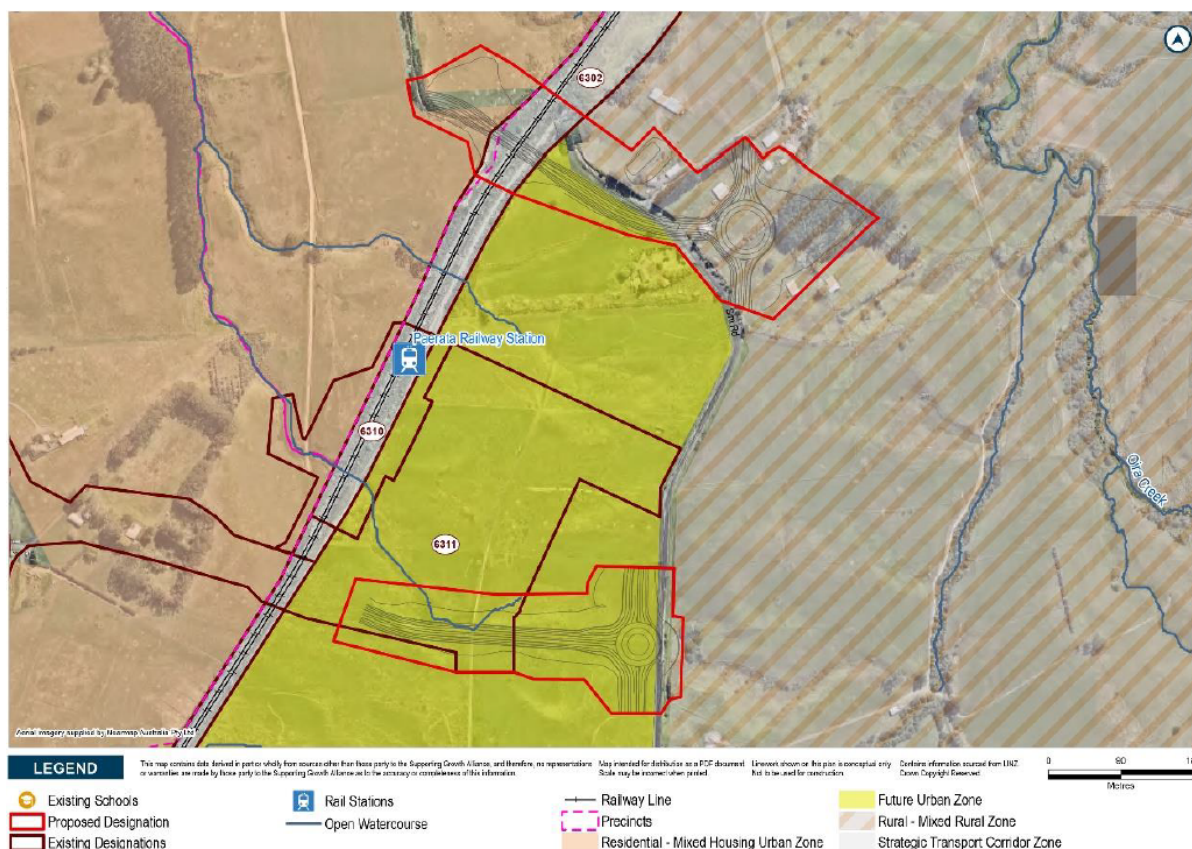
## 5 NoR 3 Paerata Connections

### 5.1 Proposal

AT are proposing a new designation for the purpose of 'Construction, operation and maintenance of a transport corridor'. NoR 3 as shown in Figure 5-1 below, will provide two connections from the existing Sim Road (south) proposed to be upgraded by NoR 2 (lodged by Waka Kotahi), one to the Paerata Rail Station and the other over the NIMT to the Paerata Rise development.

The Sim Connection Segment provides a new connection of approximately 400m between the two extents of Sim Road over the railway (NIMT). The Paerata Rail Station Connection segment provides a new transport corridor approximately 330m in length between the Paerata Rail Station (KiwiRail designation 6311 currently under construction) and NoR 2.

AT are requesting a 20 year lapse period. The connections provide the primary east-west connections for all modes in Paerata.



**Figure 5-1 NoR 3 Paerata Connections [Source: AEE]**

Key features of the designation are provided below:

- An indicative 24m wide cross section is proposed with two lanes for general traffic and active transport facilities on both sides of the corridor.

- One bridge is proposed over the NIMT to connect the two extents of Sim Road for the Sim Connection segment.
- One new stormwater wetland is proposed that is shared with NoR 2.
- One new culvert.

## **5.2 Affected Land**

The designation plans are provided in Volume 1 For 18 Attachment A: Designation Plans and the schedule of directly affected properties are provided in Volume 1 Form 18 Attachment B: Schedule of Directly Affected Properties of the NoR's together with the schedule provided describes the land that will be directly affected and required for the project and associated works.

As noted in the AEE, there will be 13 properties directly affected (i.e. the designation boundary will extend across these properties). Of the 13 properties, 8 properties are on privately owned land totalling approximately 102,591m<sup>2</sup> and 5 are rail properties totalling approximately 6,808m<sup>2</sup>. The land use is pastoral (except for the NIMT).

## **5.3 Site, locality, catchment and environment description**

This report relies on the site and environment descriptions provided by the requiring authority as set out in sections 9.8 of the AEE supporting the NoR and within each of the technical assessments. The requiring authority has set out the approach to the likely receiving environment as assessing the effects on the environment as it existing 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. It sets out the land use today, zoning type, likelihood of change for the environment (ranging from low to high) and the likely future environment.



The northern extent of NoR 3 (Sim Connection Segment) extends partly within the FUZ, partly within the Rural – Mixed Rural Zone and partly within the Residential – Mixed Housing Urban Zone and partly Strategic Transport Zone applied to the the NIMT. The proposed designation boundary also crosses the NIMT (designation reference number 6302).

The southern extent of NoR 3 (Paerata Rail Station Connection segment) is located predominantly within the FUZ with a very small portion within the Rural – Mixed Rural Zone (across on the eastern side of Sim Road). This part of the proposed designation also extends into the KiwiRail Paerata Interchange and Accessway designation (designation reference number 6311).

The proposed designation boundary also crosses a number of overland flow paths, floodplains and flood prone areas.

## 5.4 Other designations, notices of requirement and consent applications

The AEE contains a table of the interface with other projects. The table below summarises those related to NoR 1.

Project	Interface with NoR 3	Status
<p>KiwiRail Paerata Paerata Interchange and Accessway – reference number 6311</p> 	<p>Paerata Connections (NoR 3) provides a connection to the Paerata Rail Station from Sim Road (south).</p>	<p>The Paerata Interchange and Accessway to the Paerata Rail Station designation is confirmed; funding secured; construction is underway. This is a primary designation.</p>
<p>KiwiRail / Auckland Transport NIMT four tracking and Active Modes Corridor (AMC)</p>	<p>Paerata Connections (NoR 3) cross the NIMT where future four tracking and AMC are proposed. Pukekohe NE Arterial crosses the NIMT where four tracking is proposed. Space allocation was taken into consideration when designing structures over the NIMT.</p>	<p>KiwiRail and AT Programme Business Case is underway.</p>
<p>KiwiRail NIMT Railway Line – designation reference 6302</p> 	<p>NoR 3 crosses this designation.</p>	<p>Designation confirmed. This is a primary designation.</p>
<p>Paerata Rise – Grafton Downs development</p>	<p>Interface with Paerata connections (NoR 3). The Paerata Connections provide new connections to the east of the NIMT and connect into the Paerata Rise development.</p>	<p>Residential development is underway and will be developed in stages.</p>

## 5.5 Submissions

Eight submissions were received from:

Submission number	Submitter Name	Position
1	Telecommunications Submitters	Oppose in Part
2	YWMPL Limited	Support
3	KiwiRail Holdings Limited	Support
4	Watercare Services Limited	Neutral with amendments
5	Ministry of Education	Neutral
6	Paerata 5 Farms Limited	Oppose
7	Counties Energy Limited	Support with amendments
8	The Campaign for Better Transport Incorporated	Neutral

Copies of submissions are included in Attachment 1.

The issues raised in submissions are addressed throughout section 5.8 of this report.

## 5.6 Local Board Views

NoR 3 is located on land within the boundaries of the Franklin Local Board and so views were sought from them. The Board provided their view on information on Te Tupu Ngātahi Supporting Growth on Future Transport Networks Pukekohe-Paerata and south Drury provided to the local board prior to a meeting on 27 June 2023 as noted in the AEE and have more recently considered the NoRs after notification. The Local Board views are provided in Attachment 2 to this report however it is noted that the Local Board view was to support NoR 3.

## 5.7 Consideration of the notice of requirement 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 this NoR, 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 sections 5., 5., and 5. below. Section 171(1)(b) is addressed in section 5. below. Section 171(1)(c) is addressed in section 5. below. Section 171(1)(d) is addressed in section 5. 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.<sup>4</sup>*

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. Refer to section 5.18 below for our recommendation.

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<sup>4</sup> See Estate of P.A. Moran and Others v Transit NZ (W55/99)

## **5.8 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. The relevant specialists' reports are referred to and are included in Attachment 3. Submissions have also been considered and are referred to where relevant.

### **5.8.1 Effects to be disregarded - Trade competition**

I do not consider that there are any trade competition effects.

### **5.8.2 Effects that may be disregarded – Written approvals**

No written approvals were included in the notice of requirement.

### **5.8.3 Positive effects**

The AEE describes the positive effects of the project which are summarised as:

- 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.

The AEE also refers to positive landscape and visual, arboriculture, community and urban design effects.

#### Specialist Review

Wes Edwards of Arrive Ltd has reviewed the Pukekohe Transport Network Assessment of Transport Effects September 2023 by Subha Nair, Deborah Keary and Sharath Kotha (ATE) 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 the requiring authority evaluates the benefits of the Projects assuming that all development would occur with or without the Projects however Mr 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 enabled through NoR 3 will have significant positive transport effects for the reasons outlined in the AEE. The positive community effects are similar to the transport effects and I agree with the AEE in terms of those.

The positive terrestrial ecology effects identified in the AEE appear to be related largely to the delivery of stormwater management measures and landscaping. Many of these measures will be linked to future regional consents required for stormwater discharge, earthworks and vegetation removal and works affecting streams and wetlands and will be mitigating the effects of the physical works. As outlined in the AEE and the Assessment of Ecological Effects specific assessments of the current conditions along the route have not been undertaken in relation to the current conditions of the ecological values present.

It is assumed that the best practice measures that will be expected at the time that the resource consents are applied for, will deliver the claimed enhancements / positive effects on the existing environment. Therefore, it is agreed that there will be positive effects given the extent of brownfield, exotic forest, exotic grassland, exotic scrub, planted vegetation and tree land that is within and adjacent to the NoR 3 designation extent and the opportunity through the works to improve indigenous biodiversity. However, it is not clear how the works will affect the specific values that are present or the scale of the positive terrestrial ecology effects of the NoR at this time.

There are a number of matters listed under Landscape and Visual that are also linked to urban design benefits that I agree will be positive effects and contribute to the creation of an appropriate future urban environment. These include enhanced connectivity; integration of active travel routes and recreational paths and reduction in speed and new landscaping that will create attractive environments which can enhance the built character.

Also listed as a positive effect is the addition of trees in the new cross sections to enhance the urban landscape where there is room. I agree that these are potential positive effects. The challenge in terms of the assessment of the scale of these positive arboriculture and landscape effects is that Condition 1 for NoR 3 as submitted relies on the project description and concept plan that are included in the Form 18 documents

The Concept Plan in Form 18 is at such a level that there is very limited detail provided although there is also a requirement to deliver a concept plan under condition 11(g).

Therefore, the conditions are very important in delivering the positive effects identified.

The relevant condition in relation to many of these positive effects is Condition 11 related to the provision of the Urban and Landscape Design Management Plan (UDLPM) which uses 'where appropriate' and 'where practicable' without reference to how this will be determined. The amendments to conditions discussed below could address these concerns.



#### **5.8.4 Māori culture, values, and aspirations**

##### Requiring Authority AEE

The summary provided in section 4.9.4 above and section 11.3 of the AEE outlines the Māori culture, values, and aspirations which are also relevant to NoR 3.

##### Planning Review

NoR 3 is not within any 'Sites and Places of significance to Mana Whenua' as identified on the AUP:OP's planning maps. There are no known archaeological sites within the NoR area.

As noted in the AEE the Pukekohe Transport Network and therefore NoR 3 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. 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.

It is noted that NoR 3 is adjacent to the Whangapouri Creek which eventually flows to the Manukau Harbour. The AEE notes that a Cultural Values Assessment was received from Ngāti Te Ata Waiohua to inform the options assessment and a CIA from Ngāti Te Ata Waiohua to inform the concept design. The AEE notes that the CIA identifies the potential for adverse impacts on freshwater systems and receiving environments and that the CIA identified opportunities for riparian planting alongside the streams to restore and regenerate the environment and increase wetland areas as part of the Project.

No specialist review has occurred as the CIA was not provided. It is noted that no submissions have been received from Mana Whenua groups or from Heritage NZ Pouhere Taonga (HNZPT) in relation to the NoR. In light of the involvement to date as reported in the AEE. I consider that the conditions for a Cultural Advisory Report, Urban and Landscape Development Management Plan, and Cultural Monitoring Plan are appropriate.

#### **5.8.5 Traffic and Transport**

##### Requiring Authority AEE

Effects on traffic and transport are addressed in section 11.4 of the AEE which refers to the requiring authority's ATE<sup>5</sup>.

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<sup>5</sup> Pukekohe Transport Network Assessment of Transport Effects September 2023 by Subha Nair, Deborah Keary and Sharath Kotha

The AEE covers operational effects which relate to safety, walking and cycling, public transport, and general traffic and freight which are considered to have positive effects, and property access which is considered to have some adverse effects that will need to be managed. It is proposed for each of the designations to include a condition (proposed condition 13) to demonstrate (in the Outline Plan) how safe access will be provided for each existing access that is altered by the project.

Specific effects which relate to NoR 3 discussed in the AEE relate to property access. The AEE states that NoR 3 will have little impact on property access, given the relatively small extent of the corridor and largely new alignment. The assessment of existing property accesses for NoR 3 found that only few properties (less than 3) are affected, and it is viable to realign access to Sim Road. Through assessing the re-routing time, it has been determined that the additional journey time is minimal (less than 1 minute) due to the number of roundabouts located along the corridor and it is only for right turn movements not all turning movements.

The AEE also covers construction effects which relate to traffic routing, property access, pedestrian and cyclist safety, road safety, on-street and public parking, parallel construction of projects and land use activities that will require further consideration. It is recommended that a Construction Traffic Management Plan (CTMP) be prepared prior to the start of construction for each stage of the work, this is included as proposed condition 17. The technical report recommends that if required, Site-Specific Traffic Management Plans (SSTMP) should be developed to manage constraints on access to affected properties.

### Specialist Review

Mr Wes Edwards, Arrive Ltd has prepared a technical specialists report which reviews the notice of requirements for the Pukekohe Transport Network in relation to transport effects and responds to submissions that are about transport. The points around the interdependency on all the Projects and the assessment of alternatives at a macro and micro scale that are outlined in section 4.9.5 above also apply to NoR 3.

Mr Edwards has identified a number of gaps in the requiring authority's assessment which relate to all NoR's as stated above in section 4.9.5.

With regard to NoR 3 Mr Edwards disagrees with the findings of the technical report submitted by the requiring authority which suggests that NoR 3 could proceed on a stand-alone basis because these proposed roads would not connect to anything in the absence of NoR 2 it appears the NoR 3 connections are entirely dependent on at least part of NoR 2 being constructed.

In terms of property access, Mr Edwards notes that properties accessed from Sim Road could make use of the roundabout proposed for the Sim Road / NoR 2 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.

In regard to an assessment of submissions, Mr Edwards states that submission 6 (P5FL, related to 328 and 412 Sim Road) raises issues around the interface with the existing KiwiRail designation, the assessment of alternatives being flawed, the take area is flawed, opposes the proposed conditions and seeks that NoR 3 is 'declined' or that the NoR is amended to respond to the concerns of the submitter. Mr Edwards does not support these submission points.

Submission 5 (Ministry of Education) requests changes to the CTMP as discussed above and Mr Edwards supports that submission point.

The requiring authority proposes to manage effects through management plans. Mr Edwards considers that the provided purpose of the CTMP is adequately described, but he considers that some amendments are required to the list of matters the CTMPs should address. With regard to proposed condition 13 Existing Property Access, Mr Edwards considers this may not provide for movement of all vehicles used on that property such as a large truck and trailer or agriculture machinery. He recommends that the condition is amended to require the access to be fit for purpose or adequate. He also recommends that the replacement or altered access be reasonable efficient, particularly with respect to additional journey length and time but acknowledges 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.

Overall, Mr Edwards supports NoR 3 with amendments to the condition 13 relating to existing property access, and the conditions specifying CTMP requirements.

#### Planning Review

I rely on the expert opinion of Mr Edwards and agree with his recommended changes to the conditions and his responses to the relevant submitters. It is noted that in relation to submission 6 (Paerata 5 Farms Limited, 328 and 412 Sim Road) Auckland Council cannot 'decline' the notice of requirement but can request that the requiring authority withdraws the requirement. In this case I rely on Mr Edwards expert opinion and support his conclusion of amending the conditions.

It is noted that the technical report submitted by the requiring authority recommends a SSTMP is prepared if required however there are no conditions that include a SSTMP. It would be helpful if the requiring authority commented on why there are no conditions including a SSTMP.

Overall, NoR 3 will provide an access from Sim Road across the NIMT and two roundabouts which will provide turn around facilities.

## 5.8.6 Construction Noise and Vibration

### Requiring Authority AEE

Effects of construction noise and vibration are addressed in section 11.5 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Construction Noise and Vibration Effects September 2023 by Joshua Dunkel, Siiri Wilkening and Claire Drewery. The technical report states that noise levels are predicted to comply with the daytime noise criteria at all existing receivers. Future receivers (residential structures) constructed within 76m of the works could experience noise levels that exceed the 70 dB LAeq noise criterion during high noise generating activities such as the pavement works, without mitigation implemented. If a critical activity has to be carried out during the night-time in close proximity to residential receivers, consultation and mitigation measures will be essential. Any night-time works are likely to be limited in duration and will be managed through the CNVMP and a Schedule (proposed conditions 20 and 21).

Compliance with construction vibration Category B standards will be achieved for the existing receivers in NoR 3. The technical report states that Category B criteria would be met at future residential structures that are 8m or more from the proposed works and commercial structures that are 4m or more from the proposed works. The daytime Category A vibration amenity criteria is predicted to be met at all existing receivers. The Category A criteria could be exceeded in future buildings if they are occupied during the works and within 21m of the roller compactor or within the emission radii identified for the other vibration generating equipment. The effect on receivers would be subject to their respective proximity to the works but could include steady vibration from the roller compactor or a small jolt from a digger which could rattle crockery and glassware.

It is recommended in the AEE that a Construction Noise and Vibration Management Plan (CNVMP) be prepared prior to construction and is included as proposed condition 20 and 21. There are also proposed conditions around what standards will be used to measure construction noise and vibration (proposed conditions 18 and 19).

### Specialist Review

Mr Rhys Hegley, Hegley Acoustic Consultants has prepared a review of the construction and operational noise and vibration assessment. Mr Hegley states that the AEE and technical report contains a lot of generic information which 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. Mr Hegley recommends that Condition 19 is changed to reflect the Waka Kotahi Condition 18 proposed for NoRs 2 and 8 and add in requirements (18(b) and 18(c)) that set out the assessment and monitoring requirements for a situation where vibration exceeds the Category B criteria. He also noted that there appears to be an inconsistency. Firstly, the noise (Condition 18) and construction (Condition 19) conditions both provide objective criteria to be complied with, where practicable. Where not, the reader is directed to the Schedule in 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. Mr Hegley recommends clarity in these conditions. He also recommends that the CNVMP and Schedule of conditions (Condition 20 and 21) 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.

### Planning Review

It is noted in the AEE that the construction of NoR 3 will take place over approximately 1 to 2 years. While the management of construction noise through CNVMP is a common requirement for infrastructure works it is noted that long duration projects require careful management to ensure effects on individual receivers are minimised.

The Ministry of Education (submission 5) is concerned about noise effects of construction on existing schools and education facilities, or any future schools developed in this area. The nearest existing schools is at Paerata Rise, 1,500- 2,000 m from the NoR 3 area and Wesley College which is 700-900m away from both segments. With the NIMT located in between. Karaka, Bombay and Pukekohe are also existing schools in the area so it is assumed that the concern is also related to construction traffic moving past the schools. It would be useful to have this clarified.

Changes are suggested in Attachment 5 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 the submitter 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.

## 5.8.7 Operational Noise

### Requiring Authority AEE

Effects of operational noise are addressed in section 11.6 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Operational Noise Effects September 2023 by Joshua Dunkel, Siiri Wilkening, Shivam Jakhu and Vitalii Zaiets. Existing Protected Premises and Facilities (PPFs) within 100m from the proposed new road edge were assessed in urban areas, and 200m for rural areas, based on NZS6806. There are two PPFs which have been identified for NoR 3 (new road). However, all PPFs for NoR 3 were predicted to receive noise levels within Category A (the desired noise criteria category) so no mitigation is proposed in addition to the lower noise road surface. Further, ambient noise levels are likely to increase as the area urbanises, so the changes in noise levels due to the Project may not be as noticeable at the time.

### Specialist Review

Mr Rhys Hegley, Hegley Acoustic Consultants has prepared a review of the construction and operational noise and vibration assessment. Mr Hegley notes that the approach in the Assessment of Operational Noise Effects is to adopt a low noise road surface across all NoRs for the control of noise to current and future receivers, however 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 6086 provided for a PPF. Mr Hegley notes that the issue with the proposed approach is that road surface alone may not achieve a reasonable level of noise to these future dwellings and receivers. Under the current proposal, and assuming that 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.

Mr Hegley recommends that the AT road surface Condition 27 be amended to match Waka Kotahi's Condition 26. Mr Hegley recommends 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. He also recommends 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) to Condition 28. The same changes are proposed for conditions 29 and 30 and changes to conditions 31 and 32.

## Planning Review

While it is noted that the current zoning of the land is partially FUZ, the purpose of this zone is to be a transitional zone and that land may be used for a range of general rural activities but cannot be used for urban activities until the site is re zoned for urban purposes. There is also a small area which the designation extends into on the northern side of the NIMT which is zoned Residential – Mixed Housing Urban Zone. As mapped in Auckland Council GeoMaps this area and surrounding FUZ area was earmarked to become a Future Urban Area between 2018 - 2022 under the Development Strategy Sequencing and Timing of Growth Map layers. The Residential – Mixed Housing Urban Zone is located in the area that is mapped as Future Urban Area 2018 and is already being developed . This means that this area close to NoR 3 could be developed prior to or during the construction of NoR 3. It would therefore be helpful if the requiring authority outlines how noise effects on activities that may arrive between designation and construction will be dealt with as requested by Mr Hegley.

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by Mr Hegley, including the additional information and changes to conditions, to ensure that the potential adverse operational effects in particular can be avoided, remedied, or mitigated.

### **5.8.8 Flood Hazard**

#### Requiring Authority AEE

Effects on flood hazard are addressed in section 11.7 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Flood Hazard Effects 12/09/2023 by Justin Kirkman. The AEE states that there may be some flood hazard effects during the construction phase (refer to section 11.7.1 of the AEE for the full list) however the details of the construction approach will be confirmed at detailed design and mitigation measures are included in the Construction Environmental Management Plan (CEMP) outlined in condition 14.

The operational flooding effects for NoR 3 relate to one overflow path. The AEE summarises that the one flow path is located within NoR 3 in the Paerata Station Connection segment. It is located in unoccupied farmland and floodplain with no dwellings nearby. It is understood that the flow path is proposed to be culverted as part of the Paerata Rail Station access road (by KiwiRail). The AEE suggests that no alteration of the culvert is likely to be required.

There is negligible flood risk to upstream land. The modelled 3.8°C climate change scenario produced an overall higher flood level. However, the flood risk rating will remain negligible based on the land use being agricultural and no buildings in the vicinity. As the land is within the FUZ and is likely to be developed it is noted that future buildings will need to set floor elevations to a suitable height to maintain compliance with the Building Code and the Auckland Design Manual. Proposed condition 12 sets out flood risk outcomes which the project shall be designed to achieve.



### Specialist Review

Mr Trent Sunich has reviewed the Assessment of Flood Hazard Effects. He states that the NoR 3 (southern Paerata Station segment) only crosses a single flow path. The land uses in proximity of NoR 3 are rural. Therefore, a negligible flood risk exists to upstream land. The modelled 3.8° climate change scenario produced an overall higher flood level. However, the flood risk rating will remain negligible based on the land use being agricultural and no buildings in the vicinity.

Mr Sunich has reviewed the proposed conditions in conjunction with Auckland Council Healthy Waters staff and has recommended changes to the flood hazard condition and inclusion of an advice note. These changes relate to simplifying condition outcomes, referencing the relevant code of practice, the introduction of overland flow specific conditions for new and existing overland flows, and requiring AT to consult Auckland Council Healthy Waters when developing the Outline Plan.

Mr Sunich acknowledges that the Assessment of Flood Hazard Effects assesses construction effects in relation to stormwater and proposes a consent condition 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.

Submission number 6 (P5FL 328 and 412 Sim Road) has raised relevant points that relate to stormwater. The table below is taken directly from Mr Sunich's review and covers the submission points raised and his response.

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
6	Paerata 5 Farms Limited (P5FL) 328 and 412 Sim Road	<p>There is no appropriate stormwater solution for the arterial road network. The NoR material contains insufficient detail on the proposed stormwater solutions for treatment and attenuation including final location of devices and the overland flow from these devices. The locations of the devices do not have consideration of future roading connections to the P5FL landholding and their elevated position in relation to the lower land to the West of Sim Road will require appropriate geotechnical consideration for slope stability.</p> <p>Future lot owners are at risk of stormwater bunds failing or spillways engaging and flooding occurring – there seems to be no allowance for easements or any other legal mechanism to allow for passage of this water between the devices, through the P5FL land and to the outlet on the downstream side of the site. The NoR also should have sought integration (or combining) with the KiwiRail designation and the associated stormwater solutions for those projects and works to ensure a more efficient use of infrastructure and land.</p> <p>The submitter opposes the conditions as they do not address concerns of the submitter (outlined above) and in addition for following reasons:</p> <p>The project should not enable any increase in flood hazard (even by 50mm) on any sites.</p> <p>(i) This creates an unacceptable hazard for which future developers and landowners will have to bear the costs of future technical work to mitigate the flood risk;</p> <p>(ii) Any new flood risk will devalue land by creating a “hazard” on sites where no such hazard existed.</p>	Decline the NoR or amend it to respond to the concerns of the submitter	<p>In the flood hazard report the applicant has listed the functionality of the components of the stormwater management system which align with typical practice of green field stormwater management outlined in Guidance Document 01. In principle I agree with the proposed functionality which will also be subject to future detailed design and regional resource consent applications for stormwater discharges.</p> <p>I have recommended amendments to the NoR conditions to limit off site flood hazard related effects.</p> <p>Other topics such as geotechnical matters, easements and coordination with other projects are matters for the applicant to respond to.</p>

### Planning Review

In terms of construction related flooding effects no submitter raised any concerns and the impact of earthworks on flood risk will be considered as part of the regional consent process. Therefore, based on the comments from Trent Sunich I consider that the potential adverse effects on flooding during construction can be avoided, remedied, or mitigated, subject to the above. This is because the CEMP condition requirement for flood hazard to be assessed during construction and the requirements of the regional consent provisions in the AUP:OP will ensure that this effect is adequately addressed.

With regard to operational effects of flooding, there is nothing to suggest that the extent of the designation is not sufficient to provide for the alignment construction and operation and any associated works for flood mitigation techniques. It is noted that P5FL (submission number 6) raised concern about flood effects. Mr Sunich has recommended amendments to the NoR conditions to limit off site flood hazard related effects. It is also considered that given that assessment of climate change related effects is developing still that AT will prior to the Outline Plan stage, review the effects of climate change in terms of the best information available at that time. It would be useful to hear from AT on whether it is proposing a condition to that effect or considers existing conditions capture this situation.

Therefore, it would be helpful for the requiring authority to provide a response at the hearing on changes to conditions suggested by Mr Sunich and a response to the submitters concerns. I consider that subject to the above, and the proposed conditions as recommended to be amended the potential adverse effects on flooding can be avoided, remedied, or mitigated.

### **5.8.9 Terrestrial Ecology**

#### Requiring Authority AEE

Effects on ecology are addressed in section 11.8 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Ecological Effects September 2023 by Ian Bredin and Sahar Firoozkoohi. The AEE states a number of positive effects which are improved blue/ green infrastructure, landscape planting and the proposed bat mitigation in association with the landscape planting berms, embankments, and stormwater wetlands is likely to improve ecological connectivity for other native fauna.

The AEE discusses construction and operation effects of/ on vegetation clearance, long-tailed bats, birds, and herpetofauna. Potential construction effects that relate to the activities authorised by the designation include the disturbance and displacement of roosts/ nests and individual (existing) long-tail bats, avifauna and herpetofauna due to construction activities (noise, light, dust etc).

The effects on long-tail bats for NoR 3 is assessed as moderate which will require mitigation in the form of a Bat Management Plan (BMP) which is included within the Ecological Management Plan (EMP) as proposed condition 23 and 24 with the level of effect post mitigation being assessed as low. The Assessment of Ecological Effects identified potential habitat in NoR 3 which may contain Kaka which are an At-Risk: Recovering bird species. However, the technical report has not assessed the level of effect and does not recommend a specific AMP condition for this NoR.

There are two herpetofauna species which are identified as TAR however, the magnitude of effects on these was assessed as negligible due to the skinks being considered habitat generalists and the local extent of construction related effects so there is no mitigation proposed.

The potential operational effects on ecological features are the loss in connectivity for indigenous fauna and disturbance and displacement of indigenous fauna and their nests/ roosts. The effects on bat species was assessed as moderate so require mitigation in the form of a BMP and AMP which are included within the EMP as proposed condition 24. The effects on herpetofauna were assessed as low so no mitigation is proposed.

#### Specialist Review

Mr Simon Chapman, Ecology New Zealand has assessed the adequacy of the information submitted by the requiring authority. Having reviewed the proposed designation conditions for NoR 3, in particular, conditions 23 and 24, Mr Chapman considers that the potential ecological effects resulting from the proposed expressway project are likely to be adequately managed by those conditions. He has pointed out that the condition (23) should include a requirement for information regarding how the survey design is 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.

#### Planning Review

There are no SEA's within the proposed designation boundary and there are no submissions related to NoR 3 that mention ecology. 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 changes to conditions he has suggested. 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.

## 5.8.10 Landscape and Visual and Urban Design Evaluation

### Requiring Authority AEE

Effects on landscape and visual values are addressed in section 11.9 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Landscape and Visual Effects Assessment September 2023 by Matthew Jones. The AEE highlights a number of positive effects such as enhanced connectivity, landscape mitigation planting, and integration of active travel routes and recreational paths with Pukekohe's 'green network' of bush and vegetated riparian margins.

The adverse construction effects on landscape and visual values are summarised in the AEE as the construction footprint, waterbodies, exposed earthworks, reduced amenity, reduced visual amenity, and temporary effects. The AEE notes that NoR 3 will provide an element into the FUZ which is consistent with the emerging urban environment anticipated through the FUZ. As such, any adverse effects on landscape character are assessed to be very low.

It is anticipated that visual effects for the operation of NoR 3 will be low. This is based upon the design working with and integrating into the surrounding topography (including the raised topography and batters for bridge over the NIMT) and improved visual amenity and user experience associated with the streetscape design, street trees, berm planting and active modes enabled along the route.

Mitigation in the form of an Urban and Landscape Design Management Plan (ULDMP) is recommended and included as proposed condition 11.

### Specialist Review

Ms Rebecca Skidmore from RA Skidmore Urban Design Limited has considered the adequacy of the information submitted by the requiring authority, responded to relevant submissions and recommended changes to the proposed conditions. Ms Skidmore notes that she generally considers the NoRs are supported by robust urban design and landscape analysis. She notes that NoR 3 provides local connections to the corridor to north and south of the Paerata train station with the northern connection crossing the NIMT rail line.

Ms Skidmore considers the requirements of these conditions do not convey the specificity of recommendations made in both the UDE and the LVEA and she recommends a number of changes to address recommendations set out in the UDE.

In relation to the submissions, Ms Skidmore states:

*"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."*

### Planning Review

It is noted that KiwiRail (submitter number 3) supports the conditions relating to the preparation of an UDLMP. However, the McKean Family Trust (submission number 6) has concerns relating to landscape and visual effects both during construction and operation from their property at 826 Runciman Road. In particular, they seek that Auckland Council recommends that the landscape and visual effects at the time of construction and operation, is not inconsistent with the FUZ and the appropriate mitigation measures will be implemented. It is noted that the effects assessment is predicated on the basis that there is going to be a change in relation to the FUZ zoned land from rural to an urbanised environment.

It would be helpful for the requiring authority to provide a response at the hearing on changes to conditions suggested by Ms Skidmore to demonstrate how the corridor will integrate with and contribute to the creation of an appropriate future urban environment and respond to the points raised in the submissions. I consider that subject to the above, and the proposed conditions as recommended to be amended the potential adverse effects on flooding can be avoided, remedied, or mitigated.

## **5.8.11 Historic Heritage and Archaeology**

### Requiring Authority AEE

Effects on historic heritage are addressed in section 11.10 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Effects on Historic Heritage September 2023 by Matthew Campbell. The AEE states that for NoR 3 there are no known historic heritage or archaeological sites. However, there may be risks during construction of uncovering unrecorded archaeological and historic heritage sites. It is recommended that further research and survey should be undertaken to support applications for HNZPTA authority before construction commences. Damage or destruction of any previously unrecorded archaeological sites that are exposed during the works can be mitigated under the provisions of the authority, and the means of mitigation detailed in an Archaeological Management Plan prepared for the HNZPTA authority application.

### Specialist Review

Ms Myfanwy Eaves, Auckland Council has noted that all matters have been addressed in the technical assessment submitted by the requiring authority in relation to NoR 3.

### Planning Review

It is considered there are no known archaeological sites within the NoR 3 designation, adequate information has been received and no condition is relevant for NoR 3. It is noted that the requiring authority has stated that applications for HNZPTA authority will be made before construction commences so that damage or destruction of any previously unrecorded archaeological sites that are exposed during the works can be mitigated under the provisions of the authority. It is understood that an Archaeological Management Plan will be prepared for the HNZPTA authority application.

### **5.8.12 Arboricultural Effects**

#### Requiring Authority AEE

Effects on arboriculture are addressed in section 11.11 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Arboricultural Effects September 2023 by Craig Webb. The AEE notes the positive effect of allowing sufficient space to plant new trees.

There are a number of trees located within the proposed designation. However, there are no trees in NoR 3 that are noted as being protected under the relevant District Plan provisions of the AUP:OP. No mitigation is therefore proposed.

#### Specialist Review

Mr Leon Saxon, Arborlab has prepared a memo covering an assessment of the submitted documents, response to relevant submissions and recommendations. Mr Saxon notes that there are no trees protected by the District Plan provisions affected within or adjacent to the designation boundary. However, he also notes that 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. As such, Mr Saxon recommends that the condition for preparing a Tree Protection Management Plan should apply to all of the designations.

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.

Mr Saxon notes that none of the submissions raised any significant issues regarding trees currently protected by District Plan rules.

#### Planning Review

There are no submissions that relate to trees. Given that vegetation removal in FUZ land is subject to regional rules, I consider that the potential adverse effects on arboriculture can be avoided, remedied, or mitigated, subject to hearing from AT in relation to addressing the potential for new trees to be protected between the time of designation and construction and how this could be addressed.

### **5.8.13 Community Effects**

#### Requiring Authority AEE

Effects on the community are addressed in Section 11.12 of the AEE. The AEE recognises that the Project provides the necessary transport infrastructure, and resulting community benefits, required to support the planned urban zoning of land in Pukekohe, Paerata and Drury West.



The AEE notes a number of the NoRs are new roads in undeveloped greenfield areas, resulting in less community impacts during construction. However, the acquisition of land will sever some properties and may prompt changes to some rural operations. Prior to construction, there may be a reduction in the existing rural community within the greenfield areas of the Project, as AT acquires properties and those properties become vacant. Notwithstanding this, the FUZ is planned to urbanise and the proposed transport networks will be implemented at the time that greenfield areas start to urbanise. Therefore, this is anticipated to be a temporary effect as the community transitions into an urban area once the land is live (urban) zoned. The amenity values in both the existing and future urban areas could also be disrupted during construction due to dust and noise generated from construction. No adverse operational effects on the community are anticipated from the NoR 3.

It is anticipated that all community effects during the construction of the Project will be temporary and can be minimised. A 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 with throughout the construction works which is described in proposed condition 8. Access and trip disruption will be managed by the CTMP (proposed condition 17) and the SCEMP proposed as conditions of the designation. Construction effects on amenity values of property can be managed by engagement with stakeholders identified through the SCEMP, as well as through the development and implementation of the CVNMP (proposed condition 20) and the CEMP (proposed condition 14).

No adverse community impacts are anticipated from the operation of the Project therefore, no mitigation is required. However, through the implementation of the ULDMP (proposed condition 11), a range of measures will be implemented to ensure the Project is appropriately integrated into the surrounding landscape and urban context.

### Planning Review

NoR 3 involves new roads in undeveloped greenfield areas. The community impacts during construction will be related to impacts on access to the Paerata Station and any new residents on the land on the northern side of the NIMT which is zoned Residential – Mixed Housing Urban Zone. However, the acquisition of land will sever some properties and may prompt changes to some rural operations. I generally agree with the assessment undertaken by the requiring authority. By providing safe and efficient connections throughout the growth area, the Project will positively impact on the health and well-being of the existing and future community. This positive effect of improving transportation efficiency and safety and supporting urban growth is expressed in the submission by YWMP Limited (submission number 2), while the submission by The Campaign for Better Transport Incorporated (submission number 8) supports the provision for cycle infrastructure as part of the Project.

The Ministry of Education (MoE) submission is the only submission received in relation to potential direct effects on community or recreational facilities although the KiwiRail submission as it relates to the Paerata Station and its operation also relates to effects on a community facility and are addressed below. The MoE submission is primarily concerned about the potential for schools located near to the Project to be affected by traffic, noise and other nuisance effects arising from future construction works of the transportation network. The MoE is therefore seeking to ensure that appropriate conditions are included in the designations to mitigate any potential adverse effects associated with the construction of the proposed transport network. Those conditions relating to transport have been addressed in Section 5.8.5 above. The other requested changes to the proposed conditions relate to the MoE and schools being included as part of the Stakeholder Communication and Engagement Management Plan (SCEMP) and being included as a stakeholder in the Construction Traffic Management Plan (CTMP). As a component of a community that is potentially sensitive to the Project, particularly during the construction phase, inclusion of the MoE and schools as part of the SCEMP and CTMP is supported. Refer to the recommended amended conditions in Attachment 5 of this report.

It would be helpful to hear from the requiring authority on any potential impacts on schools and the changes to the conditions requested by the MoE as noted above.

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 requiring authority's response to the MoE's requested changes to the conditions and KiwiRail's concerns being addressed.

#### **5.8.14 Property and Land Use**

##### Requiring Authority AEE

Direct effects on property and land use are addressed in Section 11.13 of the AEE. The AEE notes that potential adverse effects on existing private properties have been reduced where practicable through the development of the Project concept design and the proposed designation boundary.

The AEE notes that potential adverse effects on the development of private property may arise. However, it is noted in the AEE that development is not precluded within the proposed designated area. AT will work with landowners and developers under the process in s176(1)(b) of the RMA to provide written consent for development within the proposed designations, provided those works will not prevent or hinder the work authorised by the proposed designation.

For AT's NoRs, a land use integration process (LIP) is included in the conditions for NoR 3 (proposed condition 10). This sets out a process where developers can request information to inform land use development adjacent to the transport corridors. This will support development that may go ahead of the proposed transport corridors and provides opportunities to co-ordinate and integrate infrastructure and development.

Section 11.13.1 of the AEE notes that land required for the permanent work will be acquired prior to construction and if temporary occupation is required, then the land 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 such as the development and implementation of a SCEMP, CTMP, Construction Noise and Vibration Management Plan (CNVMP) and Construction Environment Management Plan (CEMP) prior to the start of construction are noted as appropriately minimising disruption to affected properties and allow the continued use of the properties where practicable. Potential construction effects will generally be temporary.

The post construction effects are noted in section 11.13.2 of the AEE where it is noted that following the Completion of Construction, the designation boundary will be reviewed and any land not required for the permanent work or for the ongoing operation, maintenance or mitigation of effects of the Project will be reinstated and reintegrated in coordination with directly affected landowners or occupiers. The timing for this process occurring is unstated in the AEE and there are no conditions related to this process.

#### Planning Review

Submission 8 (Campaign for Better Transport Incorporated) has included the following in regard to the lapse period:

*“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.”*

Submission 6 (Paerata 5 Farms Limited) has included the following in regard to the lapse period:

*“The 20 year lapse date sterilises the development of the P5FL landholding. As identified previously, the land is earmarked to be rezoned and the rezoning should be enabled to aligned to meet the required growth capacity. There was an expectation that this land would have been rezoned by now (through the FULS strategy), but this has been delayed by Council. The NoR is significantly larger than the road boundary in order to enable construction of the roads, and this has the potential to create a disconnect between the timing of development and the implementation of the road network should the growth capacity of the P5FL site be required to come online sooner than the 20 year lapse date, and thus jeopardises the ability to enable subdivision and development designs on the P5FL site which aims to create a successful and high quality integrated urban environment.”*

Overall, Paerata 5 Farms Limited (P5FL) seeks that the Council recommended that NoR 3 be declined or that the NoR is amended to respond to the concerns of the submitter. It is noted that in relation to submission 6 (P5FL) Auckland Council cannot 'decline' the notice of requirement but can request the requiring authority withdraws the requirement.

Since the NoRs were served on Auckland Council, pursuant to Section 178(2) of the RMA, the proposed designations have had adverse effects on normal property and land use activity on both adjacent land and particularly directly affected land as no person may do anything that would prevent or hinder the public work, project, or work to which the designation relates unless the person has the prior written consent of the requiring authority.

In terms of the effects on the directly affected land, while I note that the Public Works Act 1991 (PWA) is the legislative framework under which entitled landowners will receive compensation and that this is a non-RMA process, the restrictions imposed on private property is an adverse land use effect. The proposed 20 year lapse period of the NoRs adds to the uncertainty and this potential outcome.

YWMP Limited (submission number 2) support the transport infrastructure and the potential for urban growth. P5FL (submission number 6) has specifically questioned the lapse period, stating that the 20 year lapse period sterilises their land holdings from future development, expansion or operating safely and efficiently. The submitter asks that the NoRs be declined or that the NoRs be amended to address the submitter's concerns.

P5FL has in its submission also indicated concern about the conditions of NoR 3 (and Waka Kotahi's NoR 2) and is concerned about the necessity for the two east-west road connections (three including the KiwiRail designation) through the submitter's landholding. P5FL have questioned the alignment of the designation and the construction extent as their landholding appears to be affected by the KiwiRail designation and NoR 3. The loss of development potential on the FUZ land is a key concern as well as the concern that no provision has been made for potential future road connections from the submitter's land. Concerns about the creation of 'no man's land' and the negative impacts on future urban environmental outcomes for the submitter's land are also expressed.

It would be helpful to hear from the requiring authority in response to the issues raised by P5FL in relation to its property and land use effects.

While it is noted that the conditions set includes a 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 and occupiers who for potentially 20 years will need permission from Waka Kotahi to undertake work on their own land. Providing some certainty on what can be done on the land without needing to seek approval from Waka Kotahi given the long lapse period would potentially assist many directly affected landowners and occupiers.

The timing for the process of removing the designation occurring is unstated in the AEE and there are no conditions related to this process. It would be useful to understand why not.

It would be useful to hear from the requiring authority as to whether the concerns raised in the submission in relation to potential impacts on FUZ land (that is or will be subject to plan changes) are appropriately addressed through the Project design and alignment and proposed conditions. It would also be useful to hear from the requiring authority as to whether potential impacts on properties and businesses raised in the above-mentioned submission are also appropriately addressed through the Project design and alignment and proposed conditions.

At this time, I consider that the potential adverse effects on property and land use can potentially be appropriately remedied or mitigated, but this assessment is subject to the above information being provided and potentially changes to the Project design and alignment and conditions to address how the ongoing use of the directly affected land will be enabled given the long lapse period sought.

### **5.8.15 Network Utility Effects**

#### Requiring Authority AEE

Effects on network utilities are addressed in section 11.14 of the AEE. The following network utilities are identified in the AEE as being affected by NoR 3:

- KiwiRail
  - North Island Main Trunk Railway Line (Designation 6302)
  - Paerata Interchange and Accessway (Designation 6311)
- Counties Energy – ADSS fibre optic cable and medium and high voltage cables.

To undertake work in accordance with a designation on land where there is an existing designation in place, the written consent of the requiring authority for the earlier designation is required under section 177(1)(a) of the RMA. This written approval has not been obtained from KiwiRail at this stage but AT indicates that it is expected to be obtained at a later date during the detailed design stage of the Project.

To mitigate any potential adverse effects on network utilities, a NUMP (proposed condition 26) will be prepared prior to the construction of the Project. The NUMP will set out a framework for protecting, relocating and working in proximity to existing network facilities. The NUMP 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. Submissions to NoR 3 have been received from the following requiring authorities and network utilities:

- Telecommunication submitters (Aotearoa Towers Group (ATG), Chorus New Zealand Limited (Chorus), Connexa Limited (Connexa), One New Zealand (One NZ) (formally Vodafone New Zealand Ltd) and Spark New Zealand Trading Limited (Spark));
- KiwiRail Holdings Limited (KiwiRail);
- Watercare Services Limited (Watercare); and
- Counties Energy Limited (CEL).

The Telecommunication submitters group point out that none of its group are listed in Section 11.14 of the AEE despite having existing infrastructure within and around the proposed designated boundaries. The Telecommunication submitters group therefore seek to ensure that existing and potential future telecommunications infrastructure in the Project corridors are adequately addressed and oppose the NoR if their concerns are not addressed. The submission by the Telecommunication submitters group highlights that 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. This integration is provided for through the proposed LIP condition.

However, the Telecommunications Submitters group seek amendment to the proposed NUMP condition 26(d) and an advice note to be added to the NUMP conditions as shown in italics and underlined below:

*(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.*

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).*

Subject to AT's proposed conditions, including in particular Conditions 5, 10, 11 and 26, KiwiRail's submission supports NoR 3 and seeks ongoing dialogue and engagement before detailed design starts thus enabling better planning and integration between network utility providers through greater communication and collaboration.

Watercare's submission states that Watercare neither supports or opposes NoR 3, but seeks to ensure that any decisions made respond to the issues raised in this submission. In particular, that the works provided for under the NoR avoids, remedies or mitigates potential adverse effects on Watercare's ability to provide water and wastewater services now and in the future. In relation to NoR 3, Watercare acknowledges the engagement to date and seeks early engagement to enable opportunities to plan and future proof the delivery of assets to provide for well-

functioning urban environments. In addition, 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. While supporting the proposed NUMP, SCEMP and Land use Integration Process (LIP) conditions, Watercare seeks that a new condition requiring the preparation of a "Network Utility Strategic Outcomes Plan" (NUSOP) be added to the NoR to futureproof assets in consultation with network utility operators such as Watercare. If the NUSOP condition is not included in the NoR, Watercare seeks amendment to the proposed NUMP condition.

The CEL submission indicates general support for the NoR but notes omissions in terms of the information about its existing overhead and underground infrastructure provided in the drawings submitted with the NoR. In addition, CEL require further consultation and detailed planning concerning parts of NoR which may impact the location and safe operation of its assets and 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.

There is no specific discussion about effects on the above utilities or assets in section 11 of the AEE.

In relation to the area of Sim Road subject to NoR 3, it is noted that 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. Therefore, a network utility would need to obtain a Works Approval Permit from Auckland Transport before undertaking works within the road network that is part of the proposed designated land but Proposed Condition 5 that sets out when such works do not need Auckland Transport approval under section 176(1)(b) of the RMA would also apply. If there are new roads created in the FUZ these provisions would also apply.

It will be helpful to hear from the requiring authority based on the issues raised by the submitters if the mitigation proposed in the form of the NUMP (condition 26) and condition 5 i should be amended.

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.

### **5.8.16 Effects conclusion**

In regard to the overall effects of NoR 3, I consider that subject to the further amendments to the conditions recommended above and included in Attachment 5 to this report, the potential adverse effects on the environment from the construction and operation of the NoR 3 can be appropriately avoided, remedied or mitigated.



## 5.9 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.

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

Highly productive land is defined in the National Policy Statement for Highly Productive Land 2022 (NPS-HPL) as:

*...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)*

Auckland Council has not yet notified a change to the Regional Policy Statement mapping highly productive land in accordance with the NPS-HPL. Part of the NoR 3 designation boundary extends into the Highly Productive Land –based on Transitional definition from the NPS-HPL as mapped in Auckland Council Geomaps (refer to Figure 5-2).

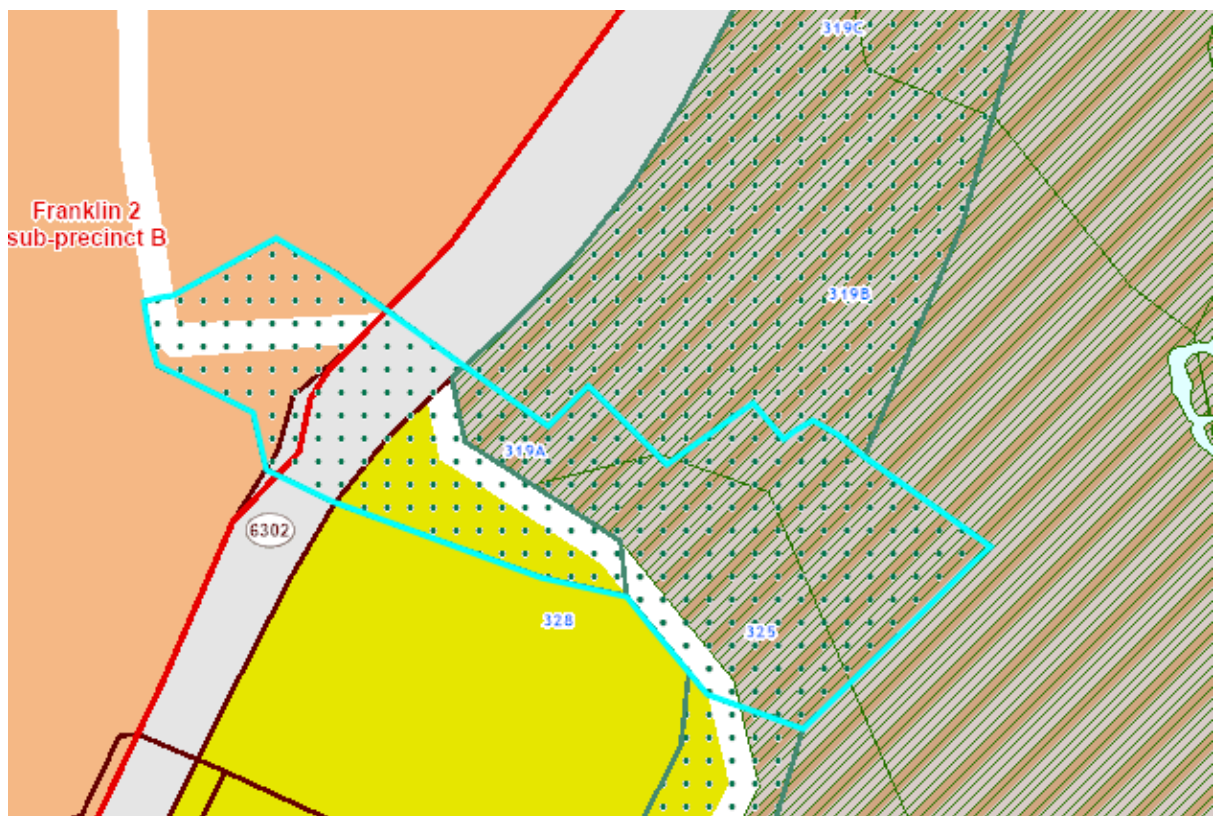


Figure 5-2 Highly Productive land – Transitional definition from the NPS-HPL – green horizontal lines [Source: Auckland Council Geomaps]

The sole objective of the NPS-HPL is that highly productive land is protected for use in land-based primary production, both now and for future generations. The applicable policy as the designation relates to the use and development of land is Policy 8 that states “Highly productive land is protected from inappropriate use and development.” Under Clause 3.9(1) of the NPS- HPL territorial authority’s must avoid the inappropriate use or development of highly productive land that is not land-based primary production. However, Auckland Transport is able to rely on the fact that Clause 3.9(2) makes provision for the use or development of land for certain activities in certain circumstances. These circumstances includes where it is for an activity by a requiring authority in relation to a designation or a notice of requirement (Clause 3.9(2)(h)), provided that under Clause 3.9(3) the territorial authority must take the following measures to ensure that any use or development on highly productive land:

*(a) minimises or mitigates any actual loss or potential cumulative loss of the availability and productive capacity of highly productive land in their district; and*

*(b) avoids if possible, or otherwise mitigates, any actual or potential reverse sensitivity effects on land-based primary production activities from the use or development.*

The guidance produced to assist in the implementation of the NPS-HPL<sup>6</sup> notes that *minimises or mitigates* a loss of productive capacity could include:

- The location of the activity – whether it can be sited somewhere on the subject site that minimises the impact on the productive capacity of HPL
- The footprint of the activity – whether efforts have been made to keep the footprint of the activity as small as possible to minimise the actual loss of HPL
- Clustering of activities – whether there is an option to group a number of activities in a similar location to mitigate the cumulative loss of HPL that would occur through activities being spread out across a wider area of HPL (e.g., clustering of buildings, co-location of telecommunications infrastructure or containing multiple activities in the same building, such as using an existing residential dwelling for a home business or visitor accommodation activity, rather than constructing multiple buildings)
- Co-existing with land-based primary production – whether the activity can be designed in such a way that is does not preclude being able to carry out land-based primary production around the activity (e.g., the potential for using the land around specified infrastructure to be used for vegetable production or animal grazing).

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<sup>6</sup> Ministry for the Environment. 2023. National Policy Statement for Highly Productive Land: Guide to implementation. Wellington: Ministry for the Environment.

It is noted that an assessment of the NPS-HPL is undertaken in section 12 of the AEE but this does not identify NoR 3 as being relevant. However, as stated above, part of the proposed designation boundary extends into the mapped Highly Productive land – Transitional which is also zoned Rural – Mixed Rural Zone so the NPS-HPL is relevant to NoR 3. The majority of NoR 3 is located outside of the Highly Productive Land – Transitional and Mixed Rural Zone and the operational elements of the proposed road will not occupy all of the designated land as some of it will be just used during construction. NoR 3 will not fragment highly productive land as the designation is on the boundary.

In terms of Clause 3.9(3)(b) and the actual or potential reverse sensitivity effects the main effect relates to construction and operational noise. These effects have been assessed in section 4.8.6 and 4.8.7 above but not specifically in terms of impacts on production activities.

In relation to the proposed future use of this site as a new road, it is noted that AT is an entity that falls under ‘specified infrastructure’ as defined in the NPS-HPL

Clause 3.9.(2) of the NPS-HPL outlines the circumstances where use or development of highly productive land is appropriate, and this includes:

*(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**:...*

Functional need and operational need are not defined in the NPS. ‘Functional need’: is defined in the National Planning Standards 2019, National Policy Statement for Freshwater Management 2020 (NPS-FM) and the National Policy Statement for Indigenous Biodiversity (NPS-IB) as “the need for a proposed activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment”.

Operational need” is defined in the National Planning Standards 2019 and the NPS-IB as “the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints”.

As outlined in section 5.13 and section 5 of the AEE, AT has considered other sites, routes and methods and in assessing these options using a multi criteria analysis, AT have chosen this preferred option for the location of NoR 3. As outlined in section 5.14 and section 12 AT have a functional and operational need to traverse the areas that are planned for growth and notes that this will not preclude the balance of the highly productive land from being used by land-based primary production.

### **5.9.2 National Policy Statement on Urban Development 2020 (NPS-UD)**

The National Policy Statement on Urban Development (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 (Objective 1). As stated in the AEE, within the NPS-UD Auckland is recognised as a Tier 1 urban environment and is therefore subject to a greater policy direction in terms of intensification and density of urban form. The NPS-UD directs that urban development is integrated with infrastructure planning and funding decisions and is strategic over the medium to long term. The AEE states that the Pukekohe Transport Network will support and enable growth by protecting improved and new transport corridors that will support Auckland Council's growth aspirations for the growth areas of Drury West, Paerata and Pukekohe area, including intensification or density of growth resulting in more efficient urban land development. This is becoming increasingly important as a result of private plan changes being lodged with Auckland Council, and developer interest around Pukekohe identified via engagement with developers and landowners. It will also support transformational mode shift from private vehicles to public transport, walking and cycling. In particular, the network provides direct connections to the rapid transit network (rail stations and rail network) and provides walking and cycling and new bus routes for existing and future communities.

I agree with these conclusions and consider that the NoRs, including NoR 3, will support and enable future growth that is proposed while also promoting and providing for active modes of transport. For NoR 3 in particular it will provide a connection across the NIMT and will provide turn around facilities in the form of roundabouts.

### **5.9.3 National Policy Statement on Freshwater 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.

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.

However, in the AEE the relevant matters have been screened to inform the concept design, options assessment, the designation boundary, and future resource consents. The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-FW because:

- The options assessment assessed the ecological impacts of a variety of options including extent of effects on stream/ waterway ecology as well as the consideration of natural wetlands under the NPS-FM.

- Through the alternatives assessment and design refinement process the requiring authority have sought to avoid wetland areas and minimise impacts on rivers and waterbodies where practicable. Where avoidance is not practicable, design refinements have looked at ways to minimise effects.
- Stormwater discharge quality will be managed through the use of soft stormwater infrastructure where possible such as swales and stormwater wetlands. An integrated stormwater network will be designed at the detailed design/ regional consenting stage that is sensitive to receiving environments, recognising capacity constraints of streams and the importance of maintaining or enhancing the quality of freshwater.

I concur with this assessment under the NPS-FW and Council's ecology specialist also agrees with the management approach (subject to amendments). In that regard, I agree that NoR 3 gives effect to the NPS-FW, subject to the conditions, as recommended to be amended.

#### **5.9.4 National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB)**

The National Policy Statement for Indigenous Biodiversity (NPS-IB) is an essential part of our response to biodiversity decline in Aotearoa. It provides direction to councils to protect, maintain and restore indigenous biodiversity requiring at least no further reduction nationally.

The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-FW because:

- The options development and assessment considered existing and likely sensitive ecological features and environments and sought to locate the designation boundary outside the Significant Natural Areas (mapped as Significant Ecological Areas (SEAs) in the AUP:OP).
- The Project seeks to maintain indigenous biodiversity through the implantation of the EMP as required by proposed condition 24.

I concur with this assessment and note that there are no SEA's which are within the proposed designation boundary.

#### **5.10 Regional Policy Statement (Chapter B of the AUP:OP) (RPS)**

The RPS sets the strategic direction for managing the use and development of natural and physical resources throughout Auckland. The following sections of the RPS are considered relevant to the NW Local Arterial NoRs:

- Chapter B2 Tāhuhu whakaruruhau-ā-taone – Urban Growth and Form
- Chapter B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao – Infrastructure, transport and energy
- Chapter B4 Te tiaki taonga tuku iho – Natural heritage

- Chapter B5 Ngā rawa tuku iho me te āhua – Historic heritage and special character
- Chapter B6 Mana Whenua
- Chapter B7 Toitū te whenua, toitū te taiao – Natural resources
- Chapter B10 Ngā tūpono ki te taiao – Environmental risk

The requiring authority has assessed the Project against the relevant provisions of the RPS in Section 12 Table 12-1. Table 4-1 below sets out the RPS Chapters in the AUP:OP and the theme set out in table 12-1 of the AEE in which the RPS is addressed.

**Table 5-1 AUP:OP RPS Chapter and Table 12-1 themes**

<b>Chapter</b>	<b>Theme identified in table 12-1 of AEE</b>
B2 Tāhuhu whakaruruhau ā-taone - Urban growth and form	Urban growth and development capacity
	Natural hazards
	Urban form and quality design
B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy	Urban growth and development capacity
	Enabling infrastructure and transport
	Enabling infrastructure within an overlay and in addition to the above
	Urban form and quality design
B6 Mana Whenua	Manawhenua
B7 Toitū te whenua, toitū te taiao - Natural resources	Manawhenua
	Indigenous biodiversity and ecological values
	Freshwater
B9 Toitū te tuawhenua - Rural environment	Urban growth and development capacity
B10 Ngā tūpono ki te taiao - Environmental risk	Natural hazards

I generally agree with the assessment under the RPS provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

## **5.11 Auckland Unitary Plan**

The AUP:OP provisions are addressed in Section 12 Table 12-1 of the requiring authority's AEE.

### 5.11.1 Chapter D overlays

NoR 3 is subject to a range of overlays in the AUP:OP including the following:

- D1: High Use Aquifer Management Areas Overlay [rp]

The provisions of Chapters D1 are regional provisions. Therefore, an assessment of these will be required at the regional resource consent stage.

### 5.11.2 Chapter E Auckland-wide

NoR 3 is subject to a range of Auckland-wide provisions in the AUP:OP and the requiring authority have assessed the following:

- E1: Water quality and integrated management
- E11: Land disturbance – Regional
- E12: Land disturbance – District
- E15: Vegetation management and biodiversity
- E17: Trees in Roads
- E25: Noise and vibration
- E26: Infrastructure
- E27: Transport
- E36: Natural hazards and flooding

I generally agree with the requiring authority's assessment under the Auckland-wide provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

I note that Table 12 -1 did not consider the following Auckland -Wide Chapters:

- E2 Water quantity, allocation and use
- E3 Lakes, rivers, streams and wetlands
- E8 Stormwater - Discharge and diversion
- E9 Stormwater quality - High contaminant generating car parks and high use roads
- E24 Lighting

While I recognise that the effects of stormwater discharges (quality and quantity), and discharges to streams and works in streams are the subject of regional consents, it would be helpful if these had also been considered in Table 12.1 especially given the large amount of new impervious area proposed and the impact on the stream the new road will cross resulting in works and discharges. I also note that lighting effects have been recognised there is no assessment in terms of relevant objectives and policies.



### **5.11.3 Chapter H Zones and Chapter I Precincts**

NoR 3 is located in the following zones: Future Urban Zone (H18); Residential – Mixed Housing Urban Zone (H5) ; Rural – Mixed Rural Zone (H19); and it crosses into the Strategic Transport Corridor Zone (the NIMT) (H22). Part of NoR 3 also extends into Franklin 2 sub-precinct B.

I generally agree with the requiring authority's assessment under the Chapter H and I provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

### **5.12 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 Appendix A to the AEE. Sections 5.2 to 5.5 of Appendix A to the AEE discuss the nature of the alternative assessment and design refinements that have taken place in relation to NoR 3.

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'<sup>7</sup>.

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.

### **5.13 Reasonable necessity for work and designation – section 171(1)(c)**

The requiring authority has set out its specific project objectives for NoR 3 in the Form 18 documents and in section 6, Table 6-1 of the AEE. These are listed in the AEE as follows:

- Improves connectivity between and within Paerata.
- Supports Vision Zero and road safety outcome.
- Supports resilience and the existing transport network by providing new transport connections.

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<sup>7</sup> Waimairi District Council v Christchurch City Council C30/1982

- Supports planned urban growth and the future transport network by providing new connections within new future urban communities.
- Supports travel choice by providing for all modes of transport.
- Contributes to mode shift and the transition to a low carbon transport network by providing for active modes and connections to the Paerata Rail Station.

The method of designation is considered in the AEE as reasonably necessary to achieve the objectives because it enables the identification and protection of the land required for the Project for an extended duration. I agree with this assessment and conclude that the works and designations are reasonably necessary to achieve the requiring authority's objectives.

#### **5.14 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. In this case the non-RMA documents are considered relevant.

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 Table 12.1 of the AEE. I generally concur with the assessments and conclusions of the AEE on any other matter and the range of other documents listed.

I also consider that the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 NES (Soil) is a relevant other matter that has not been considered or given regard to specifically.

The NES (Soil) provides a nationally consistent set of planning controls and soil contaminant values to ensure that land affected by contaminants in soil is appropriately identified and assessed before it is developed and, if necessary, the land is remediated or the contaminants contained to make the land safe for human use.

In Form 18 the requiring authority has listed resource consent under the NES (soil) as being required but are not sought at this time. It is considered the addition of an advice note to state this is appropriate to ensure this is captured as part of the designation.

I also note that the AEE refers to the Draft Future Development Strategy (FDS) which is considered an 'other matter'. It would be helpful for the requiring authority to advise if, now that the FDS has been finalised, the assessment would change.

## 5.15 Designation lapse period extension – section 184(1)(c)

As outlined in section 5.8.15 it would also be helpful to hear from the requiring authority in response to the issues raised on how the impact of the requested 20 year lapse period could be mitigated. 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.

## 5.16 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. There is nothing specific terms of NoR 3 that has been addressed. 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.

## 5.17 Conclusions

The requiring authority has lodged NoR 3 under section 168 of the RMA for the new Paerata Connections.

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 3 should be confirmed subject to conditions and with modifications, for the following reasons:

- The notice 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 notice of requirement is generally consistent with the relevant AUP:OP provisions.
- The notice of requirement is 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.

## **5.18 Recommendation and conditions**

### **5.18.1 Recommendation**

Subject to new or contrary evidence being presented at the hearing, it is recommended that NoR 3 be confirmed by the requiring authority, subject to the amended and additional conditions, set out in Attachment 5 to this report.

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

- The notice of requirement are 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 of requirement is consistent with and give effect to the relevant national environmental standards, national policy statements and the AUP:OP.
- 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 of requirement is reasonably necessary to achieve the requiring authority's objectives.
- Restrictions, by way of conditions attached to the notice of requirement have been recommended to avoid, remedy or mitigate adverse environmental effects associated with the works.

### **5.18.2 Recommended conditions**

The conditions set recommended by the reporting planner for NoR 3 are set out in Attachment 5 to this report.

## 6 NoR 4 Pukekohe North-East Arterial

### 6.1 Proposal

The Pukekohe North-East Arterial (NoR 4) is approximately 4km long and is a new transport corridor that travels around the north eastern side of Pukekohe, connecting from SH22 in the northwest to Pukekohe East Road in the South-East (refer to Figure 6-1 below). It connects the strategic corridors at SH22 (at the Northern extent of the Pukekohe North-West Arterial NoR 7), crosses over the NIMT and connects to the Drury to Pukekohe Link NoR 2 and Pukekohe East Road proposed to be upgraded by NoRs 5 and 8, shown in Figure 9-24 of the AEE. Its primary function is for general traffic, freight, an active mode links between future neighbourhoods and alleviating traffic on existing roads at Cape Hill Road and Valley Road.

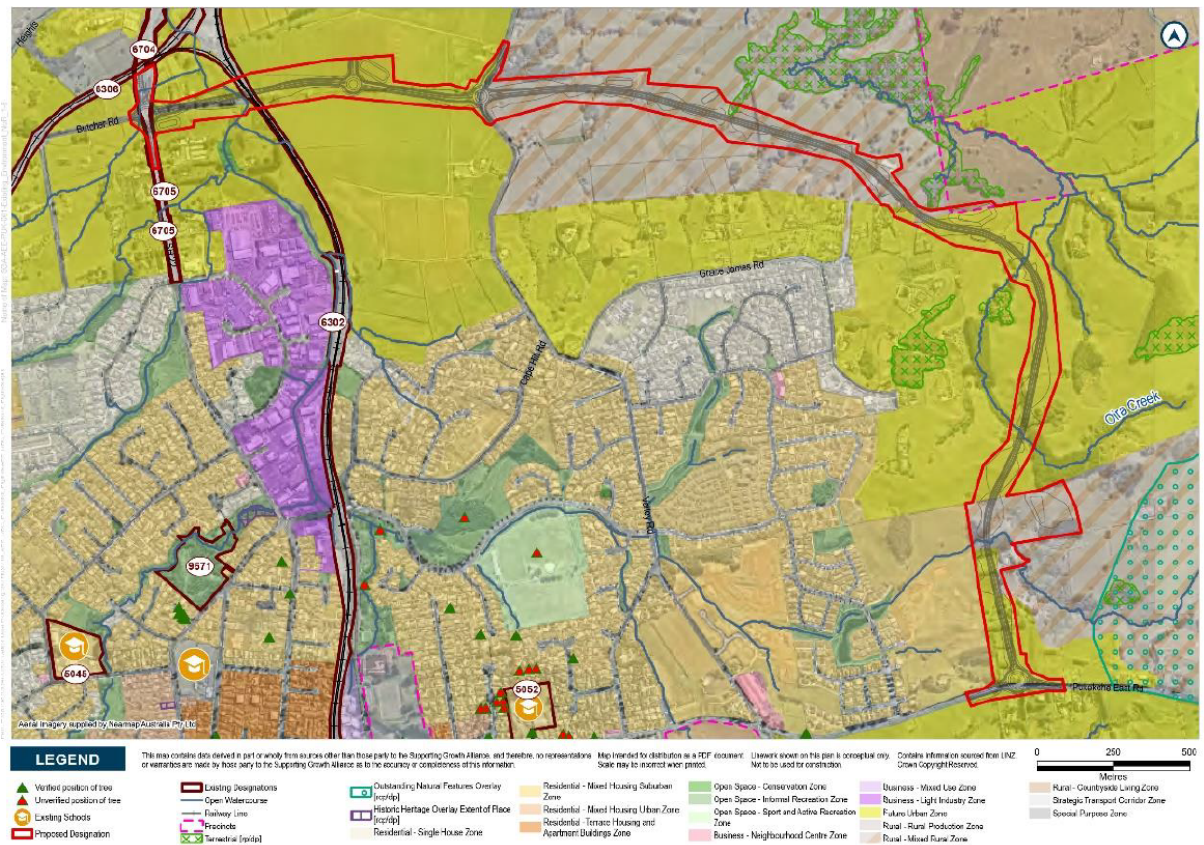


Figure 6-1 NoR 4 North-East Arterial [Source: AEE]

The key features of the designation include:

- An indicative 24m wide cross section with two lanes for general traffic and active transport facilities proposed on both or one side of the corridor.
- Seven bridges over the Whangapouri Creek, the NIMT, and other unnamed streams and tributaries.
- Six new stormwater wetlands and new culverts.

## **6.2 Affected Land**

The designation plans are provided in Volume 1 For 18 Attachment A: Designation Plans and the schedule of directly affected properties is provided in Volume 1 Form 18 Attachment B: Schedule of Directly Affected Properties of the NoR. The plans together with the schedule provided describe the land that will be directly affected and required for the project and associated works.

As noted in the AEE, there will be 32 properties directly affected (i.e. the designation boundary will extend across these properties). Of the 32, 29 properties are on privately owned land totalling approximately 501,981m<sup>2</sup> and 3 rail properties totalling approximately 3,515m<sup>2</sup>. Land use is pastoral and rural-residential.

NoR 4 is located on land zoned primarily in the FUZ or the Rural – Mixed Rural Zone, with very small areas of Rural – Countryside Living Zone, Residential – Mixed Housing Suburban Zone (a very small part located near Mill Road) and Strategic Transport Corridor Zone within the designation extent. It includes part of Cape Horn Road and a section of unformed road between the NIMT and Paerata Road (SH22) and a section of Paerata Road south of the Mission Bush Branch rail overbridge.

The proposed designation extent also includes a number of overland flow paths, floodplains and flood prone areas.


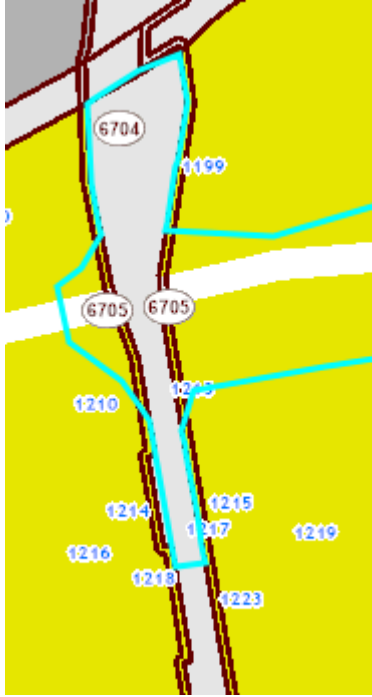
## **6.3 Site, locality, catchment and environment description**

This report relies on the site and environment descriptions provided by the requiring authority as set out in sections 9.8 of the AEE supporting the NoR and within each of the technical assessments. The requiring authority has set out the approach to the likely receiving environment as assessing the effects on the environment as it existstoday 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. It sets out the land use today, zoning type, likelihood of change for the environment (ranging from low to high) and the likely future environment.

The AEE notes that NoR 4 interfaces with an unnamed tributary of the Whangapouri Creek and unnamed tributary of the Oira Creek. The existing land use is described in the AEE (section 9.9.2) as pastoral land with a small pocket of rural residential development. The Pukekohe East Tuff Ring is located to the east as close as 115m away. The project is adjacent to three SEA and interfaces with SEA\_T\_4375 as a small part of the SEA is within the designation boundary.

## 6.4 Other designations, notices of requirement and consent applications

The AEE contains a table of the interface with other projects. The table below summarises those related to NoR 4.

Project	Interface with NoR 4 (teal)	Status
<p>KiwiRail NIMT</p> 	<p>NoR 4 crosses the NIMT (designation reference number 6302).</p>	<p>Given effect to. This is a primary designation.</p>
<p>SH22</p> 	<p>NoR will overlap with this designation (reference numbers 6704 and 6705).</p>	<p>Given effect to. These are primary designations.</p>
<p>1199 Paerata Road</p>	<p>NoR 4 interacts with this property.</p>	<p>Resource consent was approved dated 3 December 2020 for the establishment of a storage facility at the northern area of the site.</p>

## 6.5 Submissions

Twelve submissions were received from:

Submission number	Submitter Name	Position
1	Gerald Baptist	Neutral
2	Telecommunications Submitters	Oppose in part
3	Stephen Smith	Support
4	Pukekohe Industrial Park and Storage Limited	Support with amendments
5	Heritage New Zealand Pouhere Taonga	Support
6	Simon Burgoyne	Neutral
7	KiwiRail Holdings Limited	Support
8	Watercare Services Limited	Neutral
9	Ministry of Education	Neutral
10	Siobhan Ainsley	Neutral
11	Counties Energy Limited	Support with amendments
12	The Campaign for Better Transport Incorporated	Neutral

Copies of submissions are included in Attachment 1.

The issues raised in submissions are addressed throughout section 6.8 of this report.

## 6.6 Local Board Views

NoR 4 is located on land within the boundaries of the Franklin Local Board and so views were sought from them. The Board provided their view on information on Te Tupu Ngātahi Supporting Growth on Future Transport Networks Pukekohe-Paerata and south Drury provided to the local board prior to a meeting on 27 June 2023 as noted in the AEE and have more recently considered the NoRs after notification. The Local Board views are provided in Attachment 2 to this report however it is noted that the Local Board view was to support NoR 4.

## 6.7 Consideration of the notice of requirement 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 this NoR, 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 sections 6.9, 6.10, and 6.11 below. Section 171(1)(b) is addressed in section 6.12 below. Section 171(1)(c) is addressed in section 7.30 below. Section 171(1)(d) is addressed in section 7.32 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.<sup>8</sup>*

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. Refer to section 7.36 below for our recommendation.

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<sup>8</sup> See Estate of P.A. Moran and Others v Transit NZ (W55/99)

## **6.8 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. The relevant specialist reports are referred to and are included in Attachment 3. Submissions have also been considered and are referred to where relevant.

### **6.8.1 Effects to be disregarded - Trade competition**

I do not consider that there are any trade competition effects.

### **6.8.2 Effects that may be disregarded – Written approvals**

No written approvals were included in the notice of requirement.

### **6.8.3 Positive effects**

The AEE describes the positive effects of the project which are summarised as:

- 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.

The AEE also refers to positive landscape and visual, arboriculture, community and urban design effects. The AEE specifically refers to the positive effects for NoR 4 that provides viewing opportunities of Te Māunu a Tūmatauenga pā, to the east of the designation. This pā sits upon a natural bluff and landform and is identified as an Outstanding Natural Landscape (ONL) within the AUP:OP.

#### Specialist Review

Wes Edwards of Arrive Ltd has reviewed the transport assessment 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.

He also notes that the assessment material provided by the requiring authority evaluates the benefits of the Projects assuming that all development would occur with or without the Projects however Mr 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 enabled through NoR 4 will have significant positive transport effects for the reasons outlined in the AEE. The positive community effects are similar to the transport effects and I agree with the AEE in terms of those.

The positive terrestrial ecology effects identified in the AEE appear to be related largely to the delivery of stormwater management measures and landscaping. As outlined in the AEE and the Assessment of Ecological Effects<sup>9</sup> submitted in support of the AEE specific assessments of the current conditions along the route have not been undertaken in relation to the current conditions of the ecological values present.

It is assumed that the best practice measures that will be expected at the time that the resource consents are applied for, will deliver the claimed enhancements / positive effects on the existing environment. Therefore, it is agreed that there will be positive effects given the extent of exotic forest, exotic grassland, exotic scrub, Kahikatea forest, planted vegetation, tree land, Pūriri Forest and Taraire, tawa, podocarp forest that is identified as being within and adjacent to the NoR 4 designation extent and the opportunity through the works to improve indigenous biodiversity. However, it is not clear how the works will affect the specific values that are present or the scale of the positive terrestrial ecology effects of the NoR at this time.

There are a number of matters listed under Landscape and Visual that are also linked to urban design benefits that I agree will be positive effects and contribute to the creation of an appropriate future urban environment. These include enhanced connectivity; integration of active travel routes and recreational paths and reduction in speed and new landscaping that will create attractive environments which can enhance the built character.

Also listed as a positive effect is the addition of trees in the new cross sections to enhance the urban landscape where there is room. I agree that these are potential positive effects. The challenge in terms of the assessment of the scale of these positive arboriculture and landscape effects and the reliance on the concept plan and project description set out in NoR 3 in the future as established by Condition 1 for NoR 4 that states:

*Except as provided for in the in the conditions below and subject to final design and Outline Plans(s) works within the designation shall be undertaken in general accordance with the Project description and concept plan in Schedule 1....*

The Project Description for NoR 3 as set out in Schedule 1 of Form 18 is:

*“The proposed work is for the construction, operation and maintenance of a new transport corridor between State Highway 22 and Pukekohe East Road including active transport facilities and associated infrastructure. The proposed work is shown in the following Concept Plan (Figure 1) and includes:*

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<sup>9</sup> Prepared by Ian Bredin and Sahar Firoozkoohi September 2023

- (a) *A transport corridor including active mode facilities;*
- (b) *Associated works including intersections, bridges, embankments, retaining walls, culverts, stormwater management systems;*
- (c) *Changes to local roads, where the proposed work intersects with local roads; and*
- (d) *Construction activities including construction areas and the re-grading of driveways.”*

The Concept Plan in Form 18 is at such a level that there is no detail to be seen although there is also a requirement to deliver a concept plan under condition 11(g).

Therefore, the conditions are very important in delivering the positive effects identified.

The relevant condition in relation to many of these positive effects is Condition 11 related to the provision of the Urban and Landscape Design Management Plan (UDLPM) which uses ‘where appropriate’ and ‘where practicable’ without reference to how this will be determined.

#### **6.8.4 Māori culture, values, and aspirations**

##### Requiring Authority AEE

The summary provided in section 4.7.4 above and section 11.3 of the AEE outlines the Māori culture, values, and aspirations which are also relevant to NoR 4.

##### Planning Review

NoR 4 is not within any ‘Sites and Places of significance to Mana Whenua’ as identified on the AUP:OP’s planning maps. There are no known archaeological sites within the NoR area.

As noted in the AEE the Pukekohe Transport Network and therefore NoR 4 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. 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.

It is noted that NoR 4 crosses seven streams which eventually flow to the Papakura Channel and the Manukau Harbour. The AEE notes that a CIA was provided by Ngāti Te Ata Waiohua to inform the concept design and that the CIA identifies the potential for adverse impacts on freshwater systems and receiving environments and opportunities for riparian planting alongside the streams to restore and regenerate the environment and increase wetland areas as part of the Project.

Given the matters outlined in the AEE I consider that the conditions for a Cultural Advisory Report, Urban and Landscape Development Management Plan, and Cultural Monitoring Plan are appropriate.

## 6.8.5 Traffic and Transport

### Requiring Authority AEE

Effects on traffic and transport are addressed in section 11.4 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Transport Effects September 2023 by Subha Nair, Deborah Keary and Sharath Kotha. The AEE covers operational effects which relate to safety, walking and cycling, public transport, and general traffic and freight which are considered to have positive effects, and property access which is considered to have some adverse effects that will need to be managed.

The AEE notes that due to the complexity of access arrangements changing over time, it's not currently possible to confirm a precise treatment for all individual accesses, particularly in areas that are transitioning from rural to urban. Therefore, it is proposed to include a condition (proposed condition 13) to demonstrate (in the Outline Plan) how safe access will be provided for each existing access that is altered by the project. The implementation of restricted turning movements such as the inclusion of a raised median or wire rope barrier (left in, left out) from existing accesses are anticipated to be minor, adding a maximum of 1 – 4 minutes to journey times (only for restricted right turn movements).

As stated in the Assessment of Transport Effects, as the route is largely a new alignment and the surrounding land use is primarily rural, there is not considered to be a significant impact on existing property access. Also the AEE notes that the access changes and additional new intersections in future will largely be driven by land development adjacent to NoR 4. Where properties have existing access along NoR 4, accesses will be retained where feasible. It is anticipated that a few properties (less than 3) will be restricted to left-in and left-out vehicle access, where right turning movements are restricted. Through assessing the re-routing time, it has been determined that the additional journey time is minimal (less than 2 minutes) and it is only for right turn movements not all turning movements.

The AEE also covers construction effects which relate to traffic routing, property access, pedestrian and cyclist safety, road safety, on-street and public parking, parallel construction of projects and land use activities that will require further consideration. It is recommended that a Construction Traffic Management Plan (CTMP) be prepared prior to the start of construction for each stage of the work, this is included as proposed condition 17. The technical report recommends that if required, Site-Specific Traffic Management Plans (SSTMP) should be developed to manage constraints on access to affected properties.

### Specialist Review

Wes Edwards, Arrive Ltd has prepared a technical specialists report which reviews the notice of requirements for the Pukekohe Transport Network in relation to transport effects and responds to submissions that are about transport. Mr Edwards notes that 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. He states that the two key issues for the hearing panel are if the consideration of alternatives is adequate and if the Projects are reasonably necessary. Mr Edwards agrees with the assessment of alternatives submitted at a macro scale but notes that 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.

Mr Edwards has identified a number of gaps in the assessment common to all NoR's and these are set out in his report under the following headings: design standards, management of effects, integration of transport and land use, assessment of operational effects, road safety, active modes, public transport, freight, generic traffic, travel and emissions, property access, parking, and management of effects.

Mr Edwards has assessed each NoR and in regard to NoR 4, he states that a relatively small area of land (that includes 1199 Paerata Road) would end up being surrounded by SH22 on the western side, the Mission Bush Branch railway on the northern side, the NIMT railway on the eastern side and the Project on the southern side. Access on the SH22 frontage for this site is constrained by the height difference as SH22 passes beneath the Mission Bush Branch railway and by limited sight distances to the north. It appears properties currently utilise the unformed Butchers Road reserve for access. It appears the only practicable option for access to this land is from the western end of the NoR 4 extent away from the embankment rising to the new bridge over the NIMT. In that case Mr Edwards notes that he would expect access to be limited to left-in and left-out movements. The roundabouts at SH22 and at the NoR 2 new road are about 700m apart so a detour could be up to 1.4km long. Depending on 3-5 minutes at peak times so I consider the ATE estimate of 2 minutes could be understated.

In regard to an assessment of submissions, Mr Edwards states:

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. 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. 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 Mr Edwards does not support this submission point.

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. Mr Edwards requests that the requiring authority provide information on this matter at the hearing. Submission 4 (Pukekohe Industrial Park and Storage Ltd, 1199 Paerata Road) requests that an access be provided after construction in an agreed location. Mr Edwards notes that 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 does not support that submission point. Submission 4 also requests that fit-for-purpose access is provided during construction. Mr Edwards considers the conditions should provide appropriate access for every property as far as possible so he supports that submission point.

Submission 1 (Baptist G, 1173 Paerata Road) is concerned that safe access with a clear view is provided at the driveway of the property however, Mr Edwards does not support this because none of the Notices submitted require any part of that site and the General Arrangement drawings do not show any changes to Paerata Road near the driveway of 1173 Paerata Road or other changes that might reduce the sight distances available at the driveway.

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. Mr Edwards considers the questions and concerns are addressed in the notified material and other hearing documentation.

Submission 9 (Ministry of Education) requests changes to the CTMP to address potential effects on existing and future schools located near to the Project related to traffic, noise and other nuisance effects arising from future construction works. This issue is discussed in more detail below although it is noted that Mr Edwards supports that submission point.

The requiring authority proposes to manage effects through management plans. Mr Edwards considers that the provided purpose of the CTMP is adequately described, but he considers that some amendments are required to the list of matters the CTMPs should address. With regard to proposed condition 13 which relates to existing property access, Mr Edwards considers this may not provide for movement of all vehicles used on that property such as a large truck and trailer or agriculture machinery. He recommends that the condition is amended to require the access to be fit for purpose or adequate. He also recommends that the replacement or altered access be reasonable efficient, particularly with respect to additional journey length and time but acknowledges 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.

Overall, Mr Edwards provisionally supports NoR 4 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.

### Planning Review

I note that the Assessment of Transport Effects submitted by the requiring authority recommends a SSTMP is prepared if required however there are no conditions that include a SSTMP. It would be helpful if the requiring authority commented on why there are no conditions including a SSTMP.

I rely on the expert opinion of Mr Edwards and agree with his recommended changes to the conditions and his responses to the relevant submitters. It would be helpful if the requiring authority responded to Mr Edwards assessment of additional time for properties if their right turn is removed.

## **6.8.6 Construction Noise and Vibration**

### Requiring Authority AEE

Effects of construction noise and vibration are addressed in section 11.5 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Construction Noise and Vibration Effects September 2023 by Joshua Dunkel, Siiri Wilkening and Claire Drewery. The AEE notes that the majority of the work will be able to comply with the relevant construction noise standards following mitigation. It also notes that some receivers will still intermittently experience noise levels over 85 dB LAeq after mitigation, if high noise generating activities occur at the construction boundary. Future receivers constructed within 76m of the works could experience noise levels that exceed the 70 dB LAeq noise criterion during high noise generating activities such as the pavement works, without mitigation implemented

The AEE notes that compliance with construction vibration Category B standards will be achieved for the majority of receivers in NoR 4. The Assessment of Construction Noise and Vibration Effects states that three existing dwellings may experience vibration levels above 5mm/s PPV, exceeding the daytime Category B criterion, if the roller compactor is used on the construction boundary in the closest position to them. One commercial receiver is predicted to receive vibration that exceeds the 10mm/s PPV daytime criteria. Without mitigation, at these receivers there is potential for cosmetic damage to buildings (such as cracking) and annoyance from perception of vibration. Mitigation such as the use of non-vibratory compaction equipment within 8m of buildings is recommended to avoid potential cosmetic damage.

The daytime Category A vibration amenity criteria could also be exceeded in existing or future buildings if they are occupied during the works and within 21m of the roller compactor or within the emission radii identified for the other vibration generating equipment. The effect on receivers would be subject to their respective proximity to the works but could include steady vibration from the roller compactor or a small jolt from a digger which could rattle crockery and glassware.

It is recommended in the AEE that a Construction Noise and Vibration Management Plan (CNVMP) be prepared prior to construction and is included as proposed condition 20 and 21. There are also proposed conditions around what standards will be used to measure construction noise and vibration (proposed conditions 18 and 19).



### Specialist Review

Mr Rhys Hegley, Hegley Acoustic Consultants has reviewed the Assessment of Construction Noise and Vibration Effects. Mr Hegley states that the AEE and technical report contains a lot of generic information which 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. For both construction noise and vibration, he states that the Assessment of Construction Noise and Vibration Effects identified receivers where the criteria may be exceeded without defining the magnitude of the exceedance.

Mr Hegley recommends that Condition 19 is changed to reflect the Waka Kotahi Condition 18 and add in requirements (18(b) and 18(c)) that set out the assessment and monitoring requirements for a situation where vibration exceeds the Category B criteria. He also noted that there appears to be an inconsistency. Firstly, the noise (Condition 18) and construction (Condition 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.

Mr Hegley recommends clarity in these conditions. He also recommends that the CNVMP and Schedule of conditions (Condition 20 and 21) 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.

### Planning Review

It is noted in the AEE that construction of NoR 4 will take place over approximately 3 to 4 years. While it is noted that the current zoning of the land is FUZ, the purpose of this zone is to be a transitional zone and that land may be used for a range of general rural activities but cannot be used for urban activities until the site is re zoned for urban purposes. As mapped in GeoMaps this area and surrounding FUZ area is earmarked to become a Future Urban Area between 2023 – 2027 under the Development Strategy Sequencing and Timing of Growth Map layers. This means that this area could become residential prior to or during the construction of NoR 4. It would be useful to know how the requiring authority proposes to address this.

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 for some existing and potentially future receivers can be avoided, remedied, or mitigated.

## 6.8.7 Operational Noise

### Requiring Authority AEE

Effects of operational noise are addressed in section 11.6 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Operational Noise Effects September 2023 by Joshua Dunkel, Siiri Wilkening, Shivam Jakhu and Vitalii Zaiets. Existing Protected Premises and Facilities (PPFs) located within 100m from the proposed new road edge were assessed in urban areas, and those within 200m for rural areas, based on NZS6806.

There are 22 PPFs identified under the altered road criteria and 2 under the new roads criteria for NoR 4. However, most PPFs for NoR 4 were predicted to receive noise levels within Category A (the desired noise criteria category) so no mitigation is proposed. Further, ambient noise levels are likely to increase as the area urbanises, so the AEE notes that changes in noise levels due to the Project may not be as noticeable at the time.

### Specialist Review

Mr Rhys Hegley, Hegley Acoustic Consultants has reviewed the operational noise and vibration assessment. Mr Hegley notes that the approach in the technical assessment is to adopt a low noise road surface across all NoRs for the control of noise to current and future receivers, however 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 6086 provides for a PPF. Mr Hegley notes that 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 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.

Mr Hegley recommends that the AT road surface Condition 27 be amended to match Waka Kotahi's Condition 26 for NoRs 2 and 8. Mr Hegley recommends 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. He also recommends 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) to Condition 28. The same changes are proposed for conditions 29 and 30 and changes to conditions 31 and 32.

### Planning Review

It is noted that the current zoning of much of the land is FUZ, the purpose of this zone is to be a transitional zone and that land may be used for a range of general rural activities but cannot be used for urban activities until the site is re zoned for urban purposes. There is also a small area which the designation extends into which is zoned Residential – Mixed Housing Urban Zone and areas that are zoned Rural – Mixed Rural Zone. As stated in section 6.8.6 above, the FUZ area could become residential prior to or during the construction of NoR 4. It would be helpful if the requiring authority assesses the noise effects on activities that may arrive between designation and construction as stated by Mr Hegley. This assessment should include any mitigation that may be required and if mitigation in the form of noise barriers is required then the effects on landscape and visual should also be assessed.

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by Mr Hegley, including the additional information and changes to conditions, to ensure that the potential adverse operational effects in particular can be avoided, remedied, or mitigated.

### **6.8.8 Flood Hazard**

#### Requiring Authority AEE

Effects on flood hazard are addressed in section 11.7 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Flood Hazard Effects 12/09/2023 by Justin Kirkman.

NoR 4 crosses 7 flow paths within the Oira and Whangapouri catchments. The land is generally unoccupied farmland and floodplain with no dwellings nearby. However, there is one commercial and residential building at 1221 Paerata Road very close to the floodplain near the proposed crossing of the Whangapouri Creek.

The AEE states that there may be some flood hazard effects during the construction phase (refer to section 11.7.1 of the AEE for the full list) however the details of the construction approach will be confirmed at detailed design and mitigation measures are included in the Construction Environmental Management Plan (CEMP) outlined in condition 14.

The operational flooding effects for NoR 4 relate to the seven overland flow paths, existing floodplains, and the effects of using a 3.8° climate change adjusted rainfall pattern compared to the 2.1° climate change pattern. This dwelling at 1221 Paerata Road has been identified as having a moderate existing risk. All other crossings have negligible risk. Using a 3.8° climate change adjusted rainfall pattern compared to the 2.1° climate change pattern shows deeper flood depths at all flow path crossings. Flooding is indicated at the building at 1221 Paerata Road and therefore the risk increases to high in this scenario.

Specific mitigation for NoR 1 include appropriately sized culverts and bridges, attenuation for the 10yr and 100yr events in the Whangapouri, Ngakoroa and Oira Stream catchments, provide diversion channels at the toe of fill embankments to prevent ponding, offset the flood volume displaced by filling in the floodplain with an equivalent volume of excavation within the floodplain, and maintain 1200mm freeboard to new bridge soffits using the 100-year ARI flood level with 3.8° C climate change hydrology. Proposed condition 12 sets out flood risk outcomes which the project shall be designed to achieve.

### Specialist Review

Mr Trent Sunich, has reviewed the Assessment of Flood Hazard Effects. He states that the commercial and residential buildings referenced in the AEE and technical report submitted by the requiring authority are very close to the floodplain with the access to 1221 Paerata Road showing as flooded despite the building not showing as flooded. If these buildings are still present in the future at detailed design, there should be no increase to existing flood levels and no decrease in freeboard. It is noted that the Assessment of Flood Hazard Effects refers to points 1 – 7 which relate to the overland flow paths and floodplains that NoR 4 crosses from north to south and Mr Sunich refer to them (as set out below). There are three residential buildings (at points 4, 5 and 6) in the Assessment of Flood Hazard Effects that are located on terrain well above the adjacent streams, and he considers that the project works will not likely have any influence on these properties. The effects of using a 3.8° climate change adjusted rainfall pattern compared to the 2.1° climate change pattern shows deeper flood depths for points 2 through 6 however, the water depth at point 4 only increased by around 50mm mainly due to the weir present in the channel that controls flows and depths to this location. The changes in flood depth at the other locations are minor and are a negligible flood risk to upstream properties. The 3.8° climate change flood depth at point 1 would begin to flood the residential dwelling at 1221 Paerata Road and the risk rating would then change to from moderate to high.

Mr Sunich has reviewed the proposed conditions with Auckland Council Healthy Waters staff and has recommended changes to the flood hazard condition and an inclusion of an advice note. These changes relate to simplifying condition outcomes, referencing the relevant code of practice, the introduction of overland flow specific conditions for new and existing overland flows, and requiring AT to consult Auckland Council Healthy Waters when developing the Outline Plan.

Mr Sunich acknowledges that the Assessment of Flood Hazard Effects assesses construction effects in relation to stormwater and proposes a consent condition requiring flood hazard assessment during construction (and associated mitigation) is addressed as part of the Construction Environmental Management Plan (CEMP). He considers the proposed approach satisfactory to assess and or mitigate any temporary flood hazard effects associated with the construction activities. No changes are recommended to the CEMP conditions.

Submission number 4 (Pukekohe Industrial Park and Storage Limited) has relevant points that relate to stormwater. The table below is taken directly from Mr Sunich's comments and covers the submission points raised and his response.

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
4	Ken Vincent and Andrew Vincent, Pukekohe Industrial Park and Storage Limited 1199 Paerata Road	<p>The site affected is 1199 Paerata Road (SH22). The land on the eastern side of Whangapouri Creek is low-lying and subject to flooding from the Creek, and is undevelopable therefore. A second farm drain conveying overland flow enters the western boundary and discharges into the Whangapouri Creek to the east, through the centre of the site. The majority of the site is subject to a flood plain which the Submitter understands is caused by the downstream culvert beneath SH22 to the north being undersized, causing upstream flooding, including within the site.</p> <p>There is little analysis of the potential flood effects arising within the site from the proposed extent of battering. The Submitter understands this is because the resultant flood effects will be experienced outside of the subject site. The Submitter would support such an outcome.</p> <p>The Submitter supports NOR 4 on the basis that no flood effects or change in flood levels will arise on the subject site, as stated in the Flood Assessment supplied by the Requiring Authority.</p> <p>The Submitter supports the location of the North East Arterial Wetland 1 on the southern side of Butchers Road</p>	<p>Condition 12 Flood Hazard – given the extent of the flood plain in and around the Submitter's property and with reference to the conditions for the North West NORs -</p> <p>i. Clause 12(a)(vii) should also refer to the 50%, 20%, 10% and 1% AEP rainfall events, not only the 1% AEP event.</p> <p>ii. Clause 12(b) should reference the 10% and 1% AEP flood levels, not only the 100 year ARI flood level.</p>	<p>I have recommended amendments to the NoR conditions, including provision for assessing the effects of smaller rainfall events (e.g. 10% AEP).</p>

### Planning Review

In terms of construction related flooding effects no submitter raised any concerns and the impact of earthworks on flood risk will be considered as part of the regional consent process. Therefore, based on the comments from Trent Sunich I consider that the potential adverse effects on flooding during construction can be avoided, remedied, or mitigated, subject to the above, as the CEMP condition requirement for flood hazard to be assessed during construction and the requirements of the regional consent provisions in the AUP:OP will ensure that this effect is adequately addressed.

With regard to operational effects of flooding, there is nothing to suggest that the extent of the designation is not sufficient to provide for the alignment construction and operation and any associated works for flood mitigation techniques. It is noted that one of the submitters raised concern about flood effects (Ken Vincent and Andrew Vincent, Pukekohe Industrial Park and Storage Limited at 1199 Paerata Road – submitter number 4). Mr Sunich has recommended amendments to the NoR conditions to include provision for assessing the effects of smaller rainfall events (e.g. 10% AEP). It is also considered that given that this is a changing space AT should prior to the Outline Plan stage review the effects of climate change in terms of the best information available at that time. It would be helpful to have this confirmed by AT.

It would be helpful for the requiring authority to provide a response at the hearing on changes to conditions suggested by Mr Sunich and a response to the submitters concerns. I consider that subject to the above, and the proposed conditions as recommended to be amended the potential adverse effects on flooding can be avoided, remedied, or mitigated.

### **6.8.9 Terrestrial Ecology**

#### Requiring Authority AEE

Effects on ecology are addressed in section 11.8 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Flood Ecological Effects September 2023 by Ian Bredin and Sahar Firoozkoohi. The AEE states a number of positive effects which include improved blue/ green infrastructure, landscape planting and the proposed bat mitigation in association with the landscape planting berms, embankments, and stormwater wetlands is likely to improve ecological connectivity for other native fauna.

The AEE discusses construction and operation effects of/ on vegetation clearance, long-tailed bats, birds, and herpetofauna. Potential construction effects that relate to the activities authorised by the designation include the disturbance and displacement of roosts/ nests and individual (existing) long-tail bats, avifauna and herpetofauna due to construction activities (noise, light, dust etc). The effects of vegetation removal have been assessed as low and therefore do not require any impact management. The effects on long-tail bats for NoR 4 is assessed as moderate and will require mitigation in the form of a Bat Management Plan (BMP) which is included within the Ecological Management Plan (EMP) as proposed condition 23 and 24. Following mitigation, the level of effect is assessed as low.

There are a number of Threatened and At-Risk (TAR) species of birds within NoR 4 and the effects on these birds are considered moderate so require mitigation by an Avifauna Management Plan (AMP) which is included within the Ecological Management Plan (EMP) as proposed condition 23 and 24. Once mitigated, the effects on birds is assessed as being very low. There are two herpetofauna species which are TAR however, the magnitude of effects on these was assessed as negligible due to the skinks being considered habitat generalists and the local extent of construction related effects so there is no mitigation proposed.

The potential operational effects on ecological features are identified in the AEE as being the loss in connectivity for indigenous fauna and disturbance and displacement of indigenous fauna and their nests/ roosts. The effects on the long tail bat and birds were assessed as moderate so require mitigation in the form of a BMP and AMP which are included within the EMP as proposed condition 24. The effects on herpetofauna were assessed as low so no mitigation is proposed.

#### Specialist Review

Mr Simon Chapman, Ecology New Zealand has prepared a technical memo assessing the adequacy of the information submitted by the requiring authority. Having reviewed the proposed designation conditions for NoR 4, in particular, conditions 23 and 24, Mr Chapman considers that the potential ecological effects resulting from the proposed expressway project are likely to be adequately managed by those conditions. He has however pointed out that the condition (23) should include a requirement for information regarding how the survey design is 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.

#### Planning Review

I rely on the expert opinion of Mr Chapman and consider the proposed conditions to be adequate to manage the effects on ecology. However, I note that the designation boundary extends into a small area of approximately 810m<sup>2</sup> of a SEA - terrestrial (AUP:OP reference SEA\_T\_4375) which meets the factors for representativeness, threat status and rarity and diversity. The designation boundary only partially extends into a small section of the SEA and I consider the proposed conditions appropriate to manage the adverse effects on ecology.

### **6.8.10 Landscape and Visual and Urban Design Evaluation**

#### Requiring Authority AEE

Effects on landscape and visual values are addressed in section 11.9 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Landscape and Visual Effects Assessment September 2023 by Matthew Jones. The AEE highlights a number of positive effects such as enhanced connectivity, landscape mitigation planting, and integration of active travel routes and recreational paths with Pukekohe's 'green network' of bush and vegetated riparian margins.

The adverse construction effects on landscape and visual values are summarised in the AEE as being moderate- high as construction requires the removal of limited amounts of vegetation (notably along the Whangapouri Creek corridor) and substantial earthworks due to topography. The concept design of the alignment includes bridges spanning across streams which will assist in ensuring the natural alignments and patterns of these hydrological features remain.

The temporary visual amenity effects of resulting from the construction of NoR 4 are anticipated to be Moderate to Moderate-High. For those properties immediately adjacent to the alignment located to the north and east of Grace James Road, NoR 4 will likely result in up to moderate-high temporary effects on visual amenity. This is due to the open nature of the views and the potential landform modification required and the potential direct and prolonged views of the construction works will be likely during the construction period (resulting from the potential curtilage being removed to facilitate the works).

Properties in the wider rural residential setting within both the rural and FUZ land likely have views of the alignment and construction activity (including landform modification), partly contained by the existing vegetation pattern within the rural environment and existing planting within the curtilage. Views from public locations will likely be restricted to motorists travelling along road corridors.

The landscape character operational effects included in the AEE are summarised as follows: that while the project adds a new road element through this area, the area is expected to change to an urbanised context due to the current zoning of FUZ. Where NoR 4 spans through the land which is to remain as Rural – Mixed Rural zone, the project will permanently change the character of that landscape through the addition of an urban arterial road. In relation to landscape character the adverse effects are assessed as very low within the areas zoned as FUZ, but moderate within the rural zoned landscape.

The adverse visual amenity operational effects included in the AEE are assessed as moderate-high reducing to moderate over time as vegetation becomes established. To the south of NoR 4, where it extends across the rural environment, is Grace James Road where existing development (Residential – Single Housing Zone within the AUP:OP) forms the 'suburban edge' to Pukekohe. The elevated properties in this location overlook the rural environment to the North, part of which is identified as FUZ under the AUP:OP within the RUB. As such the AEE summarises that over time these properties between Grace James Road and NoR 4 extent will change into an urban character and any adverse effects from the existing development on these properties is anticipated to be low.

Mitigation in the form of an Urban and Landscape Design Management Plan (ULDMP) is recommended and included as proposed condition 11.

### Specialist Review

Ms Rebecca Skidmore, RA Skidmore Urban Design Limited has prepared a technical memo assessing the adequacy of the information submitted by the requiring authority, responded to relevant submissions and recommended changes to the proposed conditions. Ms Skidmore notes that she generally considers the NoRs are supported by robust urban design and landscape analysis.



Ms Skidmore notes that the assessment construction effects on landscape character and visual amenity set out in the LVEA as ranging from moderate-high to moderate. In her 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. Ms Skidmore notes that Condition 10 sets out a mechanism to facilitate discussion and co-ordination with adjacent property owners. She agrees 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, she agrees that the adverse effects on the landscape character will be very low.

Ms Skidmore considers the requirements of these conditions do not convey the specificity of recommendations made in both the UDE and the LVEA and she recommends a number of changes to address recommendations set out in the UDE.

In relation to the submissions, Ms Skidmore states:

*“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 requirements of Condition 10 (Land use Integration Process) to facilitate the creation of appropriate interfaces.*

*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).”*

#### Planning Review

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by submitters and in terms of the changes to conditions suggested by submitters and Ms Skidmore. I consider that the potential adverse landscape, visual and urban design effects can be avoided, remedied, or mitigated, subject to the above, and the proposed conditions as recommended to be amended.

## 6.8.11 Historic Heritage and Archaeology

### Requiring Authority AEE

Effects on historic heritage are addressed in section 11.10 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Effects on Historic Heritage September 2023 by Matthew Campbell. The AEE states that for NoR 4 there are two possible pre-1900 villas located in the proposed designation boundary at 1201 Paerata Road and at 87 Pukekohe East Road (within NoR 4 and adjacent NoR 5). The Assessment of Effects on Historic Heritage notes that the date of the construction of the villas has not been confirmed and detailed archival and buildings research should be undertaken at the design and construction phase of the project to outline the buildings history. It is recommended in the AEE that an Historic Heritage Management Plan (HHMP) is prepared (proposed condition 22) for NoR 4 to address these potential pre-1900 villas specifically, as a precautionary measure.

### Specialist Review

Ms Myfanwy Eaves, Auckland Council has made her assessment and notes that there is one submission from HNZPT (submission number 5). In the submission HNZPT express concerns regarding two potential pre-1900 villa otherwise NoR 4 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 additional research required to assess and clarify if residence is pre- or post-1900 in origin in the HHMP are supported.

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."*

Ms Eaves notes that the Council's Heritage Unit do not support the replacement of the term "accidental" with 'unexpected' as stated in Condition 22(b)(IX)C. This term (unexpected) has no basis in the existing statutory framework and will give rise to confusion between all parties, particularly mana whenua, contractors and subcontractors.

Ms Eaves agrees with the submitter's concern around unknown historic heritage across the application area, including pre- or post-1900 residences.

HHMP condition (c) applies to RMA Part 3 s35, Duty to gather information, monitor and keep records. To achieve this Duty, Ms Eaves recommends 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)"

### Planning Review

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

## **6.8.12 Arboricultural Effects**

### Requiring Authority AEE

Effects on arboriculture are addressed in section 11.11 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Arboricultural Effects September 2023 by Craig Webb. The AEE notes the positive effect of allowing sufficient space to plant new trees.

There are a number of trees located within the proposed designation. However, there are no trees in NoR 4 that are protected under the relevant District Plan provisions of the AUP:OP. No mitigation is proposed.

### Specialist Review

Mr Leon Saxon, Arborlab has prepared a memo covering an assessment of the submitted documents, response to relevant submissions and recommendations. Mr Saxon also notes that there are no trees protected by the District Plan provisions affected within or adjacent to the designation boundary. However, he notes that 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. As such, Mr Saxon recommends that the condition for preparing a Tree Protection Management Plan should apply to all of the designations.

A condition is also proposed for the preparation of an ULDMP 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.

Mr Saxon notes that none of the submissions raised any significant issues regarding trees currently protected by District Plan rules.

### Planning Review

I would find it helpful to hear from AT in relation to Mr Saxon's recommendation that the condition for preparing a Tree Protection Management Plan should apply to all of the designations due to potential for trees to become protected between the time of designation and construction.

There are no submissions that relate to trees. Given that vegetation removal in FUZ land is subject to regional rules, I consider that the potential adverse effects on arboriculture can be avoided, remedied, or mitigated, subject to the above.

### 6.8.13 Community Effects

#### Requiring Authority AEE

Effects on the community are addressed in Section 11.12 of the AEE. The AEE recognises that the Project provides the necessary transport infrastructure, and resulting community benefits, required to support the planned urban zoning of land in Pukekohe, Paerata and Drury West.

NoR 4 is one of the designations delivering a new road in undeveloped greenfield areas, resulting in less community impacts during construction. However, as noted in the AEE the acquisition of land will sever some properties and may prompt changes to some rural operations. Prior to construction, there may be a reduction in the existing rural community within the greenfield areas of the Project, as AT acquires properties and those properties become vacant. Notwithstanding this, the AEE notes that the FUZ land is planned to urbanise and the proposed transport networks will be implemented at the time that greenfield areas start to urbanise. Therefore, this is anticipated to be a temporary effect as the community transitions into an urban area once the land is live (urban) zoned. The amenity values in both the existing and future urban areas could also be disrupted during construction due to dust and noise generated from construction. No adverse operational effects on the community are anticipated from the Project.

It is anticipated that all community effects during the construction of the Project will be temporary and can be minimised. 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 with throughout the construction works which is described in proposed condition 8. Access and trip disruption will be managed by the CTMP (proposed condition 17) and the SCEMP proposed as conditions of the designation. Construction effects on amenity values of property can be managed by engagement with stakeholders identified through the SCEMP, as well as through the development and implementation of the CVNMP (proposed condition 20) and the CEMP (proposed condition 14).

The AEE notes that no adverse community impacts are anticipated from the operation of the Project and therefore no mitigation is required. However, through the implementation of the ULDMP (proposed condition 11), a range of measures will be implemented to ensure the Project is appropriately integrated into the surrounding landscape and urban context.

## Planning Review

I largely agree with the assessment undertaken by the requiring authority. By providing safe and efficient connections throughout the growth area, the Project will positively impact on the health and well-being of the existing and future community. In this regard, the submission by The Campaign for Better Transport Incorporated supports the provision for cycle infrastructure as part of the Project and hopes that the Project will lead to a change in some Pukekohe roads to make the roads more friendly toward other uses (for example, decreasing the speed limit of some roads through the Pukekohe village).

The Ministry of Education (MoE) submission is the only submission received in relation to potential direct effects on community or recreational facilities. The MoE submission is primarily in response to the number of existing schools located proximate to the NoRs, but also any future schools that will be developed in the area. As outlined in the MoE submission, there is potential for schools located near to the Project to be affected by traffic, noise and other nuisance effects arising from future construction works of the transportation network. The MoE is therefore seeking to ensure that appropriate conditions are included in the designations to mitigate any potential adverse effects associated with the construction of the proposed transport network. Those conditions relating to transport have been addressed in Section 4.7.5 above. The other requested changes to the proposed conditions relate to the MoE and schools being included as part of the Stakeholder Communication and Engagement Management Plan (SCEMP) and being included as a stakeholder in the Construction Traffic Management Plan (CTMP). As a component of a community that is potentially sensitive to the effects of the Project, particularly during the construction phase, inclusion of the MoE and schools as part of the SCEMP and CTMP is supported. Refer to the recommended amended conditions in Attachment 5 to this report.

It would be helpful to hear from the requiring authority on any potential impacts on schools and the changes to the conditions requested by the MoE as noted above.

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 requiring authority's response to the MoE's requested changes to the conditions.

### **6.8.14 Property and Land Use**

#### Requiring Authority AEE

Direct effects on property and land use are addressed in Section 11.13 of the AEE. The AEE notes that potential adverse effects on existing private properties have been reduced where practicable through the development of the Project concept design and the proposed designation boundary.

The AEE notes that potential adverse effects on the development of private property may arise. However, it is noted in the AEE that development is not precluded within the proposed designated area. AT will work with landowners and developers under the process in s176(1)(b) of the RMA to provide written consent for development within the proposed designations, provided those works will not prevent or hinder the work authorised by the proposed designation.

For the AT NoRs, a land use integration process (LIP) is included in the conditions for NoR 4 (proposed condition 10). This sets out a process where developers can request information to inform land use development adjacent to the transport corridors. This will support development that may go ahead of the proposed transport corridors and provides opportunities to co-ordinate and integrate infrastructure and development.

Section 11.13.1 of the AEE notes that land required for the permanent work will be acquired prior to construction and if temporary occupation is required, then the land 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 such as the development and implementation of a SCEMP, CTMP, Construction Noise and Vibration Management Plan (CNVMP) and Construction Environment Management Plan (CEMP) prior to the start of construction are noted as appropriately minimising disruption to affected properties and allow the continued use of the properties where practicable. Potential construction effects will generally be temporary.

The post construction effects are noted in section 11.13.2 of the AEE where it is noted that following the Completion of Construction, the designation boundary will be reviewed and any land not required for the permanent work or for the ongoing operation, maintenance or mitigation of effects of the Project will be reinstated and reintegrated in coordination with directly affected landowners or occupiers. The timing for this process occurring is unstated in the AEE and there are no conditions related to this process.

#### Planning Review

Since the NoRs were served on Auckland Council, pursuant to Section 178(2) of the RMA, the proposed designations have had adverse effects on normal property and land use activity on both adjacent land and particularly directly affected land as no person may do anything that would prevent or hinder the public work, project, or work to which the designation relates unless the person has the prior written consent of the requiring authority.

In terms of the effects on the directly affected land, while I note that the Public Works Act 1991 (PWA) is the legislative framework under which entitled landowners will receive compensation and that this is a non-RMA process, the restrictions imposed on private property is an adverse land use effect. This is because the uncertainty that the NoRs can create for landowners can result in some landowners being reluctant to actively manage their land. Given the rural / farming land use and private plan changes located close to the NoRs, this uncertainty could result in unmanaged land and a loss in production that results in negative physical changes to the land along with a reluctance to invest in the land. The proposed 20 year lapse period of the NoRs adds to the uncertainty and this potential outcome.

The key issue for many of the submitters of the NoRs is concern about how they can continue to operate their farm or business or live in their home both with the uncertainty of the 20 year lapse period and the timeframe for the works to be completed. Some have sought as relief changes to the alignment of the designation and the construction extent, and / or that the NoRs be declined.

Uncertainty of property access has been raised as a matter of concern in the submissions by Gerald Baptist and Pukekohe Industrial Park and Storage Limited.

The submission by Pukekohe Industrial Park and Storage Limited also raises concerns in relation to the extent of battering within its property stating that it should be reduced and replaced with retaining, while also seeking confirmation that additional flooding will not occur within the site as a result of the Project. Pukekohe Industrial Park and Storage Limited seeks amendments to the proposed conditions to suitably avoid, remedy and mitigate the potential adverse effects of development on its property, and seeks to ensure appropriate integration between required management plans, projects in the area, and engagement with key stakeholders, including owners and occupiers of directly affected land.

Stephen Smith is in the process of preparing a private plan change from Future Urban Zone to a live residential zoning. Therefore, the submission by Stephen Smith (in relation to NoR 4) requests that the proposed route through the submitter's site remains in its current location or moves no further westwards within the site and that at least one connection is provided to the proposed arterial road from the site.

Although the planned position of the roundabout is considered acceptable, the submission Siobhan Ainsley raises concerns about the stormwater pond for NOR 5 that is located in the centre of the land at 84 Pukekohe East Road as this land is planned for future residential development. Ms Ainsley requests that a single community owned stormwater pond, to treat both road and subdivision stormwater, be designed and located either on the adjoining rural land (owned by Ms Ainsley) or another proximate the site.

It would be helpful to hear from the requiring authority in response to the issues raised in relation to the property and land use effects by the submitters. While it is noted that the conditions set includes a 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 or occupiers who for potentially 20 years will need permission from Waka Kotahi to undertake work on their own land. Providing some certainty on what can be done on the land without needing to seek approval from Waka Kotahi given the long lapse period would assist many potentially.

The section of NoR 4 located to the east of Cape Horn Road is on land identified as falling under the transitional definition of Highly Productive land as shown in Auckland Council's Geomaps. The effects of the removal of highly productive land are not specifically assessed in the AEE although it is recognised that severing properties may prompt changes to some rural operations. There is an assessment of the relevant NPS-HPL objectives and policies where it is noted that the alignment of the designation will not significantly erode or fragment the highly productive land. It would be helpful to hear from the requiring authority in response to this issue.

The timing for the process of removing the designation occurring is unstated in the AEE and there are no conditions related to this process. It would be useful to understand why not.

It would be useful to hear from the requiring authority as to whether the concerns raised in the submission in relation to potential impacts on Future Urban zoned land (that is or will be subject to plan changes) are appropriately addressed through the Project design and alignment and proposed conditions. It would also be useful to hear from the requiring authority as to whether potential impacts on properties and businesses raised in the above-mentioned submission are also appropriately addressed through the Project design and alignment and proposed conditions.

At this time, I consider that the potential adverse effects on property and land use can potentially be appropriately remedied or mitigated, but this assessment is subject to the above information being provided and potentially changes to the Project design and alignment and conditions to address how the ongoing use of the directly affected land will be enabled given the long lapse period sought.

### **6.8.15 Network Utility Effects**

#### Requiring Authority AEE

Effects on network utilities are addressed in section 11.14 of the AEE. The following network utilities are identified as being affected by NoR 4:

- KiwiRail – North Island Main Trunk Railway Line (Designation 6302).
- Counties Energy – ADSS fibre optic cable and medium and high voltage cables.



- New Zealand Transport Agency – State Highway 22: Karaka to Pukekohe and State Highway 22: Karaka to Pukekohe - Road Widening (Designations 6704 and 6705).

To undertake work in accordance with a designation on land where there is an existing designation in place, the written consent of the requiring authority for the earlier designation is required under section 177(1)(a) of the RMA. This written approval has not been obtained at this stage but will be obtained at a later date during the detailed design stage of the Project.

To mitigate any potential adverse effects on network utilities, a Network Utilities Management Plan (NUMP) (proposed condition 26) will be prepared prior to the construction of the Project. The NUMP will set out a framework for protecting, relocating and working in proximity to existing network facilities. The NUMP 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. Submissions to NoR 4 have been received from the following requiring authorities and network utilities:

- Telecommunication submitters (Aotearoa Towers Group (ATG), Chorus New Zealand Limited (Chorus), Connexa Limited (Connexa), One New Zealand (One NZ) (formally Vodafone New Zealand Ltd) and Spark New Zealand Trading Limited (Spark));
- KiwiRail Holdings Limited (KiwiRail);
- Watercare Services Limited (Watercare); and
- Counties Energy Limited (CEL).

The Telecommunication submitters group point out that none of its group are listed in Section 11.14 of the AEE despite having existing infrastructure within and around the proposed designated boundaries. The Telecommunication submitters group therefore seek to ensure that existing and potential future telecommunications infrastructure in the Project corridors are adequately addressed and oppose the NoR if their concerns are not addressed. The submission by the Telecommunication submitters group highlights that 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. This integration is provided for through the proposed Land Use Integration Process (LIP) condition.

However, the Telecommunications Submitters group seek amendment to the proposed NUMP condition 26(d) and an advice note to be added to the NUMP conditions as shown in italics and underlined below:

*(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.*

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).

Subject to the requiring authority's (Auckland Transport's) proposed conditions, including in particular Conditions 5, 10, 11 and 26, KiwiRail's submission supports NoR 4 and seeks ongoing dialogue and engagement before detailed design starts thus enabling better planning and integration between network utility providers through greater communication and collaboration.

Watercare's submission states that Watercare neither supports or opposes NoR 4, but seeks to ensure that any decisions made respond to the issues raised in this submission. In particular, that the works provided for under the NoR avoids, remedies or mitigates potential adverse effects on Watercare's ability to provide water and wastewater services now and in the future. In relation to NoR 4, Watercare acknowledges the engagement to date and seeks early engagement to enable opportunities to plan and future proof the delivery of assets to provide for well-functioning urban environments. In addition, 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. While supporting the proposed NUMP, SCEMP and Land use Integration Process (LIP) conditions, Watercare seeks that a new condition requiring the preparation of a "Network Utility Strategic Outcomes Plan" (NUSOP) be added to the NoR to futureproof assets in consultation with network utility operators such as Watercare. If the NUSOP condition is not included in the NoR, Watercare seeks amendment to the proposed NUMP condition.

The CEL submission indicates general support for the NoR but notes omissions in terms of the information about its existing overhead and underground infrastructure provided in the drawings submitted with the NoR. In addition, CEL require further consultation and detailed planning concerning parts of NoR which may impact the location and safe operation of its assets and 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.

There is no specific discussion about effects on the above utilities or assets in section 11 of the AEE.

Works within the existing road reserves affected by NoR 4 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. Access to the local road network subject to the NoR is managed through a Corridor Access Request process to Auckland Transport and in relation to SH22 to Waka Kotahi as road controlling authorities for these roads. Therefore, a network utility would need to seek written consent from both Waka Kotahi and Auckland Transport and obtain a Works Approval Permit before undertaking works within the proposed designated land that is also road. Notwithstanding, proposed Condition 5 sets out when such works do not need Auckland Transport approval under section 176(1)(b) of the RMA.

As there is no further discussion on the effects on network utilities in the AEE, it is not clear if the mitigation proposed in the form of the NUMP (condition 26) and condition 5 is considered adequate. As noted above, the Telecommunication Group seeks amendment to proposed Condition 26 and Watercare seeks a new condition requiring the preparation of a Network Utility Strategic Outcomes Plan. It would be useful to hear from the requiring authority in relation to the changes sought.

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.

#### **6.8.16 Effects conclusion**

In regard to the overall effects of the Project, I consider that subject to the further amendments to the conditions recommended above and included in Attachment 5 to this report, the potential adverse effects on the environment from the construction and operation of the NoR 4 can be appropriately avoided, remedied or mitigated.

### **6.9 National policy statements**

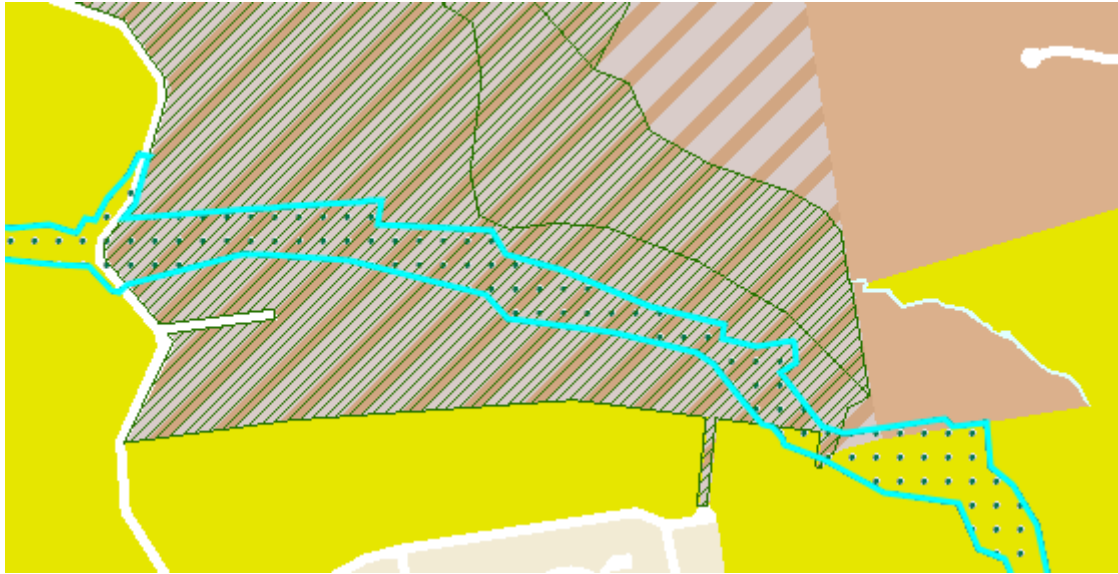
Section 171(1)(a)(ii) requires the council to, subject to Part 2, consider the effects on the environment of allowing the notice of requirement, having particular regard to any relevant provisions of a national policy statement.

#### **6.9.1 National Policy Statement for Highly Productive Land 2022 (NPS HPL)**

Highly productive land is defined in the National Policy Statement for Highly Productive Land 2022 (NPS-HPL) as:

*...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)*

Part of the propose NoR 4 designation boundary extends into the Highly Productive land – Transitional definition from the NPS-HPL as mapped in Auckland Council Geomaps (refer to Figure 6-2 below).



**Figure 6-2 Highly Productive land – Transitional definition from the NPS-HPL – green horizontal lines [Source: Auckland Council Geomaps]**

The sole objective of the NPS-HPL is that highly productive land is protected for use in land-based primary production, both now and for future generations. The applicable policy as the designation relates to the use and development of land is Policy 8 that states “Highly productive land is protected from inappropriate use and development.” Under Clause 3.9(1) of the NPS- HPL, a territorial authority must avoid the inappropriate use or development of highly productive land that is not land-based primary production. However, Auckland Transport is able to rely on the fact that Clause 3.9(2) makes provision for the use or development of land for certain activities in certain circumstances. These circumstances includes where it is for an activity by a requiring authority in relation to a designation or a notice of requirement (Clause 3.9(2)(h)), provided that under Clause 3.9(3) the territorial authority must take the following measures to ensure that any use or development on highly productive land:

- (a) minimises or mitigates any actual loss or potential cumulative loss of the availability and productive capacity of highly productive land in their district; and*
- (b) avoids if possible, or otherwise mitigates, any actual or potential reverse sensitivity effects on land-based primary production activities from the use or development.*

The guidance produced to assist in the implementation of the NPS-HPL<sup>10</sup> notes that *minimises or mitigates* a loss of productive capacity could include:

- The location of the activity – whether it can be sited somewhere on the subject site that minimises the impact on the productive capacity of HPL

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<sup>10</sup> Ministry for the Environment. 2023. National Policy Statement for Highly Productive Land: Guide to implementation. Wellington: Ministry for the Environment.

- The footprint of the activity – whether efforts have been made to keep the footprint of the activity as small as possible to minimise the actual loss of HPL
- Clustering of activities – whether there is an option to group a number of activities in a similar location to mitigate the cumulative loss of HPL that would occur through activities being spread out across a wider area of HPL (e.g., clustering of buildings, co-location of telecommunications infrastructure or containing multiple activities in the same building, such as using an existing residential dwelling for a home business or visitor accommodation activity, rather than constructing multiple buildings)
- Co-existing with land-based primary production – whether the activity can be designed in such a way that it does not preclude being able to carry out land-based primary production around the activity (e.g., the potential for using the land around specified infrastructure to be used for vegetable production or animal grazing).

It is noted that in section 12 of the AEE an assessment of the NPS-HPL is undertaken but this does not identify NoR 4 as being relevant. However, as stated above, part of the proposed designation boundary extends into the mapped Highly Productive land – Transitional which is also zoned Rural – Mixed Rural Zone so the NPS-HPL is relevant. The operational elements of the proposed road will not occupy all of the designated site. NoR 4 will extend through the highly productive land and may impact farming operations but will not preclude land-based primary production from happening on either side.

In terms of Clause 3.9(3)(b) and the actual or potential reverse sensitivity effects the main effect relates to construction and operational noise. These effects have been assessed in section 4.8.6 and 4.8.7 above.

In relation to the proposed future use of this site as a new road, it is noted that it falls under the definition of ‘specified infrastructure’ in the NPS-HPL

Clause 3.9.(2) of the NPS-HPL outlines the circumstances where use or development of highly productive land is appropriate, and this includes:

- (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:*
  - (ii) the maintenance, operation, upgrade, or expansion of defence facilities operated by the New Zealand Defence Force to meet its obligations under the Defence Act 1990:*
  - (iii) mineral extraction that provides significant national public benefit that could not otherwise be achieved using resources within New Zealand:*
  - (iv) aggregate extraction that provides significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand.*

Functional need and operational need are not defined in the NPS. 'Functional need': is defined in the National Planning Standards 2019, National Policy Statement for Freshwater Management 2020 (NPS-FM) and the National Policy Statement for Indigenous Biodiversity (NPS-IB) as "the need for a proposed activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment".

Operational need" is defined in the National Planning Standards 2019 and the NPS-IB as "the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints".

As outlined in section 5.13 and section 5 of the AEE, AT has considered other sites, routes and methods and in assessing these options using a multi criteria analysis, AT have chosen this preferred option for the location of NoR 4. As outlined in section 5.14 and section 12 AT have a functional and operational need to traverse the areas that are planned for growth and notes that this will not preclude the balance of the highly productive land from being used by land-based primary production.

#### **6.9.2 National Policy Statement on Urban Development 2020 (NPS-UD)**

The National Policy Statement on Urban Development (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 (Objective 1). As stated in the AEE, within the NPS-UD Auckland is recognised as a Tier 1 urban environment and is therefore subject to a greater policy direction in terms of intensification and density of urban form. The NPS-UD directs that urban development is integrated with infrastructure planning and funding decisions and is strategic over the medium to long term. The AEE states that the Pukekohe Transport Network will support and enable growth by protecting improved and new transport corridors that will support Auckland Council's growth aspirations for the growth areas of Drury West, Paerata and Pukekohe area, including intensification or density of growth resulting in more efficient urban land development. This is becoming increasingly important as a result of private plan changes being lodged with Auckland Council, and developer interest around Pukekohe identified via engagement with developers and landowners. It will also support transformational mode shift from private vehicles to public transport, walking and cycling. In particular, the network provides direct connections to the rapid transit network (rail stations and rail network) and provides walking and cycling and new bus routes for existing and future communities.

I agree with these conclusions and consider that the NoRs, including NoR 4, will support and enable future growth that is proposed while also promoting and providing for active modes of transport. For NoR 4 in particular it will provide a connection and a different route from SH22 to Pukekohe East Road and Mill Road and to SH1.

### **6.9.3 National Policy Statement on Freshwater 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.

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.

However, in the AEE the relevant matters have been screened to inform the concept design, options assessment, the designation boundary, and future resource consents. The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-FW because:

- The options assessment assessed the ecological impacts of a variety of options including extent of effects on stream/ waterway ecology as well as the consideration of natural wetlands under the NPS-FM.
- Through the alternatives assessment and design refinement process the requiring authority have sought to avoid wetland areas and minimise impacts on rivers and waterbodies where practicable. Where avoidance is not practicable, design refinements have looked at ways to minimise effects.
- Stormwater discharge quality will be managed through the use of soft stormwater infrastructure where possible such as swales and stormwater wetlands. An integrated stormwater network will be designed at the detailed design/ regional consenting stage that is sensitive to receiving environments, recognising capacity constraints of streams and the importance of maintaining or enhancing the quality of freshwater.

I concur with this assessment under the NPS-FW and Council's ecology specialist also agrees with the management approach (subject to amendments). In that regard, I agree that the NoR gives effect to the NPS-FW, subject to the conditions, as recommended to be amended.

### **6.9.4 National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB)**

The National Policy Statement for Indigenous Biodiversity (NPS-IB) is an essential part of our response to biodiversity decline in Aotearoa. It provides direction to councils to protect, maintain and restore indigenous biodiversity requiring at least no further reduction nationally.

The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-FW because:

- The options development and assessment considered existing and likely sensitive ecological features and environments and sought to locate the majority of the designation boundary outside the Significant Natural Areas (mapped as Significant Ecological Areas (SEAs) in the AUP:OP).
- The Project seeks to maintain indigenous biodiversity through the implantation of the EMP as required by proposed condition 24.

I concur with this assessment and note that the majority of SEA's have been avoided except for one SEA which extends slightly into the proposed designation boundary. It is considered the conditions, with appropriate amendments will adequately manage any adverse effects on the SEA.

### **6.10 Regional Policy Statement (Chapter B of the AUP:OP) (RPS)**

The RPS sets the strategic direction for managing the use and development of natural and physical resources throughout Auckland. The following sections of the RPS are considered relevant to NoR 4:

- Chapter B2 Tāhuhu whakaruruhau-ā-taone – Urban Growth and Form
- Chapter B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao – Infrastructure, transport and energy
- Chapter B4 Te tiaki taonga tuku iho – Natural heritage
- Chapter B5 Ngā rawa tuku iho me te āhua – Historic heritage and special character
- Chapter B6 Mana Whenua
- Chapter B7 Toitū te whenua, toitū te taiao – Natural resources
- Chapter B10 Ngā tūpono ki te taiao – Environmental risk

The requiring authority has assessed the Project against the relevant provisions of the RPS in Section 12 Table 12-1. **Table 6-1** below sets out the RPS Chapters in the AUP:OP and the theme set out in table 12-1 of the AEE in which the RPS is addressed.



**Table 6-1 AUP:OP RPS Chapter and Table 12-1 themes**

<b>Chapter</b>	<b>Theme identified in table 12-1 of AEE</b>
B2 Tāhuhu whakaruruhau ā-taone - Urban growth and form	Urban growth and development capacity
	Natural hazards
	Urban form and quality design
B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy	Urban growth and development capacity
	Enabling infrastructure and transport
	Enabling infrastructure within an overlay and in addition to the above
B6 Mana Whenua	Urban form and quality design
	Manawhenua
	Manawhenua
B7 Toitū te whenua, toitū te taiao - Natural resources	Indigenous biodiversity and ecological values
	Freshwater
	Urban growth and development capacity
B9 Toitū te tuawhenua - Rural environment	Natural hazards
B10 Ngā tūpono ki te taiao - Environmental risk	

I generally agree with the assessment under the RPS provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

The AUP:OP district plan provisions are addressed in Section 12 Table 12-1 of the requiring authority's AEE.

### **6.11 Auckland Unitary Plan**

The AUP:OP provisions are addressed in Section 12 Table 12-1 of the requiring authority's AEE.

### 6.11.1 Chapter D overlays

NoR 4 is subject to a range of overlays in the AUP:OP including the following:

- D1: High Use Aquifer Management Areas Overlay [rp]
- D2: Quality-sensitive Aquifer Management Overlay [rp]
- D9: Significant Ecological Areas Overlay [rp/dp]

The provisions of Chapters D1, D2 and parts of D9 are regional provisions. Therefore, an assessment of these will be required at the regional resource consent stage. It is noted that proposed conditions 23 and 24 include a pre-construction ecological survey and ecological management plan which are considered appropriate to adequately avoid, remedy and mitigate adverse effects.

### 6.11.2 Chapter E Auckland-wide

NoR 4 is subject to a range of Auckland-wide provisions in the AUP:OP and the requiring authority have assessed the following:

- E1: Water quality and integrated management
- E11: Land disturbance – Regional
- E12: Land disturbance – District
- E15: Vegetation management and biodiversity
- E17: Trees in Roads
- E25: Noise and vibration
- E26: Infrastructure
- E27: Transport
- E36: Natural hazards and flooding

I generally agree with the requiring authority's assessment under the Auckland -Wide provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

I note that Table 12 -1 did not consider the following Auckland -Wide Chapters :

- E2 Water quantity, allocation and use
- E3 Lakes, rivers, streams and wetlands
- E8 Stormwater - Discharge and diversion
- E9 Stormwater quality - High contaminant generating car parks and high use roads
- E24 Lighting

While I recognise that the effects of stormwater discharges (quality and quantity) are the subject of regional consents, it would be helpful if these had also been considered in Table 12.1. I also note that lighting effects have been recognised there is no assessment in terms of relevant objectives and policies.

### **6.11.3 Chapter H Zones and Precincts**

NoR 4 is located in the Future Urban Zone (H18 of the AUP:OP), Rural – Mixed Rural Zone and Rural Countryside Living zone (H19) and it crosses into the Strategic Transport Corridor Zone (the NIMT and SH22). A very small section of NoR 4 also extends into Runciman sub-precinct A.

I generally agree with the requiring authority's assessment under the Zone and Precinct provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

### **6.12 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 Appendix A to the AEE. Sections 5.2 to 5.5 of Appendix A to the AEE discuss the nature of the alternative assessment and design refinements that have taken place in relation to NoR 4.

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'<sup>11</sup>.

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.

### **6.13 Reasonable necessity for work and designation – section 171(1)(c)**

The requiring authority has set out its specific project objectives for NoR 4 in the Form 18 documents and in section 6, Table 6.1 of the AEE. These are listed in the AEE as follows:

- Improves connectivity in Pukekohe.

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<sup>11</sup> Waimairi District Council v Christchurch City Council C30/1982

- Support Vision Zero and road safety outcomes.
- Supports resilience and the existing transport network by providing a new transport connection.
- Supports planned urban growth and the future transport network by providing new connections within new future urban communities.
- Supports travel choice by providing for all modes of transport.
- Contributes to mode shift and the transition to a low carbon transport network by providing for active modes and capacity for new public transport services.

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.

#### **6.14 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. In this case the non-RMA documents are considered relevant.

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 Table 12.1 of the AEE. I generally concur with the assessments and conclusions of the AEE on any other matter and the range of other documents listed.

I also consider that the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 NES (Soil) is a relevant other matter that has not been considered or given regard to specifically.

The NES (Soil) provides a nationally consistent set of planning controls and soil contaminant values to ensure that land affected by contaminants in soil is appropriately identified and assessed before it is developed and, if necessary, the land is remediated or the contaminants contained to make the land safe for human use.

In Form 18 the requiring authority has listed resource consent under the NES (soil) as being required but are not sought at this time. It is considered the addition of an advice note to state this is appropriate to ensure this is captured as part of the designation.

I also note that the AEE refers to the Draft Future Development Strategy (FDS) which is considered an 'other matter'. It would be helpful for the requiring authority to advise if, now that the FDS has been finalised, the assessment would change.

## 6.15 Designation lapse period extension – section 184(1)(c)

As outlined in section 6.8.14 it would also be helpful to hear from the requiring authority in response to the issues raised on how the impact of the requested 20 year lapse period could be mitigated. 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.

## 6.16 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. There is nothing specific terms of NoR 4 that has been addressed. 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.

## 6.17 Conclusions

The requiring authority has lodged NoR 4 under section 168 of the RMA for the new Pukekohe North-East Arterial.

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 4 should be confirmed subject to conditions and with modifications, for the following reasons:

- The notice 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 notice of requirement is generally consistent with the relevant AUP:OP provisions.
- The notice of requirement is 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.

## 6.18 Recommendation and conditions

### 6.18.1 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 5 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 of requirement is consistent with and give effect to the relevant national environmental standards, national policy statements and the AUP:OP.
- 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 of requirement is reasonably necessary to achieve the requiring authority's objectives.
- Restrictions, by way of conditions attached to the notice of requirement have been recommended to avoid, remedy or mitigate adverse environmental effects associated with the works.

### **6.18.2 Recommended conditions**

The conditions set recommended by the reporting planner for NoR 4 is set out in Attachment 5 to this report.

## 7 NoR 5 Pukekohe South-East Arterial

### 7.1 Proposal

As set out in section 9.10 of the AEE, NoR 5 upgrades part of Pukekohe East Road, Golding Road and provides a new connection between Golding Road (from North of Royal Doulton Drive) and across Station Road and the NIMT to the existing industrial development on Crosbie Road to Svendsen Road. The location is shown in Figure 7-1 below. It is a primary east-west connection to assist in redirecting general traffic and freight away from the Pukekohe town centre to provide additional resilience to the wider network.

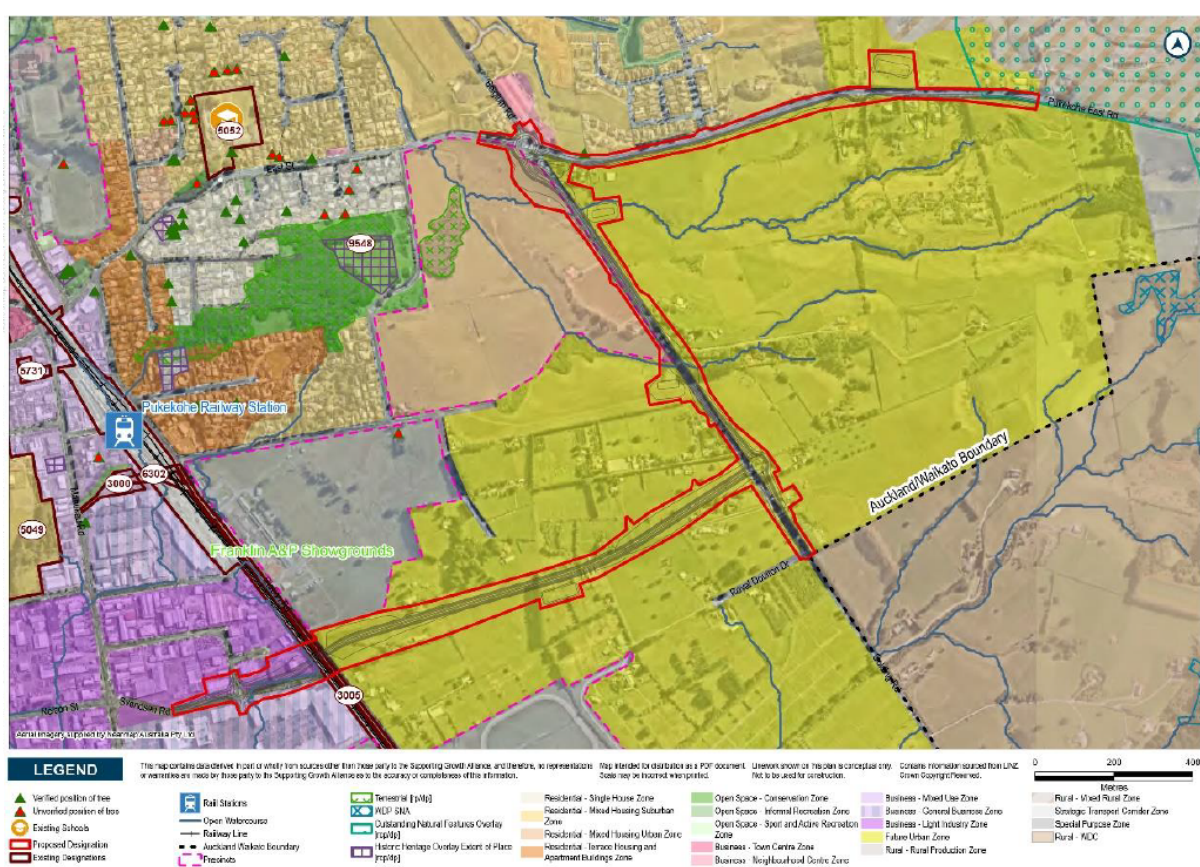


Figure 7-1 NoR 5 Pukekohe South-East Arterial [Source: AEE]

Key features of the designation include:

- An indicative 24m wide cross section with two lanes for general traffic with active transport facilities on the southern side of the corridor on Pukekohe East Road and on both sides for the remainder of the corridor.
- One bridge crossing Station Road and the NIMT through the existing industrial development on Crosbie Road to Svendsen Road.
- Five new stormwater wetlands and new and upgraded culverts.



## **7.2 Affected Land**

The designation plans are provided in Volume 1 For 18 Attachment A: Designation Plans and the schedule of directly affected properties are provided in Volume 1 Form 18 Attachment B: Schedule of Directly Affected Properties of the NoR's together with the schedule provided describes the land that will be directly affected and required for the project and associated works.

As noted in the AEE, there will be 52 properties directly affected (i.e. the designation boundary will extend across these properties). Of the 52, 50 properties are privately owned land totalling approximately 205,695m<sup>2</sup>, 1 property which is Council owned land totalling 8,205m<sup>2</sup> and there is 1 rail property totalling approximately 2,188m<sup>2</sup>. Land use is agriculture-pastoral, rural-residential, light industrial and residential.

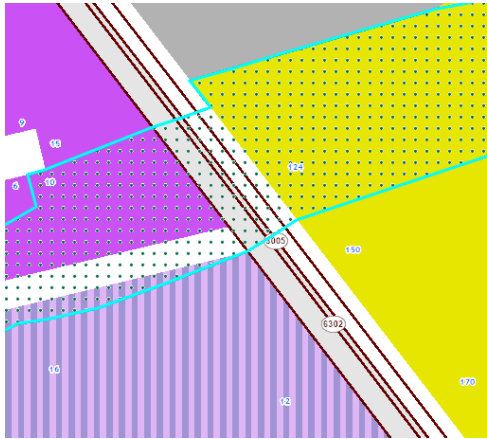
## **7.3 Site, locality, catchment and environment description**

This report relies on the site and environment descriptions provided by the requiring authority as set out in sections 9.2.1 and 9.2.2 of the AEE supporting NoR 4 and within each of the supporting technical assessments. The requiring authority has set out the approach to the likely receiving environment as assessing the effects on the environment as it existing 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. It sets out the land use today, zoning type, likelihood of change for the environment (ranging from low to high) and the likely future environment.

NoR 5 is located on existing roads and extends into land zoned FUZ, Residential - Mixed Housing Urban Zone, Residential – Mixing Housing Suburban Zone and Business – Neighbourhood Centre Zone near the intersection of Mill Road and Golding Road, as well as Business Light Industry Zone and Business – General Business Zone. The proposed designation boundary extends into the Pukekohe East-Central Precinct along Goldings Road. The proposed designation boundary extends into a small section of the Outstanding Natural Feature Overlay (Pukekohe East Tuff Ring) along Mill Road. There is a notable tree located very close to the designation boundary along Mill Road. The proposed designation boundary also crosses a number of overland flow paths, floodplains and flood prone areas. The designation boundary will cross an unnamed stream at Golding Road.

## 7.4 Other designations, notices of requirement and consent applications

The AEE contains a table of the interface with other projects. The table below summarises those related to NoR 5.

Project	Interface with NoR 5	Status
<p>KiwiRail NIMT</p> 	<p>NoR 5 crosses the NIMT (designation reference number 6302).</p>	<p>Given effect to. This is the primary designation</p>
<p>Counties Energy Limited</p>	<p>NoR 5 crosses this designation at the same location as outlined about (designation reference number 3005).</p>	<p>Given effect to. This is the primary designation</p>
<p>Plan Change 78 (PC78)</p>	<p>NPS-UD and Medium Density Residential Standards (MDRS) are intending to enable housing choice in main urban areas. These standards support the development of three homes up to three storeys on each site without the need for resource consent. Part of NoR 5 will be located within PC78 as there is a section along Mill Road that will change from Residential – Mixed Housing Suburban Zone to Residential – Mixed Housing Urban Zone under the plan change</p>	<p>Notified on 18 August 2022. Further submissions on PC78 closed on 17 March 2023.</p>

<b>Project</b>	<b>Interface with NoR 5</b>	<b>Status</b>
Plan Change 76 Kohe 47 Golding Road and 50 Pukekohe East Road	PC76 rezones approximately 30.61 hectares of land in eastern Pukekohe, bounded by East Street to the north, Golding Road to the east, Ngahere Road to the west and Birch Road and rural/residential blocks to the south. The plan change rezones land from Future Urban Zone to Residential – Mixed Housing Urban Zone. NoR 5 has a direct interface with the plan change area on Golding Road.	Further submissions closed 24 February 2023
43 – 45 Puni Road and 44 McNally Road – Franklin Village	NoR 5 is located in close proximity on Puni Road.	A retirement village has recently been consented on the site.

## 7.5 Submissions

21 submissions were received from:

<b>Submission number</b>	<b>Submitter Name</b>	<b>Position</b>
1	Holy Properties Limited	Oppose
2	Franklin Agricultural Land Pastoral Society	Oppose
3	Cade Daroux	Oppose
4	Chris Feng	Oppose
5	DH and IM Mills Property	Oppose
6	Telecommunications Submitters	Oppose in Part
7	Enviro NZ Services Limited	Oppose
8	Xiaoli Chen	Neutral
9	Bernard Kennelly	Oppose
10	Kevin Golding	Oppose
11	Michael Lieshout	Oppose
12	Shao Jie Zheng	Oppose
13	OMAC Limited and Next Generation Properties Limited	Oppose in Part

Submission number	Submitter Name	Position
14	AEDIFICE Development No. 1 Limited	Oppose in Part
15	KiwiRail Holdings Limited	Support
16	The Campaign for Better Transport Incorporated	Neutral
17	Watercare Services Limited	Neutral
18	Ministry of Education	Neutral
19	Siobhan Ainsley	Neutral
20	Counties Energy Limited	Support with amendments
21	Pukekohe Meg Trustees Limited and Wrightson Way Limited	Oppose

Copies of submissions are included in Attachment 1.

The issues raised in submissions are addressed throughout section 4.7 of this report.

## **7.6 Consideration of the notice of requirement 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 this NoR, 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 7.8, 7.9, and 7.10 below. Section 171(1)(b) is addressed in section 7.11 below. Section 171(1)(c) is addressed in section 7.12 below. Section 171(1)(d) is addressed in section 7.13 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.<sup>12</sup>*

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. Refer to section 7.17 below for our recommendation.

## **7.7 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. The relevant specialist reports are referred to and are included in Attachment 3. Submissions have also been considered and are referred to where relevant.

### **7.7.1 Effects to be disregarded - Trade competition**

I do not consider that there are any trade competition effects.

### **7.7.2 Effects that may be disregarded – Written approvals**

No written approvals were included in the notice of requirement.

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<sup>12</sup> See Estate of P.A. Moran and Others v Transit NZ (W55/99)

### 7.7.3 Positive effects

The AEE describes the positive effects of the project which are summarised as:

- 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.

The AEE also refers to positive landscape and visual, arboriculture, community and urban design effects.

#### Specialist Review

Wes Edwards of Arrive Ltd has reviewed the 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 the requiring authority evaluates the benefits of the Projects assuming that all development would occur with or without the Projects however Mr 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 enabled through NoR 5 will have significant positive transport effects for the reasons outlined in the AEE. The positive community effects are similar to the transport effects and I agree with the AEE in terms of those.

The positive terrestrial ecology effects identified in the AEE appear to be related largely to the delivery of stormwater management measures and landscaping. Many of these measures will be linked to future regional consents required for stormwater discharge, earthworks and vegetation removal and works affecting streams and wetlands.

It is assumed that the best practice measures that will be expected at the time that the resource consents are applied for, will deliver the claimed enhancements / positive effects on the existing environment. Therefore, it is agreed that there will be positive effects given the extent of brown field, exotic grassland, exotic scrub, planted vegetation, and tree land that is within and adjacent to the NoR 5 designation extent and the opportunity through the works to improve indigenous biodiversity. However, it is not clear how the works will affect the specific values that are present or the scale of the positive terrestrial ecology effects of the NoR at this time. As outlined in the AEE and the Assessment of Ecological Effects specific assessments of the current conditions along the route have not been undertaken in relation to the current conditions of the ecological values present.

There are a number of matters listed under Landscape and Visual benefits that are also linked to urban design benefits that I agree will be positive effects and contribute to the creation of an appropriate future urban environment. These include enhanced connectivity; integration of active travel routes and recreational paths and reduction in speed and new landscaping that will create attractive environments which can enhance the built character.

Also listed as a positive effect is the addition of trees in the new cross sections to enhance the urban landscape where there is room. I agree that these are potential positive effects. However, Condition 1 for NoR 5 as submitted states:

*Except as provided for in the in the conditions below and subject to final design and Outline Plans(s) works within the designation shall be undertaken in general accordance with the Project description and concept plan in Schedule 1....*

The Project Description for NoR 5 as set out in Schedule 1 of Form 18 is:

*“The proposed work is for the construction, operation and maintenance of a transport corridor including active transport facilities and associated infrastructure between Pukekohe East Road, Pukekohe in the north east and Svendsen Road, Pukekohe in the south west. The proposed work is shown in the following Concept Plan and includes:*

- (a) A transport corridor including active mode facilities;*
- (b) Associated works including intersections, bridges, embankments, retaining walls, culverts, stormwater management systems;*
- (c) Changes to local roads, where the proposed work intersects with local roads; and*
- (d) Construction activities including construction areas and the re-grading of driveways.”*

As the Concept Plan in Form 18 is at such a level that there is no detail to be seen I am concerned at how the positive arboriculture and landscape effects will be delivered. This places greater need on the relevant conditions in delivering the positive effects identified. I do note that there is also a requirement to deliver a concept plan under condition 11(g).

The relevant condition in relation to many of these positive effects is Condition 11 related to the provision of the Urban and Landscape Design Management Plan (UDLPM) which uses ‘where appropriate’ and ‘where practicable’ without reference to how this will be determined.

#### **7.7.4 Māori culture, values, and aspirations**

##### Requiring Authority AEE

The AEE notes that only Mana Whenua can speak to the impact that a project may have on their cultural values, heritage and aspirations. 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.

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, Sites of Significance under the AUP:OP or within the coastal environment under the Marine and Coastal Area (Takutai Moana) Act 2011.

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. To avoid, remedy or mitigate these potential adverse effects, SGA are proposing a number of conditions which were collaboratively developed with Mana Whenua. These conditions include inviting Mana Whenua to prepare a Cultural Advisory Report (proposed condition 9), Mana Whenua will be invited to participate in the development of the Urban and Landscape Design Management Plan (ULDMP) (proposed condition 11), and prior to the start of construction works or enabling works Mana Whenua will be invited to prepare a Cultural Monitoring Plan (proposed condition 16).

##### Planning Review

NoR 5 is not within any ‘Sites and Places of significance to Mana Whenua’ as identified on the AUP:OP’s planning maps. There are no known archaeological sites within the NoR area.

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.

It is noted that NoR 5 crosses two unnamed tributaries of the Whangapouri Creek and one unnamed tributary of the Tutaenui Stream which eventually flows to the Manukau Harbour. The AEE notes that the CIA provided by Te Ata Waiohua to inform the concept design identifies the potential for adverse impacts on freshwater systems and receiving environments and that the CIA identified opportunities for riparian planting alongside the streams to restore and regenerate the environment and increase wetland areas as part of the Project.



While no specialist review of has been undertaken, I consider given the information provided that the conditions for a Cultural Advisory Report, Urban and Landscape Development Management Plan, and Cultural Monitoring Plan are appropriate.

### **7.7.5 Traffic and Transport**

#### Requiring Authority AEE

Effects on traffic and transport are addressed in section 11.4 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Transport Effects September 2023 by Subha Nair, Deborah Keary and Sharath Kotha. The AEE covers operational effects which relate to safety, walking and cycling, public transport, and general traffic and freight which are considered to have positive effects, and property access which is considered to have some adverse effects that will need to be managed. Due to the complexity of access arrangements changing over time, it's not currently possible to confirm a precise treatment for all individual accesses, particularly in areas that are transitioning from rural to urban. Therefore, it is proposed for each of the designations to include a condition (proposed condition 13) to demonstrate (in the Outline Plan) how safe access will be provided for each existing access that is altered by the project. The implementation of restricted turning movements such as the inclusion of a raised median or wire rope barrier (left in, left out) from existing accesses are anticipated to be minor, adding a maximum of 1 – 4 minutes to journey times (only for restricted right turn movements).

Specific effects related to property access are discussed in the AEE.. An assessment of property access has been undertaken to inform the designation boundary and concept design and to assess potential effects. The majority of the property accesses will be maintained with limited to no impact on property access. It is anticipated that a few properties (less than 5) will be restricted to left-in and left-out vehicle access, where right turning movements are restricted. Through assessing the re-routing time, it has been determined that the additional journey time is minimal (less than 2 minutes).

The AEE also covers construction effects which relate to traffic routing, property access, pedestrian and cyclist safety, road safety, on-street and public parking, parallel construction of projects and land use activities that will require further consideration. It is recommended that a Construction Traffic Management Plan (CTMP) be prepared prior to the start of construction for each stage of the work, this is included as proposed condition 17. The technical report recommends that if required, Site-Specific Traffic Management Plans (SSTMP) should be developed to manage constraints on access to affected properties.

## Specialist Review

Mr Wes Edwards, Arrive Ltd has prepared a technical specialists report which reviews the notice of requirements for the Pukekohe Transport Network in relation to transport effects and responds to submissions that are about transport. Mr Edwards notes that 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. He states that the two key issues for the hearing panel are if the consideration of alternatives is adequate and if the Projects are reasonably necessary. Mr Edwards agrees with the requiring authority's assessment of alternatives at a macro scale but notes that 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.

Mr Edwards has identified a number of gaps in the requiring authority's assessment which relates to all NoR's and are set out in his report under the following headings: design standards, management of effects, integration of transport and land use, assessment of operational effects, road safety, active modes, public transport, freight, generic traffic, travel and emissions, property access, parking, and management of effects.

There are a large number of submissions that relate to transport (refer to Attachment 3 for the detailed response to each submission from Mr Edwards). The submissions relate to Pukekohe East Road, new East-West connection, property access and management of effects.

The requiring authority proposes to manage effects through management plans. Mr Edwards considers that the provided purpose of the CTMP is adequately described, but he considers that some amendments are required to the list of matters the CTMPs should address. With regard to proposed condition 13 which relates to existing property access, Mr Edwards considers this may not provide for movement of all vehicles used on that property such as a large truck and trailer or agriculture machinery. He recommends that the condition is amended to require the access to be fit for purpose or adequate. He also recommends that the replacement or altered access be reasonable efficient, particularly with respect to additional journey length and time but acknowledges 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.

Overall, Mr Edwards provisionally supports NoR 5 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.

#### Planning Review

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by the submitters and by Mr Edwards as it is not clear at this time that the potential adverse transport effects in particular can be avoided, remedied, or mitigated.

It is noted that the technical report submitted by the requiring authority recommends a SSTMP is prepared if required however there are no conditions that include a SSTMP. It would be helpful if the requiring authority commented on why there are no conditions including a SSTMP.

### **7.7.6 Construction Noise and Vibration**

#### Requiring Authority AEE

Effects of construction noise and vibration are addressed in section 11.5 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Construction Noise and Vibration Effects September 2023 by Joshua Dunkel, Siiri Wilkening and Claire Drewery. The AEE summarises that the closest existing receivers are approximately 2m away from the construction boundary. With mitigation in place, the most affected receivers could still receive intermittent noise levels over 85 dB LAeq if high noise generating activities occur on the construction boundary. However, due to the setback distances to most of the proposed works and the use of equipment with lower source noise levels for large portions of the works, mitigated noise levels can comply with the 70 dB LAeq noise criterion for most of the construction works.

Six existing dwellings and two commercial receivers may experience vibration levels above the daytime Category B criteria, if the roller compactor is used on the construction boundary in the closest position to them. Mitigation, such as the use of non-vibratory compaction equipment within 8m of residential structures and 4m of commercial structures, is recommended to avoid potential cosmetic damage.

It is recommended in the AEE that a Construction Noise and Vibration Management Plan (CNVMP) be prepared prior to construction and is included as proposed condition 20 and 21. There are also proposed conditions around what standards will be used to measure construction noise and vibration (proposed conditions 18 and 19).

### Specialist Review

Mr Rhys Hegley, Hegley Acoustic Consultants has reviewed the construction noise and vibration assessments. Mr Hegley states that the AEE and technical reports contains a lot of generic information which 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. For both construction noise and vibration effects he states that the Assessment of Construction Noise and Vibration Effects identified receivers where the criteria may be exceeded without defining the magnitude of the exceedance. Mr Hegley recommends that Condition 19 is changed to reflect the Waka Kotahi Condition 18 and add in requirements (18(b) and 18(c)) that set out the assessment and monitoring requirements for a situation where vibration exceeds the Category B criteria. He also noted that there appears to be an inconsistency. Firstly, the noise (Condition 18) and construction (Condition 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. Mr Hegley recommends clarity in these conditions. He also recommends that the CNVMP and Schedule of conditions (Condition 20 and 21) 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.

### Planning Review

It is noted in the AEE that the construction of NoR 5 will take place over approximately 3 to 4 years. While it is noted that the majority of the current zoning of the land is FUZ, the purpose of this zone is to be a transitional zone and that land may be used for a range of general rural activities but cannot be used for urban activities until the site is re zoned for urban purposes. As mapped in GeoMaps this area and surrounding FUZ area is earmarked to become a Future Urban Area between 2023 – 2027 under the Development Strategy Sequencing and Timing of Growth Map layers. This means that this area could become residential prior to or during the construction of NoR 5. It would be useful to know how the requiring authority proposes to address this given the lapse period sought.

It is noted The Franklin Agricultural and Pastoral Society (submission number 2) are concerned about the possible impact of noise and heavy traffic movements where the proposed road is along the boundary of the Society's property.

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.

### 7.7.7 Operational Noise

#### Requiring Authority AEE

Effects of operational noise are addressed in section 11.6 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Operational Noise Effects September 2023 by Joshua Dunkel, Siiri Wilkening, Shivam Jakhu and Vitalii Zaiets. Existing Protected Premises and Facilities (PPFs) within 100m from the proposed new road edge were assessed in urban areas, and 200m for rural areas, based on NZS6806. There are 28 PPFs that are identified under the altered roads criteria and 2 PPFs under the new roads criteria which have been identified for NoR 5. However, all PPFs for NoR 5 were predicted to receive noise levels within Category A (the desired noise criteria category) so no mitigation is proposed. Further, ambient noise levels are likely to increase as the area urbanises, so the changes in noise levels due to the Project may not be as noticeable at the time.

#### Specialist Review

Mr Rhys Hegley, Hegley Acoustic Consultants has prepared a review of the operational noise and vibration assessment. Mr Hegley notes that the approach in the requiring authority's technical assessments is to adopt a low noise road surface across all NoRs for the control of noise to current and future receivers, however 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 6086 provides for a PPF. Mr Hegley notes that 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 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. Mr Hegley recommends that the AT road surface Condition 27 be amended to match Waka Kotahi's Condition 26. Mr Hegley recommends 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. He also recommends 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) to Condition 28. The same changes are proposed for conditions 29 and 30 and changes to conditions 31 and 32.

## Planning Review

The current zoning of the land affected by NoR 5 is partially FUZ, the land may be used for a range of general rural activities but cannot be used for urban activities until the site is re zoned for urban purposes. There are also small areas which the designation extends into which is zoned Residential – Mixed Housing Urban Zone, Residential – Mixed Housing Suburban, Business – Neighbourhood Centre Zone, Business – Light Industrial Zone and Business - General Business Zone. As stated in section 7.7.6 above, the FUZ area could become residential prior to or during the construction of NoR 5. It would be helpful if the requiring authority assesses the noise effects on activities that may arrive between designation and construction as stated by Mr Hegley. This assessment should include any mitigation that may be required and if mitigation in the form of noise barriers is required then the effects on landscape and visual should also be assessed.

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by Mr Hegley, including the additional information and changes to conditions, to ensure that the potential adverse operational effects in particular can be avoided, remedied, or mitigated.

### **7.7.8 Flood Hazard**

#### Requiring Authority AEE

Effects on flood hazard are addressed in section 11.7 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Flood Hazard Effects 12/09/2023 by Justin Kirkman. The AEE states that there may be some flood hazard effects during the construction phase (refer to section 11.7.1 of the AEE for the full list) however the details of the construction approach will be confirmed at detailed design and mitigation measures are included in the Construction Environmental Management Plan (CEMP) outlined in condition 14.

NoR 5 crosses four flow paths and within the Whangapouri Stream and Tutaenui Stream catchments. The land uses upstream of the crossing points have dwellings nearby that may be subject to flood effects if the upstream flood level caused by NoR 5 not adequately managed. The buildings in the floodplain along Station Road at the flow path crossing in the FUZ to the east of Station Road are flooded due to the constrictive nature of the railway line and the drainage beneath.

There is some moderate and high risk locations related to NoR 5 (listed below) where there are existing buildings.

- 65 Golding Road residential building - Moderate existing and future risk
- 124 Station Road residential building - Moderate existing and future risk
- 150 Station Road residential building - High risk existing and future risk
- 170 Station Road residential building - Moderate existing and future risk
- 15 Austen Place industrial building - Moderate existing and future risk

- 44-46 Crosbie Road industrial building - Moderate existing and future risk

The operational flooding effects for NoR 5 relate to the four overland flow paths, existing floodplains and the effects of using a 3.8° climate change adjusted rainfall pattern compared to the 2.1° climate change pattern. The 3.8° climate change scenario would likely increase by 100mm to 400mm as a result. The moderate risk locations would likely become high risk and low risk would become moderate risks.

Specific mitigation for NoR 5 in the AEE include:

- Adequately size culverts and the bridge over the NIMT rail line and Station Road.
- Avoid lifting the crown of the road along Golding Road to prevent adverse effects upstream.
- Attenuation for the 10yr and 100yr in the Whangapouri and Tutaenui Stream catchments
- Provide diversion channels at the toe of fill embankments to prevent ponding.
- Offset the flood volume displaced by filling in the floodplain with an equivalent volume of excavation within the floodplain.
- Maintain 600mm freeboard to the new bridge soffit over the NIMT rail using the 100-year ARI flood level with 3.8° Climate change hydrology.

Proposed condition 12 sets out flood risk outcomes which the project shall be designed to achieve.

### Specialist Review

Mr Trent Sunich has reviewed the Assessment of Flood Hazard Effects (which references points 1-4 where the designation boundary crosses overland flow paths or floodplains from north to south). He states that land uses upstream of points 1, 2 and 3 which is referenced in the AEE and technical report submitted by the requiring authority contain dwellings nearby that may be subject to flood effects if the upstream flood level caused by the NoR 5 alignment is not adequately managed. Future buildings nearby will be considered during future design stages to meet the flood hazard condition proposed on the NoR. The buildings in the floodplain along Station Road at point 3 are flooded due to the constrictive nature of the railway line and the drainage beneath. Additionally, earthworks in this floodplain may exacerbate flooding on these properties. A longer bridge or compensatory earthworks may be needed to avoid worsening flood effects on these properties. The designation extent is sufficient to find a solution to meet the designation conditions being sought.

Flooding at point 4 will likely remain unchanged as a result of the works. If adverse effects are found at this location, the effects can be managed with a channel and pipe network within the designation.

The 3.8° climate change scenario has not been simulated for this catchment and the Auckland Council GIS does not provide information on this event at this location. As noted in previous sections the flood levels will likely increase by 100mm to 400mm as a result. The moderate risk locations would likely become high risk and low risk would become moderate risks.

Mr Sunich has reviewed the proposed conditions with Auckland Council Healthy Waters staff and has recommended changes to the flood hazard condition and an inclusion of an advice note. These changes relate to simplifying condition outcomes, referencing the relevant code of practice, the introduction of overland flow specific conditions for new and existing overland flows, and requiring AT to consult Auckland Council Healthy Waters when developing the Outline Plan.

Mr Sunich acknowledges that the Assessment of Flood Hazard Effects assesses construction effects in relation to stormwater and proposes a consent condition 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 changes are recommended to the CEMP conditions.

Submission number 19 (Siobhan Ainsley) has relevant points that relate to stormwater. The table below is taken directly from Mr Sunich's specialist review and covers the submission points raised and his response.



Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
19	Sir William Birch on behalf of Siobhan Ainsley	<p>A pre-application meeting for the Private Plan Change for part of 87 and part of 131 Pukekohe East Road, Pukekohe was held with senior Council Planners and officers of Water Care and Auckland Transport on 12 September 2023.</p> <p>A major concern is that the proposed location of a stormwater treatment pond on NOR 5 that provides for treatment from the wide roading on the southern side of Pukekohe East Road is in the centre of the land at 84 Pukekohe East Road that is planned for residential development. This does not make any sense and would be strongly opposed by our client. On the other hand it is a relatively simple matter to build the SW treatment pond either on the adjoining rural land owned by our client or somewhere in the proximity of the site shown on our attached concept plan to treat the runoff from Pukekohe East Road and the proposed residential development shown on our plan. It makes sense to have a single community owned pond to treat both the road water and the subdivision water and to design the ultimate subdivision to provide for this. This matter has been discussed with Supporting Growth and we hope to meet and explore this option further before the designations are finalised.</p>		<p>I support the functionality of the proposed wetland and I do not have a view on its exact location until further detailed design can be completed on route design and the associated requirements to manage stormwater runoff through the regional consent process to authorise the stormwater discharges.</p> <p>The applicant may wish to comment of the feasibility of moving the location of the wetland as requested in this submission.</p>

### Planning Review

In terms of construction related flooding effects no submitter raised any concerns and the impact of earthworks on flood risk will be considered as part of the regional consent process. Therefore, based on the comments from Trent Sunich I consider that the potential adverse effects on flooding during construction can be avoided, remedied, or mitigated, subject to the above, as the CEMP condition requirement for flood hazard to be assessed during construction and the requirements of the regional consent provisions in the AUP:OP will ensure that this effect is adequately addressed.

With regard to operational effects of flooding, there is nothing to suggest that the extent of the designation is not sufficient to provide for the alignment construction and operation and any associated works for flood mitigation techniques. It is noted that one of the submitters raised concern about flood effects (Siobhan Ainsley – submitter number 19). Mr Sunich has recommended amendments to the NoR conditions to include provision for assessing the effects of smaller rainfall events (e.g. 10% AEP). It is also considered that given that this is a changing space it is assumed that AT will prior to the Outline Plan stage review the effects of climate change in terms of the best information available at that time.

Therefore, it would be helpful for the requiring authority to provide a response at the hearing on changes to conditions suggested by Mr Sunich and a response to the submitters concerns. I consider that subject to the above, and the proposed conditions as recommended to be amended the potential adverse effects on flooding can be avoided, remedied, or mitigated.

### **7.7.9 Terrestrial Ecology**

#### Requiring Authority AEE

Effects on ecology are addressed in section 11.8 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Flood Ecological Effects September 2023 by Ian Bredin and Sahar Firoozkoohi. The AEE states a number of positive effects which are improved blue/ green infrastructure, landscape planting and the proposed bat mitigation in association with the landscape planting berms, embankments, and stormwater wetlands is likely to improve ecological connectivity for other native fauna.

The AEE discusses construction and operation effects of/ on vegetation clearance, long-tailed bats, birds, and herpetofauna. Potential construction effects that relate to the activities authorised by the designation include the disturbance and displacement of roosts/ nests and individual (existing) long-tail bats, avifauna and herpetofauna due to construction activities (noise, light, dust etc). The effects of vegetation removal have been assessed as low and therefore do not require any impact management.

The effects on long-tail bats for NoR 5 is assessed as moderate which will require mitigation in the form of a Bat Management Plan (BMP) which is included within the Ecological Management Plan (EMP) as proposed condition 23 and 24. Following mitigation, the effects on long-tail bats is assessed as low.

There is one identified Threatened and At-Risk (TAR) species of birds (Dabchick) within NoR 5 and the effects on these birds are considered moderate so require mitigation by an Avifauna Management Plan (AMP) which is included within the Ecological Management Plan (EMP) as proposed condition 23 and 24 which is then assessed as very low.

There are two herpetofauna species which are TAR however, the magnitude of effects on these was assessed as negligible due to the skinks being considered habitat generalists and the local extent of construction related effects so there is no mitigation proposed.

The potential operational effects on ecological features are the loss in connectivity for indigenous fauna and disturbance and displacement of indigenous fauna and their nests/ roosts. The effects on the long tail bat and birds were assessed as moderate so require mitigation in the form of a BMP and AMP which are included within the EMP as proposed condition 24. The effects on herpetofauna were assessed as low so no mitigation is proposed.

#### Specialist Review

Mr Simon Chapman, Ecology New Zealand has prepared a technical memo assessing the adequacy of the information submitted by the requiring authority. Having reviewed the proposed designation conditions for NoR 5, in particular, conditions 23 and 24, Mr Chapman considers that the potential ecological effects resulting from the proposed expressway project are likely to be adequately managed by those conditions. He has pointed out that the condition (23) should include a requirement for information regarding how the survey design is 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.

#### Planning Review

There are no SEA's within the proposed designation boundary and there are no submissions that address ecology. 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 with the assessment and any changes to conditions suggested. I also note that there is no specific reference to BMP or AMP in the designation conditions as currently drafted. 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.

### **7.7.10 Landscape and Visual and Urban Design Evaluation**

#### Requiring Authority AEE

Section 9.10 of the AEE, in the description of the receiving environment for NoR 5, notes that the alignment of the proposed designation is located along (and within) the edge of the Pukekohe East tuff ring (identified Outstanding Natural Feature – ID 169 in the AUP:OP)) and conflicts with the Notable Tree Overlay - 2732, Monterey Pine.

Section 11.9 of the AEE discusses Landscape and Visual Amenity Effects and relies on the Assessment report submitted.

Positive effects are identified from the provision of new and upgraded roads both within the existing urban and rural environment, and within the FUZ as including:

- Enhanced connectivity for Pukekohe and Paerata as a whole by integrating with the existing local street network and improving road user safety. It will also improve transport network connectivity to the adjacent landscape outside of Pukekohe.
- Potential for stormwater wetlands to become attractive focal points through considered planting and wetland construction, and for stormwater wetlands to be integrated with active transport routes.
- Landscape mitigation planting will be provided to create attractive environments, which can enhance the built character of their surroundings and positively contribute to the visual quality of the streets and the area's sense of place.
- Opportunity to highlight cultural narratives in the landscape.
- The reduction in speed limits along upgraded alignments of existing roads both within the rural environment and the FUZ will improve the experiential qualities of the corridor for both road users and adjacent properties.
- Integration of active travel routes and recreational paths with Pukekohe's 'green network' of bush and vegetated riparian margins.

The above positive effects are not specific to NoR 5.

Construction and operational effects are outlined in Sections 11.9.2 and 11.9.3 of the AEE respectively for all the NoRs, while the specific landscape and visual effects for NoR 5 are broken down in Section 11.9.4.5 by segment and are outlined below:

NoR 5 Alignment Description	Construction Effects	Operational Effects
<p><b>Pukekohe South-East Arterial</b> - Upgrades to existing roads along Pukekohe East Road and Golding Road, and a new connection between Golding Road and Svendsen Road (to the west). Along the alignment, NoR 5 for the majority is located in the FUZ.</p>	<p>The construction works will be visible from rural residential properties along the alignment, with partial screening provided by existing vegetation, resulting in anticipated high temporary effects on visual amenity. Properties in the wider rural residential setting within both the rural and FUZ zoned land (including north and east of Grace James Road) likely have views of the alignment and construction activity, partly contained by the existing vegetation, resulting in anticipated moderate visual amenity effects for those properties within the wider setting, and from public viewpoints. The effects on landscape character resulting from the construction of NoR 5 are anticipated to be low-moderate. The upgrade of Pukekohe East Road and Golding Road will require the removal of limited sections of lot boundary planting along the existing road corridor where the proposed designation encroaches into adjacent properties. The level of effects is reduced as the construction of NoR 5 will require limited earthworks considering the integration with existing topography will also be required and no stream or catchments crossings. As the alignment is for the upgrade of existing roads and a new road within the rural environment (within the FUZ), roading and rail infrastructure are anticipated components within the setting of the proposed designation and the eastern urban fringe of Pukekohe. NoR 5 is also within the Light Industry Zone, with effects on a number of commercial properties (including the refuse and recycling transfer station). The designation will not introduce new or uncharacteristic features into the environment.</p>	<p>Urban development is anticipated within this area therefore, any adverse effects on landscape character related to the operational effects are therefore assessed to be very low. At the southwestern extent the projects bridges Station Road and the NIMT and connects to Svendsen Road in the Business – Light Industry Zone. The alignment and structures will be expected features within this environment. The visual context of the FUZ is anticipated to change to that of an urbanised environment, therefore, the anticipated visual effects for the operation of NoR 5 will be low.</p> <p>The operational visual amenity effects resulting from NoR 5 are anticipated to be low. This is based upon the design working with and integrating into the surrounding topography (including the raised topography and batters for bridge over the NIMT) and improved visual amenity and user experience (positive effects) associated with the streetscape design, street trees, berm planting and active modes enabled along the route. Additionally, the visual context of the FUZ will change over time to that of an urbanised environment.</p>

NoR 5 Alignment Description	Construction Effects	Operational Effects
	<p>NoR 5 will have moderate – high visual amenity effects for a number of urban and rural residential properties immediately adjacent to the alignment. Anticipated temporary visual amenity effects within the wider setting, and from public viewpoints are anticipated to be low – moderate.</p>	

Overall, it is anticipated that NoR 5 will result in low to moderate adverse landscape character effects during the construction phase and very low adverse landscape effects character when operational. In terms of visual amenity, NoR 5 is anticipated to result in low / moderate to moderate / high adverse effects during the construction phase and low adverse effects when operational.

An Urban Design Evaluation (UDE) is included with the NoR package and is discussed in Section 11.15 of the AEE. As noted in the AEE, the UDE provides urban design commentary on the concept designs that should be considered in future design stages through the implementation of the Urban Landscape and Design Management Plan (ULDMP) included as a condition of the proposed designation. The UDE is supported by a Design Framework with principles, as explained in the AEE, that seek that transport corridors contribute positively to existing and new communities, the environment and the social and economic vitality of Auckland.

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 NoRs.

Specialist Review

Rebecca Skidmore has reviewed the NoR and provided a response which is included in Attachment 3. Ms Skidmore notes that the NoRs are supported by robust urban design and landscape analysis. In section 5.22 of her assessment, Ms Skidmore considers that the context of NoR 5 is clearly described in the Landscape and Visual Effects Assessment (LVEA).

Ms Skidmore has considered NoR 5 in paragraphs 4.22 - 4.28 of her assessment and notes:

- 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.

- 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 industrial area (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 uses. Ms Skidmore agrees with this recommendation.
- 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 Outstanding Natural Landscape or Outstanding Natural Feature (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 Ms Skidmore's opinion, the existing street network provides modification to the volcanic landscape and the remnant features are not easily distinguished in the wider landscape. In Ms Skidmore's 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.

The relevant submissions have also been considered in her assessment and Ms Skidmore has requested additional information in relation to the following matters raised in the submissions:

- 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.
- The implications of the designation footprint on future residential use of 2 and 19 Golding Road (having regard to the AUP:OP Pukekohe East – Central Precinct Plan) and whether a smaller designation footprint can be achieved.
- The design challenges to spanning the NIMT railway line and Station Road.

## Planning Review

The effects assessment is predicated on the basis that there is going to be change in relation to the FUZ zoned land from a rural to an urbanised environment. The issues raised in Ms Skidmore's assessment and the concerns of some submitters are potentially addressed by the proposed Land Use Integration Process (LIP) (Condition 10).

Raised in the submissions by Franklin Agricultural and Pastoral Society, DH and IM Mills Properties, Enviro NZ Services Limited, Bernard Kennelly, Shao Jie Zheng, OMAC Limited and Next Generation Properties Limited, Aedifice Development No.1 Limited and Pukekohe Mega Trustees Limited and Wrightson Way Limited, further evidence is the required to address the extent and scale of earthworks required to achieve the proposed transport route and the implications this will have on achieving good integration with the surrounding (particularly urban) environments.

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.

A number of submitters raise concerns about adverse landscape and visual effects, including residential amenity, on their specific properties (Cade Hubert Daroux, Chris Feng, DH and IM Mills Properties and Kevin Golding). Ms Skidmore has suggested more information on the potential effects on these properties would also be helpful.

The submission by Cade Hubert Daroux raises concerns about the lack of pedestrian connection as a footpath is proposed only on one side of the road.

Given the comments made by Ms Skidmore, it would be helpful for the requiring authority to provide a response at the hearing on whether the LIP tool addresses many of the submitters specific site concerns relating to land integration matters. Further evidence is also required to address the extent and scale of earthworks required to achieve the proposed transport route and the implications this will have on achieving good integration with the surrounding environment.

I consider that the potential adverse effects can be avoided, remedied, or mitigated, subject to the above and the proposed conditions.

### **7.7.11 Historic Heritage and Archaeology**

#### Requiring Authority AEE

The AEE relies on the Pukekohe Transport Network Assessment of Effects on Historic Heritage, September 2023 by Matthew Campbell of CFG Heritage Limited submitted as part of the NoR documentation.

Section 11.10.1.1 of the AEE notes that unrecorded archaeological and historic heritage sites may be present within the proposed designation boundaries. In particular, near the banks of waterways such as the Ngaakoroa and Oira Streams. Such unrecorded archaeological and historic heritage sites could be adversely impacted by the disturbance or removal of subsurface features and deposits at the construction phase.



It is noted that no buildings which qualify as definite pre-1900 heritage have been recorded in the proposed designation boundary.

Although no specific effects on known historic heritage in relation to NoR 5 are noted, there is a general recommendation in Section 11.10.2 of the AEE that further research and survey should be undertaken to support applications for HNZPTA authority before construction commences.

No operational effects to either known or unknown historic heritage deposits are noted.

#### Specialist Review

The Council's Senior Specialist: Archaeology, Cultural Heritage Implementation Myfanwy Eaves has reviewed the NoR, which is included in Attachment 3.

Ms Eaves notes that through the Multi-Criteria Assessment (MCA) process and designing elements away from the historic heritage sites (no historic heritage sites are located in or near NoR 5), the impact on known historic heritage has been avoided. Ms Eaves is satisfied that, from a historic heritage perspective, all matters have been appropriately addressed in the technical assessment by Mr Campbell.

#### Planning Review

No submissions were received in relation to historic heritage in relation to NoR 5.

It is noted that Ms Eaves has expressed concern about the wording of the Historic Heritage Management Plan (HHMP) condition (Condition 22) as submitted where "unexpected" is used instead of "accidental" which Ms Eaves prefers. It is noted that there is no requirement for a Historic Heritage Management Plan in relation to NoR 5.

Given the comments made by Ms Eaves, it would be helpful for the requiring authority to provide a response at the hearing on the changes to conditions suggested by Ms Eaves.

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

### **7.7.12 Arboricultural Effects**

#### Requiring Authority AEE

Sections 9.10 of the AEE, in the description of the receiving environment for NoR 5, notes that the Monterey Pine (ID 2732) located at 3 Pukekohe East Road, Pukekohe is the only specifically listed tree protected under the (District) Notable Trees Overlay provisions of the AUP:OP within the proposed alignment of NoR 5. However, the submitted Assessment of Arboricultural Effects confirms that ID 2732 – Monterey pine no longer exists on the property.

Potential adverse effects on other protected trees, requiring resource consent for alteration (including pruning and works within the root zone) or removal include:

- Effects on trees in Outstanding Natural Feature (ONF), High Natural Character (HNC), Outstanding Natural Landscape (ONL) and Outstanding Natural Character (ONC) overlays;
- Effects on trees in Roads, except where adjacent to rural zoned and FUZ land in respect of infrastructure projects; and
- Effects on trees in Open Space zones.

Section 11.11 of the AEE discusses the positive effects of the NoRs in that they include sufficient space for a formal berm on both sides of the transport corridor. This will allow for the planting of new trees in an environment conducive to good tree growth and enhance the emerging urban landscape where the proposed routes are located in the FUZ.

Section 11.11o of the AEE discusses the construction effects related to the removal of trees, where it is noted again that the works affecting the majority of trees that are potentially affected by the road network construction and upgrade are considered as a regional consenting matter.

The AEE notes that for those trees that are protected by the District Plan provisions, the loss of those trees and tree canopy cover removes the benefits and ecosystem services that those trees provide and has the potential to result in adverse amenity and ecological effects on the surrounding environment. Tree loss can be remediated if adequate space and resources are provided for planting and establishment of large specimen trees within the road reserve created alongside the transport corridors. Works near trees may require works within the protected root zone or trimming of trees. These works have the potential to affect the health of trees where tree protection methodologies are not followed. The magnitude of adverse effects may be minimised if the design of the proposed road adequately allows for retention of mature specimen trees that are able to be accommodated adjacent to the road, subject to detailed assessment and tree management procedures at the time of design and construction.

In addition to the Monterey Pine (ID 2732) located at 3 Pukekohe East Road (which is no longer present), as identified in the Assessment of Arboricultural Effects, trees adjacent to NoR 5 that are protected under relevant District Plan provisions of the AUP:OP are:

- Tree group 5/41 - 24 pūriri and pohutukawa trees growing in the road reserve of Pukekohe East Road beside the rear boundaries of 3-15 Ridge View Crescent.
- Tree group 5/42 - 6 pohutukawa and totara trees growing in the road reserve of Pukekohe East Road beside the rear boundary of 4 Stockmans Lane.

### Specialist Review

The Council's arborist consultant Leon Saxon has reviewed the NoR and provided a response which is included in Attachment 3.

Mr Saxon notes that NoR 5 is one of two NoRs only proposed that contain trees currently protected by District tree protection rules. 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.

In his assessment, Mr Saxon notes that NoR 5 contains two groups of trees protected by the District tree protection rules, which are 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 these identified trees.

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) is proposed as part of NoR 5.

Mr Saxon notes that given the timeframe for the likely construction associated with some of the designations, it is considered that there is potential for more 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 considers that the proposed condition requiring the preparation of a Tree Protection Management Plan is suitable.

A condition is also proposed in the NoR requiring the preparation of an Urban and Landscape Design Management Plan, which is also considered suitable by Mr Saxon for ensuring that mitigation planting is carried out to a good standard.

### Planning Review

In their submissions Cade Hubert Daroux (submission number 3), Chris Feng (submission number 4) and Kevin Golding (submission number 10) express concern about the proposed loss of trees due to NoR 5.

With respect to these submissions, there is no reference to the trees identified in the submissions being assessed in the Assessment of Arboricultural Effects. It would therefore be helpful if the requiring authority can indicate whether the identified trees in the submissions are able to be retained, noting that the proposed ULDMP condition (Condition 11) requires that, where practicable, mature trees and vegetation are to be retained.

Given that vegetation removal in rural zones and FUZ land is subject to regional rules, and the proposed wording of the TMP and ULDMP conditions, I consider that potential adverse arboricultural effects can be appropriately avoided, remedied, or mitigated.

### 7.7.13 Community Effects

#### Requiring Authority AEE

Effects on the community are addressed in Section 11.12 of the AEE. The AEE recognises that the Project provides the necessary transport infrastructure, and resulting community benefits, required to support the planned urban zoning of land in Pukekohe, Paerata and Drury West.

A number of the NoRs involve new roads in undeveloped greenfield areas, resulting in less community impacts during construction. However, the AEE notes that the acquisition of land will sever some properties and may prompt changes to some rural operations. Prior to construction, there may be a reduction in the existing rural community within the greenfield areas of the Project, as AT acquires properties and those properties become vacant. Notwithstanding this, the FUZ is planned to urbanise and the proposed transport networks will be implemented at the time that greenfield areas start to urbanise. Therefore, this is anticipated to be a temporary effect as the community transitions into an urban area once the land is live (urban) zoned. The amenity values in both the existing and future urban areas could also be disrupted during construction due to dust and noise generated from construction. No adverse operational effects on the community are anticipated from the Project.

It is anticipated that all community effects during the construction of the Project will be temporary and can be minimised. 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 with throughout the construction works which is described in proposed condition 8. Access and trip disruption will be managed by the CTMP (proposed condition 17) and the SCEMP proposed as conditions of the designation. Construction effects on amenity values of property can be managed by engagement with stakeholders identified through the SCEMP, as well as through the development and implementation of the CVNMP (proposed condition 20) and the CEMP (proposed condition 14).

No adverse community impacts are anticipated in the AEE from the operation of the Project and therefore no mitigation is required. However, through the implementation of the ULDMP (proposed condition 11), a range of measures will be implemented to ensure the Project is appropriately integrated into the surrounding landscape and urban context.

## Planning Review

I agree with the assessment undertaken by the requiring authority. By providing safe and efficient connections throughout the growth area, the Project will positively impact on the health and well-being of the existing and future community. In this regard, the submission by The Campaign for Better Transport Incorporated supports the provision for cycle infrastructure as part of the Project and the diversion attributes of the route.

The Ministry of Education (MoE) submission (submission number 18) is the only submission received in relation to potential direct effects on community or recreational facilities. The MoE submission is primarily in response to the number of existing schools located proximate to the NoRs, but also any future schools that will be developed in the area. As outlined in the MoE submission, there is potential for schools located near to the Project to be affected by traffic, noise and other nuisance effects arising from future construction works of the transportation network. The MoE is therefore seeking to ensure that appropriate conditions are included in the designations to mitigate any potential adverse effects associated with the construction of the proposed transport network. Those conditions relating to transport have been addressed in Section 7.7.5 above. The other requested changes to the proposed conditions relate to the MoE and schools being included as part of the Stakeholder Communication and Engagement Management Plan (SCEMP) and being included as a stakeholder in the Construction Traffic Management Plan (CTMP). As a component of a community that is potentially sensitive to the Project, particularly during the construction phase, inclusion of the MoE and schools as part of the SCEMP and CTMP is supported. Refer to the recommended amended conditions in Attachment 5 of this report. It is also noted submission 11 (Crosten Investments Ltd) raises the issue of traffic safety / congestion in front of the primary school. Enviro NZ Services Limited (submission number 7) raises concern over the designation being across their entire site being the Pukekohe Transfer Station and Resource Recovery and points out that losing this site will result in adverse social and economic effects as it provides social infrastructure serving the people and communities of South Auckland.

It would be helpful to hear from the requiring authority on any potential impacts on schools and the changes to the conditions requested by the MoE and Crosten Investments Ltd as noted above. It would also be helpful to hear a response from the requiring authority to the submission by Enviro NZ Services Ltd (submission number 7).

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 requiring authority's response to the MoE's requested changes to the conditions.

### **7.7.14 Property and Land Use**

#### Requiring Authority AEE

Direct effects on property and land use are addressed in Section 11.13 of the AEE. The AEE notes that potential adverse effects on existing private properties have been reduced where practicable through the development of the Project concept design and the proposed designation boundary.

The AEE notes that potential adverse effects on the development of private property may arise. However, it is noted in the AEE that development is not precluded within the proposed designated area. AT will work with landowners and developers under the process in s176(1)(b) of the RMA to provide written consent for development within the proposed designations, provided those works will not prevent or hinder the work authorised by the proposed designation.

A land use integration process (LIP) is included in the conditions for NoR 5 (proposed condition 10). This sets out a process where developers can request information to inform land use development adjacent to the transport corridors. This will support development that may go ahead of the proposed transport corridors and provides opportunities to co-ordinate and integrate infrastructure and development.

Section 11.13.1 of the AEE notes that land required for the permanent work will be acquired prior to construction and if temporary occupation is required, then the land 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 such as the development and implementation of a SCEMP, CTMP, CNVMP and CEMP prior to the start of construction are noted as appropriately minimising disruption to affected properties and allow the continued use of the properties where practicable. Potential construction effects will generally be temporary.

The post construction effects are noted in section 11.13.2 of the AEE where it is noted that following the Completion of Construction, the designation boundary will be reviewed and any land not required for the permanent work or for the ongoing operation, maintenance or mitigation of effects of the Project will be reinstated and reintegrated in coordination with directly affected landowners or occupiers. The timing for this process occurring is unstated in the AEE and there are no conditions related to this process.

#### Planning Review

Since the NoRs were served on Auckland Council, pursuant to Section 178(2) of the RMA, the proposed designations have had adverse effects on normal property and land use activity on both adjacent land and particularly directly affected land as no person may do anything that would prevent or hinder the public work, project, or work to which the designation relates unless the person has the prior written consent of the requiring authority.

Concerns relating to property values and site compensation values have been expressed in the submissions by Holy Properties Ltd (submission number 1) and Enviro NZ Services Limited (submission number 7).

In terms of the effects on the directly affected land, while I note that the Public Works Act 1991 (PWA) is the legislative framework under which entitled landowners will receive compensation and that this is a non-RMA process, the restrictions imposed on private property is an adverse land use effect. This is because the uncertainty that the NoRs can create for landowners can result in some landowners being reluctant to actively manage their land. Given the rural / farming land use and private plan changes located close to the NoRs, this uncertainty could result in unmanaged land and a loss in production that results in negative physical changes to the land along with a reluctance to invest in the land. The proposed 20 year lapse period of the NoRs adds to the uncertainty and this potential outcome.

Submitters (Enviro NZ Services Limited, Cade Hubert Daroux, Shao Jie Zheng and Pukekohe Mega Trustees Limited and Wrightson Way Limited) have specifically questioned the lapse period, stating that the 20 year lapse period sterilises their land holdings from future development, expansion or operating safely and efficiently. These submitters ask that the NoRs be declined or that the NoRs be amended to address the submitters concerns. One submitter (Cade Hubert Daroux) has requested Council (which in this case should be the requiring authority) has not provided grounds which would justify an extension of a designation lapse period for longer than five years.

Concerns relating to unusable divided land and development uncertainty resulting from the Project have been raised in the submissions by Chris Feng, DH and IM Mills Properties, Enviro NZ Services Limited, Xiaoli Chen, Shao Jie Zheng, OMAC Limited and Next Generation Properties Limited, Aedifice Development No.1 Limited and Pukekohe Mega Trustees Limited and Wrightson Way Limited. In this regard, the submission by Shao Jie Zheng states that the Project alignment does not align with the indicative route alignment identified in the Pukekohe-Paerata Structure Plan and the projected land rezoning. Similarly, the submissions by OMAC Limited and Next Generation Properties Limited and Aedifice Development No.1 Limited state that the Project alignment currently extends onto parts of the land that are sought to be rezoned in accordance with the Future Urban to Residential – Mixed Housing Urban private plan change “Kohe 2” request.

The submission by Shao Jie Zheng also highlights that the SCEMP does not include any provision for affected landowner input into the management plans or any resolution process for where the concerns of the landowner are not adequately addressed through the outline plan process / management plans. Also, the Urban and Landscape Design Management Plan (ULDMP) requires stakeholders to be invited to participate in the detailed design six months prior to the start of detailed design, but there is no obligation for this participation to continue through the detailed design phase.

Numerous submissions (Bernard Kennelly, Shao Jie Zheng OMAC Limited and Next Generation Properties Limited, Aedifice Development No.1 Limited and Pukekohe Mega Trustees Limited and Wrightson Way Limited) query the extent of the NoR footprint.

Although the planned position of the roundabout is considered acceptable, the submission by Siobhan Ainsley raises concerns about the stormwater pond for NoR 5 that is located in the centre of the land at 84 Pukekohe East Road as this land is planned for future residential development. The submission requests that a single community owned stormwater pond, to treat both road and subdivision stormwater, be designed and located either on the adjoining rural land (owned by the submitter) or another proximate the site.

The submission by Franklin Agricultural and Pastoral Society seeks re-routing of the proposed roading to an area which will not have such a significant impact on the showgrounds.

The submission by Cade Hubert Daroux states that the Project is too vague and is not the best result for the affected properties.

It would be helpful to hear from the requiring authority in response to the issues raised in relation to the property and land use effects by the submitters. While it is noted that the conditions set includes a 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. Providing some certainty on what can be done on the land without needing to seek approval from Waka Kotahi given the long lapse period would assist many potentially.

The timing for the process of removing the designation occurring is unstated in the AEE and there are no conditions related to this process. It would be useful to understand why not.

It would be useful to hear from the requiring authority as to whether the concerns raised in the submission in relation to potential impacts on Future Urban zoned land (that is or will be subject to plan changes) are appropriately addressed through the Project design and alignment and proposed conditions. It would also be useful to hear from the requiring authority as to whether potential impacts on properties and businesses raised in the above-mentioned submission are also appropriately addressed through the Project design and alignment and proposed conditions.

At this time, I consider that the potential adverse effects on property and land use can potentially be appropriately remedied or mitigated, but this assessment is subject to the above information being provided and potentially changes to the Project design and alignment and conditions to address how the ongoing use of the directly affected land will be enabled given the long lapse period sought.

### **7.7.15 Network Utility Effects**

#### Requiring Authority AEE

Effects on network utilities are addressed in section 11.14 of the AEE. The following network utilities are identified as being affected by NoR 5:



- Watercare – Watermain, sewer main, and pipe assets.
- Counties Energy – ADSS fibre optic cable and medium and high voltage cables.

To undertake work in accordance with a designation on land where there is an existing designation in place, the written consent of the requiring authority for the earlier designation is required under section 177(1)(a) of the RMA. This written approval has not been obtained at this stage but will be obtained at a later date during the detailed design stage of the Project.

There is no specific discussion about effects on the above utilities or assets in section 11 of the AEE.

To mitigate any potential adverse effects on network utilities, a Network Utilities Management Plan (NUMP) (proposed condition 26) will be prepared prior to the construction of the Project. The NUMP will set out a framework for protecting, relocating and working in proximity to existing network facilities. The NUMP 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. Submissions to NoR 5 have been received from the following requiring authorities and network utilities:

- Telecommunication submitters (Aotearoa Towers Group (ATG), Chorus New Zealand Limited (Chorus), Connexa Limited (Connexa), One New Zealand (One NZ) (formally Vodafone New Zealand Ltd) and Spark New Zealand Trading Limited (Spark));
- KiwiRail Holdings Limited (KiwiRail);
- Watercare Services Limited (Watercare); and
- Counties Energy Limited (CEL).

The Telecommunication submitters group point out that none of its group are listed in Section 11.14 of the AEE despite having existing infrastructure within and around the proposed designated boundaries. The Telecommunication submitters group therefore seek to ensure that existing and potential future telecommunications infrastructure in the Project corridors are adequately addressed and oppose the NoR if their concerns are not addressed. The submission by the Telecommunication submitters group highlights that 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. This integration is provided for through the proposed Land Use Integration Process (LIP) condition.

However, the Telecommunications Submitters group seek amendment to the proposed NUMP condition 26(d) and an advice note to be added to the NUMP conditions as shown in italics and underlined below:

*(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.*

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).

Subject to the requiring authority's (Auckland Transport's) proposed conditions, including in particular Conditions 5, 10, 11 and 26, KiwiRail's submission supports NoR 5 and seeks ongoing dialogue and engagement before detailed design starts thus enabling better planning and integration between network utility providers through greater communication and collaboration.

Watercare's submission states that Watercare neither supports or opposes NoR 5, but seeks to ensure that any decisions made respond to the issues raised in this submission. In particular, that the works provided for under the NoR avoids, remedies or mitigates potential adverse effects on Watercare's ability to provide water and wastewater services now and in the future. In relation to NoR 5, Watercare acknowledges the engagement to date and seeks early engagement to enable opportunities to plan and future proof the delivery of assets to provide for well-functioning urban environments. In addition, 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. While supporting the proposed NUMP, SCEMP and Land use Integration Process (LIP) conditions, Watercare seeks that a new condition requiring the preparation of a "Network Utility Strategic Outcomes Plan" (NUSOP) be added to the NoR to futureproof assets in consultation with network utility operators such as Watercare. If the NUSOP condition is not included in the NoR, Watercare seeks amendment to the proposed NUMP condition.

The CEL submission indicates general support for the NoR but notes omissions in terms of the information about its existing overhead and underground infrastructure provided in the drawings submitted with the NoR. In addition, CEL require further consultation and detailed planning concerning parts of NoR which may impact the location and safe operation of its assets and 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.

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. Access to the local road network subject to the NoR is managed through a Corridor Access Request process to Auckland Transport currently as the region's road controlling authority. Therefore, a network utility would need to seek written consent from Auckland Transport and obtain a Works Approval Permit from Auckland Transport before undertaking works within the proposed designated land. Notwithstanding, proposed Condition 5 sets out when such works do not need Auckland Transport approval under section 176(1)(b) of the RMA.

As there is no further discussion on the effects on network utilities in the AEE, it is not clear if the mitigation proposed in the form of the NUMP (condition 26) and condition 5 is considered adequate. As noted above, the Telecommunication Group seeks amendment to proposed Condition 26 and Watercare seeks a new condition requiring the preparation of a Network Utility Strategic Outcomes Plan. It would be useful to hear from the requiring authority in relation to the changes sought.

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.

#### **7.7.16 Effects conclusion**

In regard to the overall effects of the Project, I consider that subject to the further amendments to the conditions recommended above and included in Attachment 5 to this report, the potential adverse effects on the environment from the construction and operation of the NoR 5 can be appropriately avoided, remedied or mitigated.

### **7.8 National policy statements**

#### **7.8.1 National Policy Statement for Highly Productive Land 2022 (NPS HPL)**

Highly productive land is defined in the National Policy Statement for Highly Productive Land 2022 (NPS-HPL) as:

*...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 land within NoR 5 does not come within the transitional definition of highly productive land as it is not mapped and is FUZ within the AUP:OP. Therefore, the NPS-HPL is not relevant to NoR 5.

#### **7.8.2 National Policy Statement on Urban Development 2020 (NPS-UD)**

The National Policy Statement on Urban Development (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 (Objective 1). As stated

in the AEE, within the NPS-UD Auckland is recognised as a Tier 1 urban environment and is therefore subject to a greater policy direction in terms of intensification and density of urban form. The NPS-UD directs that urban development is integrated with infrastructure planning and funding decisions and is strategic over the medium to long term. The AEE states that the Pukekohe Transport Network will support and enable growth by protecting improved and new transport corridors that will support Auckland Council's growth aspirations for the growth areas of Drury West, Paerata and Pukekohe area, including intensification or density of growth resulting in more efficient urban land development. This is becoming increasingly important as a result of private plan changes being lodged with Auckland Council, and developer interest around Pukekohe identified via engagement with developers and landowners. It will also support transformational mode shift from private vehicles to public transport, walking and cycling. In particular, the network provides direct connections to the rapid transit network (rail stations and rail network) and provides walking and cycling and new bus routes for existing and future communities.

I agree with these conclusions and consider that the NoRs, including NoR 5, will support and enable future growth that is proposed while also promoting and providing for active modes of transport. For NoR 5 in particular it will provide a connection from Pukekohe East Road to Pukekohe south industrial area.

### **7.8.3 National Policy Statement on Freshwater 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.

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.

However, in the AEE the relevant matters have been screened to inform the concept design, options assessment, the designation boundary, and future resource consents. The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-FW because:

- The options assessment assessed the ecological impacts of a variety of options including extent of effects on stream/ waterway ecology as well as the consideration of natural wetlands under the NPS-FM.
- Through the alternatives assessment and design refinement process the requiring authority have sought to avoid wetland areas and minimise impacts on rivers and waterbodies where practicable. Where avoidance is not practicable, design refinements have looked at ways to minimise effects.

- Stormwater discharge quality will be managed through the use of soft stormwater infrastructure where possible such as swales and stormwater wetlands. An integrated stormwater network will be designed at the detailed design/ regional consenting stage that is sensitive to receiving environments, recognising capacity constraints of streams and the importance of maintaining or enhancing the quality of freshwater.

I concur with this assessment under the NPS-FW and Council's ecology specialist also agrees with the management approach (subject to amendments). In that regard, I agree that the NoRs give effect to the NPS-FW, subject to the conditions, as recommended to be amended.

#### **7.8.4 National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB)**

The National Policy Statement for Indigenous Biodiversity (NPS-IB) is an essential part of our response to biodiversity decline in Aotearoa. It provides direction to councils to protect, maintain and restore indigenous biodiversity requiring at least no further reduction nationally.

The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-FW because:

- The options development and assessment considered existing and likely sensitive ecological features and environments and sought to locate the designation boundary outside the Significant Natural Areas (mapped as Significant Ecological Areas (SEAs) in the AUP:OP).
- The Project seeks to maintain indigenous biodiversity through the implantation of the EMP as required by proposed condition 24.

I concur with this assessment and note that there are no SEA's which are within the proposed designation boundary. It is considered that the conditions, with appropriate amendments as suggested by the council's ecology specialist will adequately manage any adverse effects.

#### **7.9 Regional Policy Statement (Chapter B of the AUP:OP) (RPS)**

The RPS sets the strategic direction for managing the use and development of natural and physical resources throughout Auckland. The following sections of the RPS are considered relevant to the NoR:

- Chapter B2 Tāhuhu whakaruruhau-ā-taone – Urban Growth and Form
- Chapter B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao – Infrastructure, transport and energy
- Chapter B4 Te tiaki taonga tuku iho – Natural heritage
- Chapter B5 Ngā rawa tuku iho me te āhua – Historic heritage and special character

- Chapter B6 Mana Whenua
- Chapter B7 Toitū te whenua, toitū te taiao – Natural resources
- Chapter B10 Ngā tūpono ki te taiao – Environmental risk
- The requiring authority has assessed the Project against the relevant provisions of the RPS in Section 12 Table 12-1. Table 4-1 below sets out the RPS Chapters in the AUP:OP and the theme set out in table 12-1 of the AEE in which the RPS is addressed.

**Table 5-1 RPS Chapter and Table 12-1 themes**

<b>Chapter</b>	<b>Theme identified in table 12-1 of AEE</b>
B2 Tāhuhu whakaruruhau ā-taone - Urban growth and form	Urban growth and development capacity
	Natural hazards
	Urban form and quality design
B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy	Urban growth and development capacity
	Enabling infrastructure and transport
	Enabling infrastructure within an overlay and in addition to the above
	Urban form and quality design
B6 Mana Whenua	Manawhenua
B7 Toitū te whenua, toitū te taiao - Natural resources	Manawhenua
	Indigenous biodiversity and ecological values
	Freshwater
B9 Toitū te tuawhenua - Rural environment	Urban growth and development capacity
B10 Ngā tūpono ki te taiao - Environmental risk	Natural hazards

I generally agree with the requiring authority's assessment under the RPS provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

The AUP:OP district plan provisions are addressed in Section 12 Table 12-1 of the requiring authority's AEE.

### **7.10 Auckland Unitary Plan**

The AUP:OP provisions are addressed in Section 12 Table 12-1 of the requiring authority's AEE.

### 7.10.1 Chapter D overlays

NoR 5 is subject to a range of overlays in the AUP:OP including the following:

- D1: High Use Aquifer Management Areas Overlay [rp]
- D2: Quality-sensitive Aquifer Management Overlay [rp]
- D10: Outstanding Natural Features Overlays and Outstanding Natural Landscapes Overlay [dp]

The provisions of Chapters D1 and D2 are regional provisions. Therefore, an assessment of these will be required at the regional resource consent stage. There is a very small portion of NoR 5 are partially located in the Pukekohe East tuff ring which is a ONF. The ONF extends across the existing Pukekohe East Road. I concur with the assessment contained in Section 12 Table 12-1 of the AEE.

### 7.10.2 Chapter E Auckland-wide

NoR 5 is subject to a range of Auckland-wide provisions in the AUP:OP and the requiring authority have assessed the following:

- E1: Water quality and integrated management
- E11: Land disturbance – Regional
- E12: Land disturbance – District
- E15: Vegetation management and biodiversity
- E17: Trees in Roads
- E25: Noise and vibration
- E26: Infrastructure
- E27: Transport
- E36: Natural hazards and flooding

I generally agree with the requiring authority's assessment under the Auckland- Wide provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

I note that Table 12 -1 did not consider the following Auckland -Wide Chapters :

- E2 Water quantity, allocation and use
- E3 Lakes, rivers, streams and wetlands
- E8 Stormwater - Discharge and diversion
- E9 Stormwater quality - High contaminant generating car parks and high use roads
- E24 Lighting



While I recognise that the effects of stormwater discharges (quality and quantity) are the subject of regional consents, it would be helpful if these had also been considered in Table 12.1. I also note that lighting effects have been recognised there is no assessment in terms of relevant objectives and policies.

### **7.10.3 Chapter H Zones and Precincts**

NoR 5 is located in the Future Urban Zone (H18 of the AUP:OP), Residential - Mixed Housing Urban Zone (H5), Residential – Mixing Housing Suburban Zone (H4) and Business – Neighbourhood Centre Zone (H12) near the intersection of Mill Road and Golding Road, as well as Business Light Industry Zone (H17) and Business – General Business Zone (H14). A very small section of NoR 5 also extends into Pukekohe East-Central.

I generally agree with the requiring authority's assessment under the RPS provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

### **7.11 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 Appendix A to the AEE. Sections 5.2 to 5.5 of Appendix A to the AEE discuss the nature of the alternative assessment and design refinements that have taken place in relation to NoR 5.

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'<sup>13</sup>.

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.

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<sup>13</sup> Waimairi District Council v Christchurch City Council C30/1982

## **7.12 Reasonable necessity for work and designation – section 171(1)(c)**

The requiring authority has set out its specific project objectives for NoR 5 in the Form 18 documents and in section 6, Table 6.1 of the AEE. These are listed in the AEE as follows:

- Supports resilience and the existing transport network by providing new transport connections.
- Supports planned urban growth and the future transport network by providing new connections within new future urban communities.
- Supports travel choice by providing for all modes of transport.
- Contributes to mode shift and the transition to a low carbon transport network by providing for active modes.

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.

## **7.13 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. In this case the non-RMA documents are considered relevant.

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 Table 12.1 of the AEE. I generally concur with the assessments and conclusions of the AEE on any other matter and the range of other documents listed.

I also consider that the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 NES (Soil) is a relevant other matter that has not been considered or given regard to specifically.

The NES (Soil) provides a nationally consistent set of planning controls and soil contaminant values to ensure that land affected by contaminants in soil is appropriately identified and assessed before it is developed and, if necessary, the land is remediated or the contaminants contained to make the land safe for human use.

In Form 18 the requiring authority has listed resource consent under the NES (soil) as being required but are not sought at this time. It is considered the addition of an advice note to state this is appropriate to ensure this is captured as part of the designation.

I also note that the AEE refers to the Draft Future Development Strategy (FDS) which is considered an 'other matter'. It would be helpful for the requiring authority to advise if, now that the FDS has been finalised, the assessment would change.

## 7.14 Designation lapse period extension – section 184(1)(c)

As outlined in section 7.7.14 it would also be helpful to hear from the requiring authority in response to the issues raised on how the impact of the requested 20 year lapse period could be mitigated. 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.

## 7.15 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. There is nothing specific terms of NoR 5 that has been addressed. 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.

## 7.16 Conclusions

The requiring authority has lodged NoR 5 under section 168 of the RMA for the new Pukekohe South-East Arterial.

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 5 should be confirmed subject to conditions and with modifications, for the following reasons:

- The notice 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 notice of requirement is generally consistent with the relevant AUP:OP provisions.
- The notice of requirement is 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.

## 7.17 Recommendation and conditions

### 7.17.1 Recommendation

Subject to new or contrary evidence being presented at the hearing, it is recommended that the notice of requirement be confirmed by the requiring authority, subject to the amended and additional conditions, set out in Attachment 5 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 of requirement is consistent with and give effect to the relevant national environmental standards, national policy statements and the AUP:OP.
- 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 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.

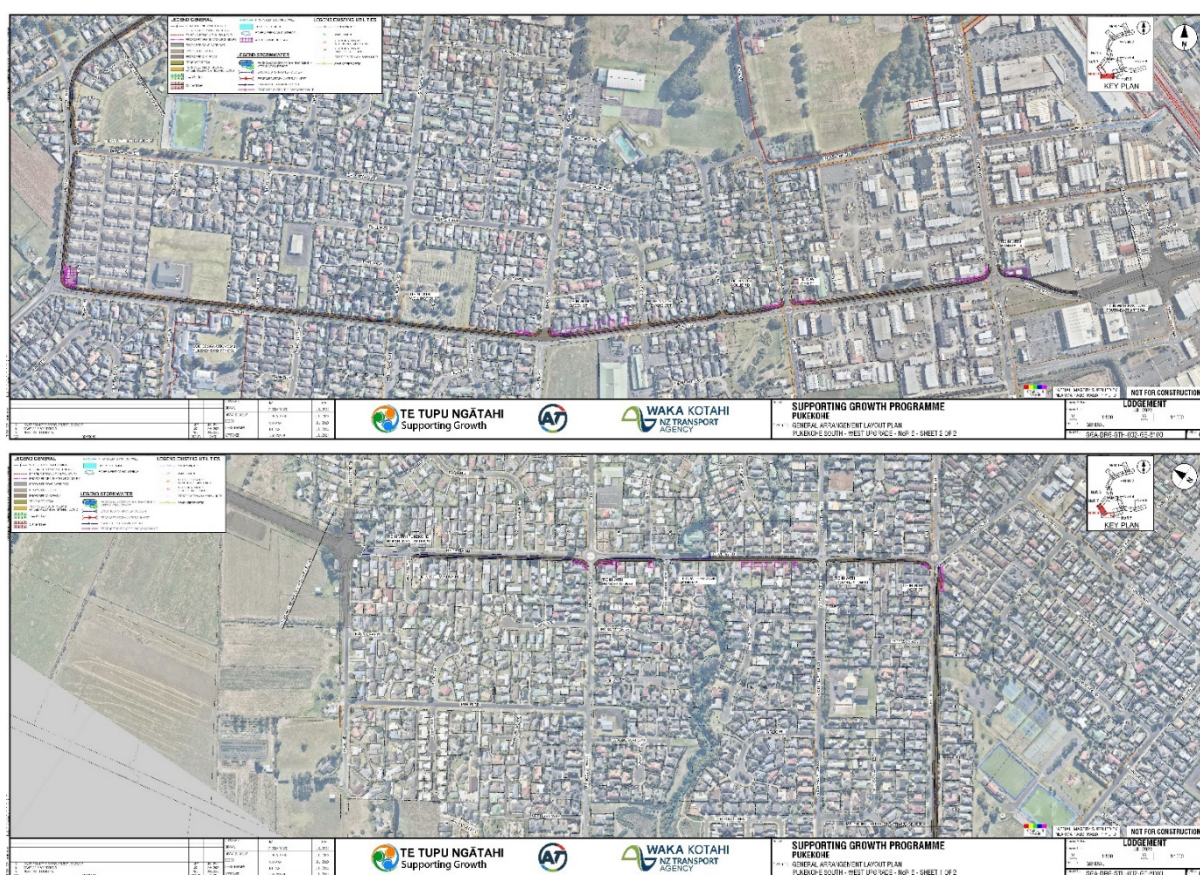
### **7.17.2 Recommended conditions**

The conditions set recommended by the reporting planner for NoR 5 are set out in Attachment 5 to this report.

## 8 NoR 6 Pukekohe South-West Upgrade

### 8.1 Proposal

AT is proposing a new designation for the purpose of 'Construction, operation and maintenance of an existing transport corridor'. This will be a designation for the upgrade of specific intersections (eight) and the regrade of a number of driveways on Nelson Street, Ward Street, West Street and Helvetia Road for active mode facilities (a bi-directional cycleway). This applies to an area of land of approximately 4,654 square meters over 40 individual land parcels. (refer to Figure 8-1 below). AT is requesting a 20 year lapse period.



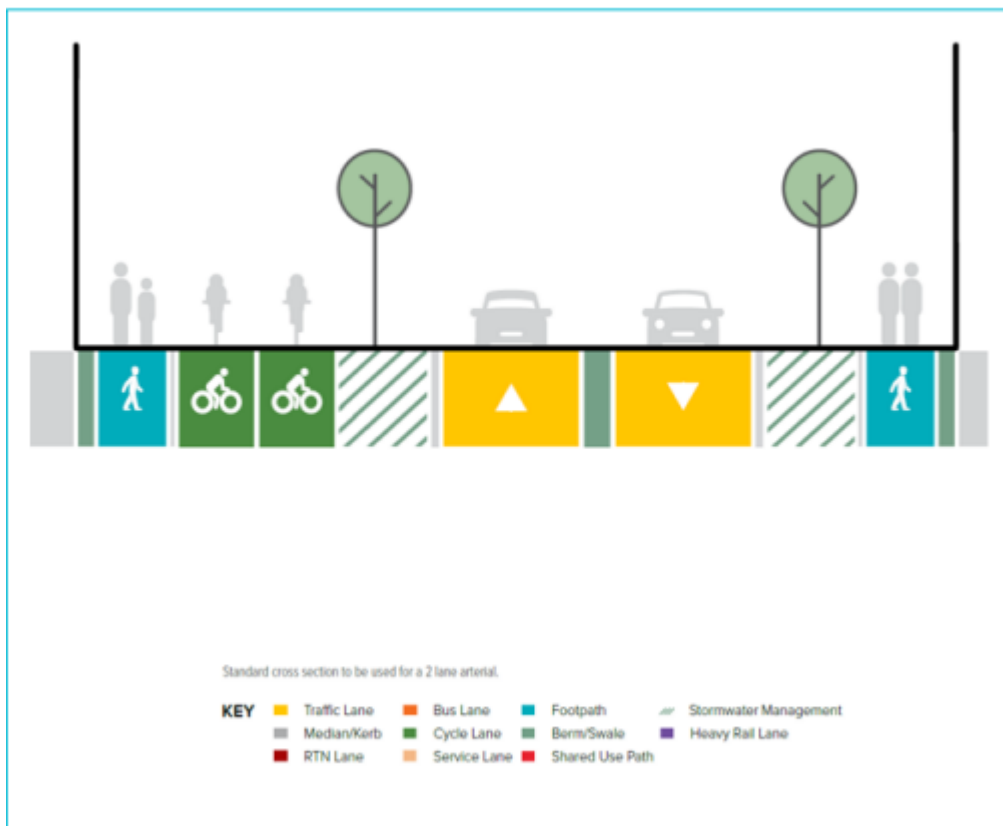
**Figure 8-2 Pukekohe South-West Upgrade**

As stated in the AEE, NoR 6 Pukekohe South-West Upgrade involves the re-allocation of road space within the existing road corridor for a bi-directional cycle way and footpath upgrade. The proposed designation is limited to specific intersections and driveways shown in Figure 9-31 of the AEE to safely accommodate active mode facilities. This is generally a reduced 20m cross section with two lanes for general traffic, footpath on both sides and a bidirectional cycleway on one side as shown in Figure 8-2 below.

The intersections proposed to be upgraded include:

- Manukau Road / Svendsen Road / Nelson Street

- Nelson Street / John Street
- Nelson Street / Queen Street
- Ward Street / Puni Road
- West Street / Helvetia Road, and
- Helvetia Road / Princes Street



**Figure 8-3 Indicative generic 20m wide cross section is proposed with two lanes for general traffic and active transport facilities on each side of the corridor.**

## 8.2 Affected land

The designation plans are provided in Form 18's Attachment A and the schedule of directly affected properties are provided in Attachment B of the NoR's. Together they describe the land that will be directly affected and required for the project and associated works.

As noted in the AEE, there will be 40 properties directly affected by NoR 6 (i.e. the designation boundary will extend across these properties) totalling approximately 4,654m<sup>2</sup>. Land use includes industrial, residential and a community facility.

### 8.3 Site, locality, catchment and environment description

This report relies on the site and environment descriptions provided by the requiring authority as set out in sections 9.11.1 and 9.11.2 of the AEE supporting the NoR and within each of the technical assessments. To summarise:

The current zoning consists of

- Residential – Mixed Housing Suburban Zone
- Business – Light Industry Zone
- Future Urban Zone (adjacent but not within proposed designation)

The existing residential areas are likely to remain a similar zoning but may be intensified in response to the National Policy Statement on Urban Development 2020 (under proposed plan change 78). The likely future receiving environment is therefore considered to be consistent with what is currently provided for in the AUP:OP.

The current land use for the industrial zoned land along Nelson Street is a range of light industry shops and businesses. Sites that interact with the NoR 6 designation include business' that provide car washing, panel beating or detailing services, coffee roasters, a Bunnings Trade Centre and a liquor store. The residential land use is characterised by low density suburban living.

There are no trees in NoR 6 that are protected under relevant District Plan provisions of the AUP:OP. Nehru Hall scheduled Historic Overlay Extent of Place 2235 within the proposed designation at 59 Ward Street.

### 8.4 Other designations, notices of requirement, and consent applications

The AEE contains a table of the interface with other projects. The table below summarises those related to NoR 6.

Project	Interface with NoR 6	Status
43 – 45 Puni Road and 44 McNally Road – Franklin Village	A retirement village has recently been consented on the site. NoR 6 Pukekohe South-West Upgrade is located in close proximity on Puni Road	Resource consent has been granted.



Plan Change 78 (PC78)	The National Policy Statement for Urban Development (NPS-UD) and Medium Density Residential Standards (MDRS) are intending to enable housing choice in main urban areas. These standards support the development of three homes up to three storeys on each site without the need for resource consent. The majority of NoR 1 will be located in the FUZ which is not included within PC78 however, there is a small section near the intersection of Helvetia Road and Kauri Road will change from Residential – Mixed Housing Urban Zone to Residential – Mixed Housing Urban Zone.	Notified on 18 August 2022. Further submissions on PC78 closed on 17 March 2023.
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## 8.5 Submissions

14 submissions were received from:

- Kathryn Cole
- Gloria Ann Mayor
- Ewen C & Beverley E McIntyre
- Jade Baker
- Telecommunications Submitters
- Christine & Brent McMahon
- Boyd Scott and Penny Farrer
- Heritage New Zealand Pouhere Taonga
- Rachel Simpson and Michael Hickmott
- Watercare Services Limited
- Ministry of Education
- Counties Energy Limited
- Pukekohe Mega Trustees Limited and Wrightson Way Limited
- The Campaign for Better Transport Incorporated

Copies of submissions are included in Attachment 1

The issues raised in submissions are addressed in section 8.7 of this report.

## 8.6 Local Board views

Views were sought from the Franklin Local Board in relation to the NoR.

The Board provided their view on information on Te Tupu Ngātahi Supporting Growth on Future Transport Networks Pukekohe-Paerata and south Drury provided to the local board prior to a meeting on 27 June 2023 as noted in the AEE and have more recently considered the NoR's after notification.

The Local Board views are provided in Attachment 2 to this report. In summary the Local Board was concerned about specific aspects of the route related to Pukekohe Hill Primary School, use of Helvetia Road, and reconsider use of Gun Club Road and Patumahoe Road.

## 8.7 Consideration of the notice of requirement

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 this NoR, 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 sections 8.9, 8.10, 8.11, 8.12, and 8.13 below. Section 171(1)(b) is addressed in section 8.14 below. Section 171(1)(c) is addressed in section 8.17 below. Section 171(1)(d) is addressed in section 8.16 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.*<sup>14</sup>

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. Refer to section 8.20 below for my recommendation.

## **8.8 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. The relevant specialist reports are referred to and are included in Attachment 3. Submissions have also been considered and are referred to where relevant.

### **8.8.1 Effects to be disregarded - Trade competition**

We do not consider that there are any trade competition effects that should be disregarded.

### **8.8.2 Effects that may be disregarded – Written approvals**

No written approvals were included in the notice of requirement.

### **8.8.3 Positive effects**

The Form 18 describes the positive effects of the project which are summarised as:

- Provide necessary transport infrastructure to support and integrate with the planned urban growth in Pukekohe,

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<sup>14</sup> See Estate of P.A. Moran and Others v Transit NZ (W55/99)

- Improve walking and cycling connectivity providing key connections to existing and future urban areas
- Provide improved access to jobs, education and social amenities; and
- Provide mode choice and contribute to mode shift;

The AEE also refers to positive landscape and visual, arboriculture, community and urban design effects.

#### **8.8.4 Māori culture, values, and aspirations**

##### Requiring Authority AEE

The AEE notes that only Mana Whenua can speak to the impact that a project may have on their cultural values, heritage and aspirations. 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.

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, Sites of Significance under the AUP:OP or within the coastal environment under the Marine and Coastal Area (Takutai Moana) Act 2011.

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.

To avoid, remedy or mitigate these potential adverse effects, the Requiring Authority is proposing a number of conditions which were collaboratively developed with Mana Whenua. These conditions include inviting Mana Whenua to prepare a Cultural Advisory Report (proposed condition 9), Mana Whenua will be invited to participate in the development of the Urban and Landscape Design Management Plan (ULDMP) (proposed condition 11), and prior to the start of construction works or enabling works Mana Whenua will be invited to prepare a Cultural Monitoring Plan (proposed condition 16).

##### Planning Review

NoR 6 is not within any 'Sites and Places of significance to Mana Whenua' as identified on the AUP:OP's planning maps. There are no known Māori archaeological sites within the NoR area.

As noted in the AEE the Pukekohe Transport Network and therefore NoR 6 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.

The AEE notes that the CIA from Ngāti Te Ata Waiohū identifies the potential for adverse effects on freshwater systems, general ecology, significant landscapes and receiving environments. As NoR6 is an active mode upgrade of existing roads in the urban area, this limits the impact on the raised issues.

No specialist review has occurred as the CIA was not provided. No submissions have been received from Mana Whenua groups. The Heritage NZ Pouhere Taonga (HNZPT) in relation to this NoR does not refer to sites or matters relating to mana whenua.

Nevertheless, I consider that the conditions for a Cultural Advisory Report, Urban and Landscape Development Management Plan, and Cultural Monitoring Plan are appropriate.

### **8.8.5 Traffic and Transport**

#### Requiring Authority AEE

Effects on traffic and transport are addressed in section 11.4 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Transport Effects September 2023 by Subha Nair, Deborah Keary and Sharath Kotha.

The AEE covers operational effects which relate to safety, walking and cycling, public transport, and general traffic and freight which are considered to have positive effects, and property access which is considered to have some adverse effects that will need to be managed.

Due to the complexity of access arrangements changing over time, the AEE notes that it is not currently possible to confirm a precise treatment for all individual accesses. Therefore, it is proposed for each of the designations to include a condition (proposed condition 13) to demonstrate (in the Outline Plan) how safe access will be provided for each existing access that is altered by the project.

There are numerous existing accesses along NoR 6, however it is not considered that the road upgrades will have an impact on accesses, and it is expected that all will be retained (with some associated regrading).

The AEE also covers construction effects which relate to traffic routing, property access, pedestrian and cyclist safety, road safety, on-street and public parking, parallel construction of projects and land use activities that will require further consideration. It is recommended that a Construction Traffic Management Plan (CTMP) be prepared prior to the start of construction for each stage of the work, this is included as proposed condition 17.

The AEE mentions in Section 11.4.2, regarding management of construction traffic for NoR6 it is recommended specifically that over-dimension routes are taken into consideration when developing the CTMP.

The technical report recommends that if required, Site-Specific Traffic Management Plans (SSTMP) should be developed to manage constraints on access to affected properties.

## Specialist Review

Mr Edwards notes that a key issue for the NoR's that are delivering the Pukekohe Transport Network is the inter dependency of each of the Projects with each other and with other transport infrastructure projects in the area. He states that the two key issues for the hearing panel are if the consideration of alternatives is adequate and if the Projects are reasonably necessary. Mr Edwards agrees with the assessment of alternatives at a macro scale but notes that 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.

Mr Edwards has identified a number of gaps in the requiring authority's assessment which relates to all NoR's and are set out in his report under the following headings: design standards, management of effects, integration of transport and land use, assessment of operational effects, road safety, active modes, public transport, freight, generic traffic, travel and emissions, property access, parking, and management of effects.

Mr Edwards has assessed each NoR and in regard to NoR 6 he states Auckland Transport discourage or prevent vehicle access across cycle paths, and particularly bi-directional paths, in new development areas due to the conflicts between cyclists and vehicles using driveways introducing a significant risk of injury to cyclists. Some Auckland Unitary Plan Precincts that require the provision of cycle paths on new collector roads prohibit or property access across those paths.

He has significant concerns about conflicts at driveways along the proposed path and consider the NoR could have an adverse impact on safety, contrary to the stated purpose. He requests the RA provide information on this at the hearing; however, his preliminary view is that this NoR has significant adverse effects, is not in accordance with the stated purpose, and is not reasonably necessary.

In regard to an assessment of submissions, Mr Edwards states:

*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.*

Mr Edwards notes that 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. He also notes 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.

He believes relocating the cycle path to the opposite side of the road would impact different properties in a similar way, so he is neutral with respect to traffic matters in relation to those submission points.

*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.*

He does not support that submission point.

*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 he does not support this submission point.

*Submission 6 (McMahon C and B, 99 Nelson Street) considers the existing berm width of 3.93 to 4.5m is more than adequate.*

Mr Edwards 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.

He notes 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). He expects the volumes on this route may be within the acceptable range for a narrower path, particularly for some shorter sections. Mr Edwards invites the RA to provide more information on this at the hearing.

*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 Mr Edwards states shifting the roundabout as required would involve substantial additional land and impact on other properties. He does do not support this submission point.

*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.*

The project involves the introduction of an active mode path along one side of the road and is not proposing to make changes to intersections. Mr Edwards does not expect this to increase the volume or speed of traffic along this route. As a result, he does not support this submission point.

*Submissions 2, 3, and 9 are concerned about adverse safety effects where driveways cross the proposed active mode path.*

Mr Edwards views the safety concerns about the proposed path crossing driveways are valid. As noted earlier he has 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 he supports the submission points in relation to safety but does not support the other points in these submissions.

*Submission 9 is concerned about the loss of berm space they rely on for parking.*

Mr Edwards notes the berm is controlled by Auckland Transport and parking could be prohibited at any time, so he does not support that submission point.

*Submission 7 is concerned about the loss of access during construction.*

He considers this is adequately addressed by the conditions.

*Submission 11 (Ministry of Education) requests changes to the CTMP.*

He supports that submission point.

#### Planning Review

I rely on the expert opinion of Mr Edwards and the assessment in the AEE and technical report.

I note Mr Edwards has serious concerns around the safety of a bi-directional cycleway and the potential for conflict with residential driveways. This is also a strong theme found in the submissions. I note the AEE states the design of the Pukekohe Transport Network has been undertaken with consideration of the latest safety guidance and under the 'Vision Zero' philosophy. For this reason, I believe the Requiring Authority should provide a robust response providing further assessment of this issue and potential remedies for this adverse effect on safety.

I agree with the other recommendations by Mr Edwards which are also recommended through the Ministry of Education submission which relate to including public transport and all transport modes into the condition to be maintained and safely managed.

I note the concerns of the Franklin Local Board and would welcome feedback from the requiring authority.

It is noted that the technical report submitted by the requiring authority recommends a SSTMP is prepared if required however, there are no conditions that include provision of a SSTMP. It would be helpful if the requiring authority commented on why there are no conditions including a SSTMP despite the recommendation in the report.

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, noting particularly the safety concerns raised by Mr Edwards and the submitters and the proposed conditions as recommended to be amended.

### **8.8.6 Construction Noise and Vibration**

#### Requiring Authority AEE

Effects on construction noise and vibration are addressed in section 11.5 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Construction Noise and Vibration Effects September 2023 by Joshua Dunkel, Siiri Wilkening and Claire Drewery.

The AEE summarises that the majority of works will be able to comply with the relevant construction noise standards following mitigation. Some receivers will still intermittently experience noise levels over 85 dB LAeq (predicted worst case scenario) after mitigation, if high noise construction activities (e.g. pavement works) occur on the edge of the designation boundary.

The technical report states that the closest receiver is 10m from the potential works and if high generating noise activities occur at the designation boundary, around 6 receivers could experience noise levels that exceed the daytime noise criterion without mitigation. With mitigation in place, noise levels of up to 77 dB LAeq could still occur intermittently at the closest receivers, if high noise generating activities occur on the construction boundary. At this level effects are likely to include loss of concentration, annoyance, and a reduction in speech intelligibility. The technical report acknowledges that future receivers constructed within 76m of the works could experience noise levels that exceed the 70 dB LAeq noise criterion during high noise generating activities such as the pavement works, without mitigation implemented.

Concerning compliance with construction vibration Category B standards, the AEE states NoR 6 is located largely in an established urban environment, so will likely experience higher construction noise and vibration levels than the rest of the Pukekohe Transport Network. If high vibration activities occur on the construction boundary, around 21 existing receivers (including 19 dwellings, one commercial, and one historic structure) could experience vibration levels that exceed the daytime standards, without mitigation.

It is recommended in the AEE that a Construction Noise and Vibration Management Plan (CNVMP) be prepared prior to construction and is included as proposed condition 20 and 21. There are also proposed conditions around what standards will be used to measure construction noise and vibration (proposed conditions 18 and 19).

In addition to a CNVMP, the AEE indicates it may be necessary to produce Site Specific or Activity Specific Construction Noise and Vibration Management Schedules where noise and/or vibration limits are predicted to be exceeded for a more sustained period or by a large margin. For buildings where the daytime Category B vibration criteria may be exceeded (like NoR 6), a building precondition survey will be undertaken prior to the start of construction, and a post-construction survey of the same buildings will be conducted once construction is complete. Any damage shown as a result of the Project construction will be rectified.

### Specialist Review

Mr Rhys Hegley of Hegley Acoustic Consultants has prepared a review of the construction and operational noise and vibration assessment. Mr Hegley states that the AEE and technical report contains a lot of generic information which 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.

For both construction noise and vibration, he states that the requiring authorities technical report identified receivers where the criteria may be exceeded without defining the magnitude of the exceedance.

Mr Hegley recommends that Condition 19 is changed to reflect the Waka Kotahi Condition 18 and add in requirements (18(b) and 18(c)) that set out the assessment and monitoring requirements for a situation where vibration exceeds the Category B criteria. He also noted that there appears to be an inconsistency. Firstly, the noise (Condition 18) and construction (Condition 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. Mr Hegley recommends clarity in these conditions.

He also recommends that the CNVMP and Schedule of conditions (Condition 20 and 21) 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.

### Planning Review

It is noted in the AEE that the construction of NoR 6 will take place over approximately 2 to 3 years. While the management of construction noise through CNVMP is a common requirement for infrastructure works it is noted that long duration projects require careful management to ensure effects on individual receivers are minimised.

There were several submitters that mentioned construction noise effects:

Kathryn Cole (Submission 1) raised concerns regarding the timing of construction to avoid noisy construction outside normal working hours. The submitter also raises concerns about noisy works occurring without prior notification to nearby property owners. Rachel Simpson and Michael Hickmott (Submission 9) also raise concerns that the roadworks required will affect their quiet enjoyment of this property through increased noise.

I believe that condition 18 and 19 as recommended in Attachment 5 will address the concerns raised by submitter 1 regarding the timing of construction noise. I note that the proposed CNVMP contains 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.

The Ministry of Education (submission 11) is concerned about noise effects of construction on existing schools and education facilities, or any future schools developed in this area. Notably the closest school to the NoR is Pukekohe Hill School on Ward Street, which is around 250m from the works on the corner of Puni Road and Ward Street. It would be useful to have potential effects clarified.

Changes are suggested in Attachment 5 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 the submitter 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.

### **8.8.7 Operational Noise**

#### Requiring Authority AEE

Effects on operational noise are addressed in section 11.6 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Operational Noise Effects September 2023 by Joshua Dunkel, Siiri Wilkening, Shivam Jakhu and Vitalii Zaiets.

The areas proposed to be designated by NoR 6 are for an active mode upgrade of existing roads in an existing urban area. The report notes that active mode transport, i.e. walking and cycling, does not generate noise levels high enough to affect the ambient noise environment, particularly where the facilities are adjacent to busy roads. NoR 6 is not predicted to bring about any changes to traffic noise generated on or near the sections of roads that are proposed to be designated, therefore, operational noise has not been assessed in the report.

#### Planning Review

I concur with the assessment above, and noting no submissions were received in relation to the operational aspects of the NoR and no objection from Council's Acoustic Specialist Rhys Hegley, active mode upgrade of existing roads in an existing urban area will not result any adverse effects on operational noise above and beyond what is expected in an existing road environment.

### 8.8.8 Flood Hazard

#### Requiring Authority AEE

Effects on flood hazard are addressed in section 11.7 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Flood Hazard Effects 12/09/2023 by Justin Kirkman. The AEE states that there may be some flood hazard effects during the construction phase (refer to section 11.7.1 of the AEE for the full list) however the details of the construction approach will be confirmed at detailed design and mitigation measures are included in the Construction Environmental Management Plan (CEMP) outlined in condition 14.

The report notes that NoR 6 includes designated areas for an active mode upgrade and driveway regrading. No changes to flooding are expected.

#### Specialist Review

Trent Sunich, Consultant Stormwater Technical Specialist has reviewed the flooding assessment and the environment of the NoR and has concluded:

- NoR 6 is an active mode upgrade of existing roads in the existing urban area of Pukekohe and includes small, isolated areas of designation.
- NoR 6 is mostly in the Tutaenui Stream and Whangapouri Stream catchments. The alignment indicates small parcels of land where required.
- This land is needed primarily for localised areas of road widening and has no flood effect component for assessment.

The review concluded that NoR 6 includes designated areas for an active mode upgrade and driveway regrading and so no changes to flooding are expected.

#### Planning Review

In terms of submissions on construction-related flooding effects, Ewen C & Beverley E McIntyre (Submission 3) raise this issue, noting that the area receives a significant amount of surface water running off Pukekohe hill. They raise concern regarding any increase to the likelihood of their house being flooded.

Considering the AEE and Mr Sunich's review I believe the concern raised by this submission has been addressed, and there should no changes to flooding risk. I note the impact of any earthworks (likely to be small scale for this NoR) on flood risk will be considered as part of the regional consent process.

Therefore, based on the comments from Trent Sunich I consider that the potential adverse effects on flooding during construction can be avoided, remedied, or mitigated, subject to the above. This is because nature of the works, the CEMP condition requirement for flood hazard to be assessed during construction and the requirements of the regional consent provisions in the AUP will ensure that this effect is adequately addressed.

Therefore, it would be helpful for the requiring authority to provide a response at the hearing on changes to conditions suggested by Mr Sunich. I consider that subject to the above, and the proposed conditions as recommended to be amended the potential adverse effects on flooding can be avoided, remedied, or mitigated.

### **8.8.9 Terrestrial Ecology**

#### Requiring Authority AEE

Effects on ecology are addressed in section 11.8 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Ecological Effects, September 2023 by Ian Bredin and Sahar Firoozkoohi.

The Assessment of Ecological Effects discusses this NoR and concludes:

- The effects of vegetation removal have been assessed as low and therefore do not require any impact management.
- Long-tailed bats were associated with all NoR's, however they were considered unlikely to occur within NoR 6. A Bat Management Plan (BMP) was not recommended.
- A total of 48 avifauna species may be present, of which, 28 are native, 14 have a Threatened or At-Risk status, and the remainder are exotic. The Threatened or At-Risk species were considered unlikely to occur within NoR 6. An Avifauna Management Plan was not recommended.
- There are no herpetofauna species with an At Risk- Declining status likely occur in NoR 6. A Lizard Management Plan (LMP) was not recommended.

#### Specialist Review

Mr Simon Chapman, Ecology New Zealand has prepared a technical memo assessing the adequacy of the information submitted by the requiring authority.

Mr Chapman notes that the proposed designation conditions do not include ecological effects management for NoR 6. His memo considered, 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.

The memo has not identified any reasons to oppose the designation.

#### Planning Review

I adopt the expert opinion of Mr Chapman that considers that the effects on ecology are adequately addressed. Furthermore, there are no SEAs within the proposed designation boundary and there are no submissions for NoR 6 that mention ecology.

### **8.8.10 Landscape and Visual**

#### Requiring Authority AEE

Effects on landscape and visual values are addressed in section 11.9 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Landscape and Visual Effects Assessment September 2023 by Matthew Jones.

The AEE highlights a number of positive effects such as enhanced connectivity, landscape mitigation planting, and integration of active travel routes and recreational paths with Pukekohe's 'green network' of bush and vegetated riparian margins.

The adverse construction effects on landscape and visual values are summarised in the AEE as change to these intersections as the roads are to be widened at these locations. This will mean the removal of small areas of vegetation (street trees and boundary planting) and fences along these streets. The AEE notes that there is a high viewing audience due to the location within an urban environment along the existing streets, movement along the respective streets and the number of houses, however considers that adverse visual effects will be low as works of this nature occur in the existing urban area.

The operational landscape character effects are noted as being very low due to the limited change to the character of the area, especially once the proposed vegetation has established. There will be positive effects resulting from the upgrade of the streetscape environment. Any adverse effects on visual amenity are assessed to be very low.

Mitigation in the form of an Urban and Landscape Design Management Plan (ULDMP) is recommended and included as proposed condition 11.

### Specialist Review

Ms Rebecca Skidmore, RA Skidmore Urban Design Limited has prepared a technical memo assessing the adequacy of the information submitted by the requiring authority, responded to relevant submissions and recommended changes to the proposed conditions. Ms Skidmore notes that she generally considers the NoR's are supported by robust urban design and landscape analysis.

The memo comments relating specifically to NoR 6 are summarised below:

- The memo considers that NoR 6 applies to small discrete areas within the existing Pukekohe Street network through both industrial and residential areas.
- 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.
- The proposed designation impacts on the Nehru Hall site (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. The requirements of the UDLMP enable suitable consideration to ensure an appropriate relationship between the street environment and this site is achieved.

Ms Skidmore considers the requirements of these conditions do not convey the specificity of recommendations made in both the UDE and the LVEA and she recommends a number of changes to address recommendations set out in the UDE.

In relation to the submissions, Ms Skidmore states:

*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.*

#### Planning Review

I note that a number of the submitters were concerned about the impact of the works on their frontage but did not address this as a visual effect so have considered these effects under Property and Land use effects below. I adopt the expert advice of Ms Skidmore and agree with her proposed recommendations to the conditions.

### **8.8.11 Historic Heritage and Archaeology**

#### Requiring Authority AEE

Effects on historic heritage are addressed in section 11.10 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Effects on Historic Heritage September 2023 by Matthew Campbell.

In summary AEE states:

- Nehru Hall is scheduled as a Category B Historic Heritage Place (# 2235) in the AUP:OP at 59 Ward Street (on the corner of Puni Road).
- NoR 6 extends into the scheduled extent of place, and immediately abuts the hall building.
- Most of the designation here will be used for temporary construction but earthworks, including batters, berms and sidewalks will extend into the extent of place.
- While there will be no direct effects on the building, there will be a contraction of the extent of place and this will have minor effects on its setting and context.
- A brick gateway will be removed, which is built from the same bricks as the hall and is assumed to date to the time of the halls' construction in 1953.
- A Historic Heritage Management Plan (HHMP) is recommended to avoid and mitigate potential effects on the Nehru Hall.

The Assessment of Effects on Historic Heritage states the following in summary.

- There will be no adverse construction effects on the building as the HHMP will provide suitable methods to avoid effects. The Noise and Vibration Management Plan should ensure that there are no adverse vibration effects on the unreinforced masonry of the hall.

- Appropriate mitigation [for the brick gateway] is to lift the gateway intact and reinstate it on the new boundary, following best conservation practice.
- Otherwise, effects on the extent of place will be minor and can be mitigated through archaeological monitoring and recording of any subsurface features associated with the construction and use of the hall.

### Specialist Review

Ms Myfanwy Eaves, Auckland Council has made her assessment and notes:

*"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 Unit consider it implemented without appropriate advice."*

In relation to the submission by HNZPT (submission 8), Ms Eaves states:

*"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.*

*The NoR is opposed by HNZPT.*

*"The submitter's (HNZPT) proposed condition for the Nehru Hall (Condition 22 (b) (x)) is appreciated and in general supported".*

*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."*

### Planning Review

I note that no other submitter raised issues with regards to heritage or archaeology.

I further note from Submission 8:

*"Nehru Hall, when constructed in 1953 was offset from the centre of the property, being closer to the front boundary with Puni Road, and the formal footpath entranceway at Ward Street was located directly parallel with the main entrance to the Hall. This site layout has remained unchanged since construction and the setbacks to both frontages, the formal entrance, including the brick and decorative iron arched gateway forms an important part of the Hall's extent of place."*

I acknowledge that the HHMP condition will cover the potential adverse effects on the Nehru Hall. However I agree with this submission that the HHMP should be specifically address how effects arising from the works, as outlined in the AEE, are to occur within Nehru Hall's extent of place or how the Hall's gateway will be appropriately mitigated.



It also would be helpful for the requiring authority to provide a response at the hearing on the matters raised by the submitter and by Ms Eaves as it is not clear at this time that the potential adverse heritage effects in particular can be avoided, remedied, or mitigated.

### **8.8.12 Arboricultural Effects**

#### Requiring Authority AEE

Effects on arboriculture are addressed in section 11.11 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Arboricultural Effects September 2023 by Craig Webb. The AEE notes the positive effect of allowing sufficient space to plant new trees.

There are a number of trees located within the proposed designation. However, there are no trees in NoR 6 that are protected under the relevant District Plan provisions of the AUP:OP. No mitigation is proposed in the AEE.

#### Specialist Review

Mr Leon Saxon of Arborlab has prepared a memo covering an assessment of the submitted documents, response to relevant submissions and recommendations. Mr Saxon notes that there are no trees protected by the District Plan provisions affected within or adjacent to the designation boundary. However, he also notes that 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. As such, Mr Saxon recommends that the condition for preparing a Tree Protection Management Plan should apply to all of the designations.

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.

Mr Saxon notes that none of the submissions raised any significant issues regarding trees currently protected by District Plan rules.

#### Planning Review

I adopt the expert advice of Mr Saxon and agree with his proposed recommendations to the conditions, noting no submissions specifically relating to arboriculture.

### **8.8.13 Community Effects**

#### Requiring Authority AEE

Effects on the community are addressed in Section 11.12 of the AEE. It is noted in 9.11.2 of the AEE that the only community facility affected is the frontage of the Nehru Hall at 59 Ward Street.

The AEE recognises the Pukekohe Arterials (NoR's 4-7) provide alternative routes for through traffic to bypass the Pukekohe town centre, improving access for regional and freight traffic across centres while reducing congestion and maintaining connectivity to amenities for communities within the Pukekohe town centre area.

Notwithstanding this, the AEE states the Future Urban Zone (FUZ) such as located at the corner of Ward Street and Puni Road in the case of NoR 6 is planned to urbanise and the proposed transport networks will be implemented at the time that greenfield areas start to urbanise. Therefore, the AEE anticipates this to be a temporary effect as the community transitions into an urban area once the land is live zoned for urban use. The AEE notes that amenity values in both the existing and future urban areas could also be disrupted during construction due to dust and noise generated from construction. However the AEE states that no adverse operational effects on the community are anticipated.

The AEE anticipates that all community effects during the construction of the Project will be temporary and can be minimised. 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 with throughout the construction works which is described in proposed condition 8. Access and trip disruption will be managed by the CTMP (proposed condition 17) and the SCEMP proposed as conditions of the designation. Construction effects on amenity values of property can be managed by engagement with stakeholders identified through the SCEMP, as well as through the development and implementation of the CVNMP (proposed condition 20) and the CEMP (proposed condition 14).

Overall, the AEE states that no adverse community impacts are anticipated from the operation of the Project and therefore no mitigation is required. However, through the implementation of the ULDMP (proposed condition 11) or Landscape Management Plan, a range of measures will be implemented to ensure the NoR is appropriately integrated into the surrounding landscape and urban context.

### Planning Review

I agree with the assessment above undertaken by the requiring authority.

The Ministry of Education (MoE) submission is the only submission received in relation to potential direct effects on community or recreational facilities. The MoE submission is primarily in response to the number of existing schools located proximate to the NoR's, but also any future schools that will be developed in the area. As outlined in the MoE submission, there is potential for schools located near to the Project to be affected by traffic, noise and other nuisance effects arising from future construction works of the transportation network. The MoE is therefore seeking to ensure that appropriate conditions are included in the designations to mitigate any potential adverse effects associated with the construction of the proposed transport network. Those conditions relating to transport have been addressed in transport effects section above.

The other requested changes to the proposed conditions relate to the MoE and schools being included as part of the Stakeholder Communication and Engagement Management Plan (SCEMP) and being included as a stakeholder in the Construction Traffic Management Plan (CTMP). As a component of a community that is potentially sensitive to the Project, particularly during the construction phase, inclusion of the MoE and schools as part of the SCEMP and CTMP is supported. Refer to the recommended amended conditions in Attachment 5 of this report.

It would be helpful to hear from the requiring authority on any potential impacts on schools and the changes to the conditions requested by the MoE as noted above.

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 requiring authority's response to the MoE's requested changes to the conditions.

### **8.8.14 Property and Land Use**

#### Requiring Authority AEE

Effects on property and land use are addressed in section 11.13 of the AEE. The assessment is summarised below:

- The AEE acknowledges that potential adverse effects on existing private properties have been reduced, where practicable through the development of the project concept design and the proposed designation boundary. It also acknowledges that the potential adverse effects on the development of private property may arise. However, development is not precluded within the proposed designated area.
- The requiring authority will work with landowners and developers under the process in s176(1)(b) to provide written consent for development within the proposed designations, provided those works will not prevent or hinder the work authorised by the proposed designation.
- A land use integration process (LIP) is included in the conditions for all NoR's, including NoR 6 (proposed condition 10). This sets out a process where developers can request information to inform land use development adjacent to the transport corridors. This will support development that may go ahead of the proposed transport corridors and provides opportunities to co-ordinate and integrate infrastructure and development.
- Section 11.13.1 of the AEE notes that land required for the permanent work will be acquired prior to construction and if temporary occupation is required, then the land 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 such as the development and implementation of a SCEMP, CTMP, Construction Noise and Vibration Management Plan (CNVMP) and Construction Environment Management Plan (CEMP) prior to the start of construction are noted as appropriately minimising disruption to affected properties and allow the continued use of the properties where practicable. Potential construction effects will generally be temporary.
- 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 timing for this process occurring is unstated in the AEE.

### Planning Review

Since the NoR's were served on Auckland Council, pursuant to Section 178(2) of the RMA, the proposed designations have affected normal property and land use activity on both adjacent land and particularly directly affected land. This is because as no person may do anything that would prevent or hinder the public work, project, or work to which the designation relates unless the person has the prior written consent of the requiring authority.

In terms of the effects on the directly affected land, while I note that the Public Works Act 1991 (PWA) is the legislative framework under entitled landowners receive compensation and this is a non-RMA process, the restrictions imposed on private property is an adverse land use effect. This is because the uncertainty that the designations can create for landowners can result in some landowners being reluctant to actively manage their land. Given the rural / farming land use and private plan changes located close to the NoR, this uncertainty could result in unmanaged land, production loss and disinvestment.

The proposed 20-year lapse period of the NoR adds to the uncertainty and this potential outcome. The LIP condition goes some way to assist with this however only when (and if) a landowner plans to urbanise their land or redevelop their property in the case of NoR 6 which may occur given the zoning along the route and the potential for more intensification on the residential zoned land under Proposed Plan Change 78. It may be helpful to go further and alleviate the effect of obtaining approval from the Requiring Authority over the next 20 years for permitted activities.

It would be helpful to hear from the requiring authority in response to the issues raised in relation to the property and land use effects by submitters and raised above about the impact of the lapse period. While it is noted that 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 will need permission from the Requiring Authority to undertake work on their own land, potentially for 20 years. Providing certainty on what can be done on the land without needing to seek approval from the Requiring Authority given the long lapse period would potentially assist many landowners and occupiers.

It would also be useful to hear from the requiring authority as to whether potential impacts on properties and businesses raised in the above-mentioned submission are also appropriately addressed through the NoR design and alignment and proposed conditions. It would be also useful to understand why no condition is included covering the timing for the process of removing the designation.

At this time, I consider that the potential adverse effects on property and land use can potentially be appropriately remedied or mitigated, but this assessment is subject to the above information being provided and potentially changes to the NoR design and alignment and conditions to address how the ongoing use of the directly affected land will be enabled given the long lapse period sought.

### **8.8.15 Network Utility Effects**

#### Requiring Authority AEE

Effects on network utilities are addressed in section 11.14 of the AEE. The following network utilities are identified and being affected by NoR 6:

- Watercare – Watermain, sewermain and pipe assets.

Where works are required by others on land subject to a designation or notice of requirement sections 176 and 178 apply. To mitigate effects on network utilities, a Network Utilities Management Plan (NUMP) (proposed condition 26) will be prepared prior to construction of the project. The NUMP will set out a framework for protecting, relocating and working in proximity to existing network facilities. The NUMP 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. Submissions to NoR 6 have been received from the following requiring authorities and network utilities:

- Telecommunications Submitters (submission 5)
- Watercare Services Limited (submission 10)
- Counties Energy Limited (submission 12)

The Telecommunication Submitters group point out that none of its group are listed in Section 11.14 of the AEE despite having existing infrastructure within and around the proposed designated boundaries. The Telecommunication submitters group therefore seek to ensure that existing and potential future telecommunications infrastructure in the Project corridors are adequately addressed and oppose the NoR's if their concerns are not addressed. The submission by the Telecommunication submitters group highlights that 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. This integration is provided for through the proposed Land Use Integration Process (LIP) condition, although as currently drafted this only applies to a Developer or Development Agency as defined in the conditions not to a network utility operator.

However, the Telecommunications Submitters group seek amendment to the proposed NUMP condition 26(d) and an advice note to be added to the NUMP conditions as shown in italics and underlined below:

*(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.*

*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).*

Watercare Services Limited's submission states that Watercare neither supports or opposes NoR 6 but seeks to ensure that any decisions made respond to the issues raised in this submission. In particular, that the works provided for under the NoR avoids, remedies or mitigates potential adverse effects on Watercare's ability to provide water and wastewater services now and in the future. In relation to NoR 6, Watercare acknowledges the engagement to date and seeks early engagement to enable opportunities to plan and future proof the delivery of assets to provide for well-functioning urban environments. In addition, 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.

In particular this submission notes 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.

While supporting the proposed NUMP, SCEMP and Land use Integration Process (LIP) conditions, Watercare seeks that a new condition requiring the preparation of a "Network Utility Strategic Outcomes Plan" (NUSOP) be added to the NoR to futureproof assets in consultation with network utility operators such as Watercare. If the NUSOP condition is not included in the NoR's, Watercare seeks amendment to the proposed NUMP condition.

The Counties Energy submission makes no specific comment in relation to NoR 6 specifically but indicates general support for the NoR but notes omissions in terms of the information about its existing overhead and underground infrastructure provided in the drawings submitted with the NoR. In addition, CEL require further consultation and detailed planning concerning parts of NoR which may impact the location and safe operation of its assets and 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.

There is no specific discussion about effects on the above utilities or assets in section 11 of the AEE.

Works within the existing roads subject to NoR 6 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. Access to the local road network subject to the NoR is managed through a Corridor Access Request process to Auckland Transport currently as the region's Road Controlling Authority. Therefore, a network utility would need to seek written consent from Auckland Transport and obtain a Works Approval Permit from Auckland Transport before undertaking works within the proposed designated land. Notwithstanding, proposed Condition 5 sets out when such works do not need Auckland Transport approval under section 176(1)(b) of the RMA.

As there is no further discussion on the effects on network utilities in the AEE, it is not clear if the mitigation proposed in the form of the NUMP (condition 26) and condition 5 is considered adequate. As noted above, the Telecommunication Group seeks amendment to proposed Condition 26 and Watercare seeks a new condition requiring the preparation of a Network Utility Strategic Outcomes Plan. It would be useful to hear from the requiring authority in relation to the changes sought.

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.

### **8.8.16 Effects conclusion**

In regard to the overall effects of the notice of requirement, I consider that subject to the further amendments to the conditions recommended above, and included in Attachment 5 to this report, noting in particular if the concerns regarding traffic safety and heritage effects can be addressed, the potential adverse effects on the environment from the construction and operation of the NoR 7 can be appropriately avoided, remedied or mitigated.

### **8.9 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.

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

Highly productive land is defined in the National Policy Statement for Highly Productive Land 2022 (NPS-HPL) as:

*...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)*

Under clause 3.5(a) the land to be designated under this Notice of Requirement is not general rural zone nor rural production zone land. Therefore, the NPS-HPL is not relevant to NoR 6.

#### **8.9.2 National Policy Statement on Urban Development 2020 (NPS-UD)**

The National Policy Statement on Urban Development (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 (Objective 1).

As stated in the AEE, within the NPS-UD Auckland is recognised as a Tier 1 urban environment and is therefore subject to a greater policy direction in terms of intensification and density of urban form. The NPS-UD directs that urban development is integrated with infrastructure planning and funding decisions and is strategic over the medium to long term.

The AEE states that the Pukekohe Transport Network will support and enable growth by protecting improved and new transport corridors that will support Auckland Council's growth aspirations for the growth areas of Drury West, Paerata and Pukekohe area, including intensification or density of growth resulting in more efficient urban land development.



This is becoming increasingly important as a result of private plan changes being lodged with Auckland Council, and developer interest around Pukekohe identified via engagement with developers and landowners. It will also support transformational mode shift from private vehicles to public transport, walking and cycling.

In particular, the network provides direct connections to the rapid transit network (rail stations and rail network) and provides walking and cycling and new bus routes for existing and future communities.

I agree with these conclusions and consider that the NoR's, including NoR 6, will support and enable future growth that is proposed while also promoting and providing for active modes of transport.

### **8.9.3 National Policy Statement on Freshwater 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.

As NoR 6 does not interface with any specific watercourse I do not consider that the NPS-FM is directly relevant to NoR 6.

### **8.9.4 National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB)**

The National Policy Statement for Indigenous Biodiversity (NPS-IB) is an essential part of our response to biodiversity decline in Aotearoa. It provides direction to councils to protect, maintain and restore indigenous biodiversity requiring at least no further reduction nationally.

It is noted that matters such as freshwater ecology, vegetation removal (under the AUP:OP), native herpetofauna in the AUP:OP are assessed under regional consenting requirements. Regional matters have not been formally assessed as part of the NoR process.

However, the relevant matters have been screened to inform the concept design, options assessment, the designation boundary, and future regional resource consents. Bat and bird management will also be developed further at regional consenting.

Although noting that there is no Ecological Management Plan for NoR 6, works will occur in an urbanised environment and avoids areas with high or significant biodiversity and ecological values.

### **8.10 Regional Policy Statement (Chapter B of the AUP:OP) (RPS)**

The RPS sets the strategic direction for managing the use and development of natural and physical resources throughout Auckland. The following sections of the RPS are considered relevant to the NW Local Arterial NoR's:

- Chapter B2 Tāhuhu whakaruruhau-ā-taone – Urban Growth and Form

- Chapter B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao – Infrastructure, transport and energy
- Chapter B4 Te tiaki taonga tuku iho – Natural heritage
- Chapter B5 Ngā rawa tuku iho me te āhua – Historic heritage and special character
- Chapter B6 Mana Whenua
- Chapter B7 Toitū te whenua, toitū te aiao – Natural resources
- Chapter B10 Ngā tūpono ki te aiao – Environmental risk

The requiring authority has assessed the Project against the relevant provisions of the RPS in Section 12 Table 12-1. Table 4-1 below sets out the RPS Chapters in the AUP:OP and the theme set out in Table 12-1 of the AEE in which the RPS is addressed.

Table 41 AUP:OP RPS Chapter and Table 12-1 themes

Chapter	Theme identified in table 12-1 of AEE
B2 Tāhuhu whakaruruhau ā-taone - Urban growth and form	Urban growth and development capacity
	Natural hazards
	Urban form and quality design
B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy	Urban growth and development capacity
	Enabling infrastructure and transport
	Enabling infrastructure within an overlay and in addition to the above
B6 Mana Whenua	Urban form and quality design
	Manawhenua
	Manawhenua
B7 Toitū te whenua, toitū te taiao - Natural resources	Indigenous biodiversity and ecological values
	Freshwater
B9 Toitū te tuawhenua - Rural environment	Urban growth and development capacity
B10 Ngā tūpono ki te taiao - Environmental risk	Natural hazards

I generally agree with the requiring authority's assessment under the RPS 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's.

### 8.11 Auckland Unitary Plan - Chapter D overlays

NoR 6 is subject to a range of overlays in the AUP:OP including the following:

- D1: High Use Aquifer Management Areas Overlay [rp]
- D3: High-use Stream Management Areas Overlay [rp]

The provisions of Chapters D1 and D3 are regional provisions. Therefore, an assessment of these will be required at the regional resource consent stage.

### 8.12 Auckland Unitary Plan - Chapter E Auckland-wide

NoR 6 is subject to a range of Auckland-wide provisions in the AUP:OP and the requiring authority have assessed the following:

- E1: Water quality and integrated management
- E11: Land disturbance – Regional
- E12: Land disturbance – District
- E15: Vegetation management and biodiversity
- E17: Trees in Roads
- E25: Noise and vibration
- E26: Infrastructure
- E27: Transport
- E36: Natural hazards and flooding

I generally agree with the requiring authority's assessment under the Auckland-wide 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.

### **8.13 Auckland Unitary Plan – Chapter H Zones**

Chapter H provisions are addressed in Section 12 Table 12-1 of the requiring authority's AEE.

I generally agree with the requiring authority's assessment that the NoR the objectives and policies of the residential zone chapters by providing the necessary transport infrastructure required to support the growth of these areas while avoiding, remedying or mitigating adverse effects on residential amenity.

### **8.14 Alternative sites, routes or methods – section 171(1)(b)**

The requiring authority has set out its specific project objectives in Form 18 and section 6 of the AEE. Section 4.5.4 of the Pukekohe Transport Network Assessment of Alternatives Report prepared by Vicky Hu, Alicia McKensie and Helen Hicks outlines the options considered. The assessment was necessary as to deliver the project works are proposed to be undertaken outside the existing legal road and AT does not have a right to undertake works on the land unless it relies on its power as a requiring authority to access the land.

The assessment of alternatives process as outlined in the AEE commenced at a broad scale and progressively narrowed down the area to a single preferred route. The process is summarised in section 5.1.1 of the AEE.

The AEE concludes that the designation is reasonably necessary to achieve the project objectives.

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.

### **8.15 Reasonable Necessity for work and designation – section 171(1)(c)**

The requiring authority has set out its specific project objectives in Form 18 and section 6 of the AEE. The NoR is for the construction, operation and maintenance of a transport corridor between Helvetia Road and Svendsen Road to provide for walking and cycling facilities. The objectives are :

*Provide for new transport corridors in Paerata that:*

- 1. Improves connectivity*
- 2. Is safe*
- 3. Provides resilience in the transport network*
- 4. Integrates with and supports planned urban growth*
- 5. Integrates with and supports the existing and future transport network*
- 6. Improves travel choice and contributes to mode shift*

The requiring authority notes that NoR 6 is reasonably necessary for achieving these objectives because it will:

- Improves active mode connectivity in Pukekohe
- Support Vision Zero and road safety outcomes
- Supports resilience and the existing transport network by providing new active mode connections
- Supports planned urban growth and the future transport network by providing new active mode connections between new future urban communities
- Supports travel choice by providing for active modes on existing roads
- Contributes to mode shift and the transition to a low carbon transport network by providing for active modes

The AEE concludes that the designation is reasonably necessary to achieve the project objectives.

Based on the information provided I consider that the works and designation are reasonably necessary to achieve the requiring authority's objectives.

#### **8.16 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. In this case the non-RMA documents are considered relevant.

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 Table 12.1 of the AEE. I generally concur with the assessments and conclusions of the AEE on any other matter and the range of other documents listed. I note that the Future Development Strategy has now been finalised and it would be helpful for the requiring authority to provide an update if relevant.

## 8.17 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:OP 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 7.1 of the AEE.

The rationale for the period is set out in Section 7.1 of the AEE and includes :

- 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 the Requiring Authorities sufficient time to:
  - 1) Obtain funding;
  - 2) Undertake tendering / procurement;
  - 3) Undertake property and access negotiations and other processes associated with construction of the projects;
  - 4) Undertake the detailed design of the projects; and
  - 5) 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).
- The AEE cites other examples of project with long lapse periods and the implications of extended lapse period.

The appropriateness of the proposed lapse date in relation to NoR 6 is assessed in Section 8.8.14 (Property and land use effects) of this report.

There are no specific submissions seeking relief in relation to the lapse periods.

Section 184 of the Act gives discretion to alter the lapse period for a designation from the default 5 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 decision 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 table in Section 4 above for reference purposes.

I note that the sites affected by NoR 6 have existing development and that the effect of the designation will be mitigated if the suggested changes in Section 8.8.14 are included in relation to enabling works to occur on the land subject to the designation. I would like to hear from the requiring authority in relation to those changes and therefore cannot recommend in support of the 20 year lapse period at this time.

### **8.18 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 NoR's required to deliver the Pukekohe Transport Network is addressed in section 13.1 and Table 13.1, of the AEE. There is nothing specific terms of NoR 6 that has been addressed. 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 NoR's 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.

### **8.19 Conclusions**

The requiring authority has lodged NoR 6 under section 168 of the RMA for the new Pukekohe South-East Arterial.

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 5 should be confirmed subject to conditions and with modifications, for the following reasons:

- the notice 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 notice of requirement is generally consistent with the relevant AUP:OP provisions.
- the notice of requirement is 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.

## **8.20 Recommendation and conditions**

### **8.20.1 Recommendation**

Subject to new or contrary evidence being presented at the hearing, it is recommended that the notice of requirement be confirmed by the requiring authority, subject to the amended and additional conditions, set out in Attachment 5 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 of requirement is consistent with and give effect to the relevant national environmental standards, national policy statements and the AUP:OP.
- 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 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.

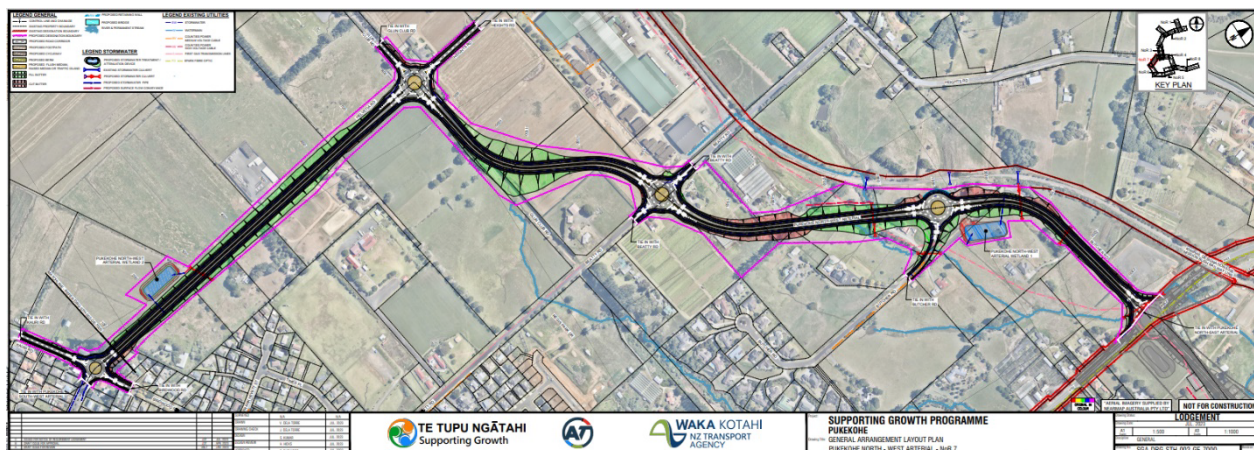
### **8.20.2 Recommended conditions**

The conditions set recommended by the reporting planner for NoR 6 are set out in Attachment 5 to this report.

## 9 NoR 7 Pukekohe North- West Arterial

### 9.1 Proposal

AT are proposing a new designation for the purpose of 'construction, operation, and maintenance of a new transport corridor between Helvetia Road and State Highway 22.' This applies to an area of land of approximately 131,906 square metres over 27 individual land parcels. (refer to Figure 4-1). AT are requesting a 20 year lapse period.



**Figure 8-4** Pukekohe Northwest Arterial

As stated in the AEE, NoR 7 Pukekohe North- West Arterial is for a 2.4km long transport corridor between Helvetia Road and State Highway 22 including active transport facilities and associated infrastructure.

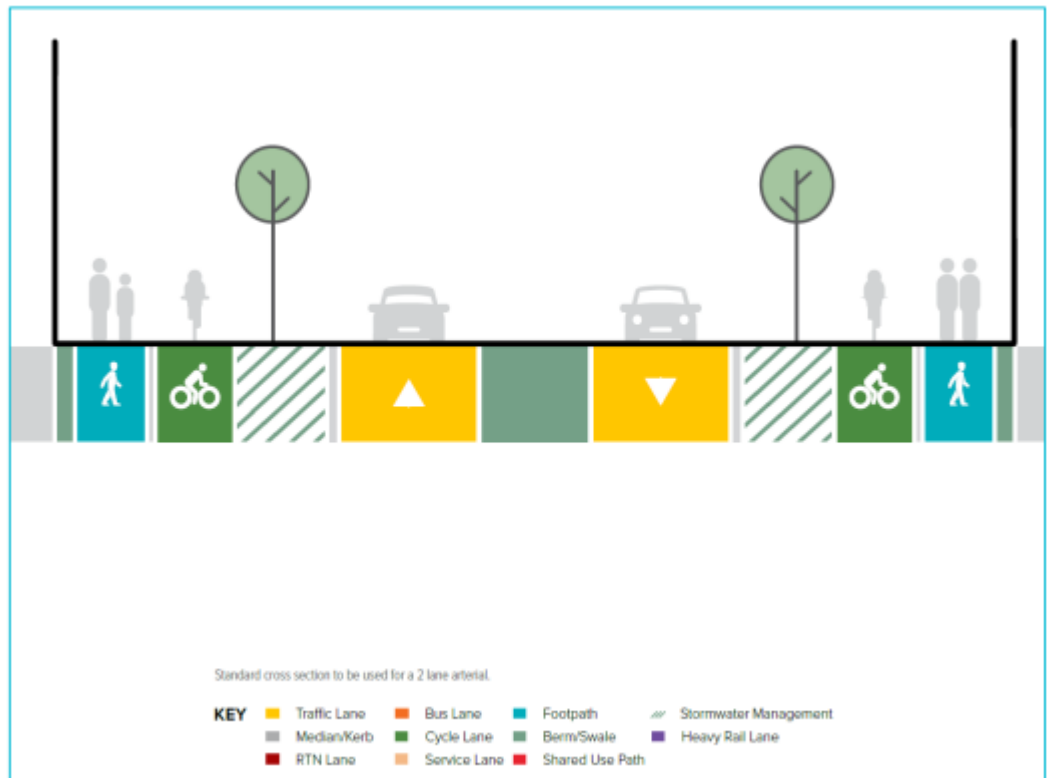
This includes:

- a) A transport corridor including active mode facilities;
- b) Associated works including intersections, bridges, embankments, retaining walls, culverts, stormwater management systems;
- c) Changes to local roads, where the proposed work intersects with local roads; and
- d) Construction activities including construction areas and the re-grading of driveways.

Section 9.12 notes that the NoR provides a new connection and upgrades Helvetia Road, utilises part of Keith Road (a paper road) and forms a new connection between Beatty Road and Butcher Road to SH22.

The AEE states the functional intent of the north-west arterial is to support adjacent urban development and provide an enhanced strategic connection around the north-west quadrant of Pukekohe and thereby into SH22 and NoR 4. It provides an alternative connection for all modes travelling north to south in west Pukekohe assisting in redirection of general traffic away from the town centre and provides additional resilience to the wider network.





**Figure 8-5 Indicative generic 24m wide cross section is proposed with two lanes for general traffic and active transport facilities on both sides of the corridor.**

## 9.2 Affected land

The designation plans are provided in Form 18's Attachment A and the schedule of directly affected properties are provided in Attachment B of the NoR's together with the schedule provided describes the land that will be directly affected and required for the project and associated works.

As noted in the AEE, there will be 27 properties directly affected (i.e. the designation boundary will extend across these properties) totalling approximately 131,906 m<sup>2</sup>. Land use includes industrial, residential and a community facility.

## 9.3 Site, locality, catchment and environment description

This report relies on the site and environment descriptions provided by the requiring authority as set out in sections 9.11.1 and 9.11.2 of the AEE supporting the NoR and within each of the technical assessments. To summarise:

The current zoning of the land subject to NoR 7 consists of:

- Future Urban Zone
- Residential – Mixed Housing Suburban Zone

The route also includes section of local roads (Butcher Road, Beatty Road, Keith Road, Heights Road, Helvetia Road and Kaurie Road).

The AEE notes that the Pukekohe - Paerata Structure Plan indicates the likely future zoning of the FUZ land as Residential Mixed Housing Suburban and Business – Light Industry.

The land use is characterised by largely flat arable land with scattered developments proximate to the urban edge. A band of existing commercial / agricultural activities and structures (including produce storage, a distribution facility and glasshouses) are located to the north and Northwest of the alignment, south of the NIMT rail line (with the alignment crossing through one glasshouse).

The Helvetia tuff ring is within the southern extent of the project on Helvetia Road. This is not identified as an ONF or ONL.

The project crosses Whangapouri Stream.

The vegetation pattern along the alignment of NoR 7 includes lot boundary planting, occasional shelterbelts and scattered groupings of trees. However there are no trees in NoR 7 that are protected under relevant District Plan provisions of the AUP:OP.

#### 9.4 Other designations, notices of requirement, and consent applications

The AEE contains a table that outlines the interface of NoR 7 with other projects. The table below summarises those related to NoR 7.

Project	Interface with NoR 7	Status
Waka Kotahi SH22 designation (Designation 6704).	The corridor intersects with this designation at Paerata Road.	Designation confirmed. This is the primary designation.
Mission Bush Railway Line designation (Designation 6306).	The corridor is south of the designation but abuts NoR 7 from Butchers Road to east of Beatty Road .	Designation confirmed.

#### 9.5 Submissions

16 submissions were received from:

- Stuart John Lawson and Paulene Anne Lawson
- Lisa Anne Whiteman
- Soo-Hwan Cha
- Balle Bros Fresh Produce Ltd
- Des and Lorraine Morrison
- Telecommunications Submitters
- Jane Emma Telfer
- Nicola Payne
- Chris and Angela Lynch
- David and Teresa Polwart
- Robert Allan John Burns
- Watercare Services Limited

- Ministry of Education
- Counties Energy Limited
- The Campaign for Better Transport Incorporated
- Sunhee Kim

Copies of submissions are included in Attachment 1.

The issues raised in submissions are addressed in section 9.8 of this report.

## 9.6 Local Board views

Views were sought from the Franklin Local Board on the Pukekohe Transport Network NoR's. The Board provided their view on information at the Franklin Local Board Meeting of 28 November 2023 (FR/2023/191).

The Board views included:

*"[support for] the north-east and north-west (to the intersection of Gun Club Rd) sections of the ring road around Pukekohe as proposed."*

The Local Board views are provided in Attachment 2 to this report.

## 9.7 Consideration of the notice of requirement 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 this NoR, 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 9.9, 9.10, 9.11, 9.12, and 9.13 below. Section 171(1)(b) is addressed in section 9.14 below. Section 171(1)(c) is addressed in section 9.14 below. Section 171(1)(d) is addressed in section 9.15 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.<sup>15</sup>*

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. Refer to section 9.19 below for our recommendation.

## **9.8 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. The relevant specialist reports are referred to and are included in Attachment 3. Submissions have also been considered and are referred to where relevant.

### **9.8.1 Effects to be disregarded - Trade competition**

We do not consider that there are any trade competition effects that should be disregarded.

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<sup>15</sup> See Estate of P.A. Moran and Others v Transit NZ (W55/99)

### **9.8.2 Effects that may be disregarded – Written approvals**

No written approvals were included in the notice of requirement.

### **9.8.3 Positive effects**

The Form 18 describes the positive effects of the project which are summarised as:

- Provide necessary transport infrastructure to support and integrate with the planned urban growth in Pukekohe;
- Improve walking and cycling connectivity providing key connections to future urban areas;
- Improve public transport facilities connecting with future urban areas;
- Improve the resilience and connectivity of the transport network for general traffic and freight;
- Provide better access to jobs, education and social amenities;
- Provide mode choice and contribute to mode shift;
- Increase the tree canopy cover of the project area;
- Provide for the inclusion of green stormwater infrastructure, such as vegetated swales and
  - planted stormwater wetlands; and
- Provide opportunities to enhance the character and identity of the project area through future design and partnership with Manawhenua.

The AEE also refers to positive landscape and visual, arboriculture, community and urban design effects.

These benefits are similar to those for each of the NoRs and for the wider Pukekohe Network project. I agree with this assessment of the positive effects of the NoR.

### **9.8.4 Māori culture, values, and aspirations**

#### Requiring Authority AEE

The AEE notes that only Mana Whenua can speak to the impact that a project may have on their cultural values, heritage and aspirations. 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.

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, Sites of Significance under the AUP:OP or within the coastal environment under the Marine and Coastal Area (Takutai Moana) Act 2011.

The AEE noted that the CIA from Ngāti Te Ata Waiohua noted a number of archaeological sites, wāhi tapu and other sites of significance to Mana whenua exist within the Project area, in particular mentioning Heights Road Ngahere.

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.

The CIA neither supports nor opposes the Pukekohe Transport Network but agrees to the proposed designation corridor in principle.

To avoid, remedy or mitigate these potential adverse effects, SGA are proposing a number of conditions which were collaboratively developed with Mana Whenua. These conditions include inviting Mana Whenua to prepare a Cultural Advisory Report (proposed condition 9), Mana Whenua will be invited to participate in the development of the Urban and Landscape Design Management Plan (ULDMP) (proposed condition 11), and prior to the start of construction works or enabling works Mana Whenua will be invited to prepare a Cultural Monitoring Plan (proposed condition 16).

### Planning Review

NoR 7 is not within any 'Sites and Places of significance to Mana Whenua' as identified on the AUP:OP's planning maps. The CIA noted a number of archaeological sites, wāhi tapu and other sites of significance to Mana whenua exist within the Project area, in particular Heights Road Ngahere.

As noted in the AEE the Pukekohe Transport Network and therefore NoR 7 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.

The AEE notes that the CIA identifies the potential for adverse effects on freshwater systems, general ecology, significant landscapes and receiving environments. I also note that the Whangapouri Stream, which the NoR crosses, is of cultural significance to Mana whenua.

Nevertheless, I consider that the conditions for a Cultural Advisory Report, Urban and Landscape Development Management Plan, and Cultural Monitoring Plan are appropriate.

## **9.8.5 Traffic and Transport**

### Requiring Authority AEE

Effects on traffic and transport are addressed in section 11.4 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Transport Effects September 2023 by Subha Nair, Deborah Keary and Sharath Kotha.

The AEE covers operational effects which relate to safety, walking and cycling, public transport, and general traffic and freight which are considered to have positive effects, and property access which is considered to have some adverse effects that will need to be managed.

Regarding property access, the ATE notes for NoR 7 that there are limited existing properties directly using the route given this is largely a new alignment. Due to the complexity of access arrangements changing over time, the ATE explains that it is not currently possible to confirm a precise treatment for all individual accesses.

In the future, the collector network is expected to be refined by Auckland Council during subsequent structure planning processes. and these will then likely be refined and confirmed as these areas develop.

Existing accesses exists property access will be retained where feasible. It is anticipated that less than 12 property accesses will be realigned or restricted to left-in and left-out vehicle access, where right turning movements are restricted.

Therefore, it is proposed to include a condition (proposed condition 13) to demonstrate (in the Outline Plan) how safe access will be provided for each existing access that is altered by the project.

The AEE also covers construction effects (Section 11.4.2) which relate to traffic routing, property access, pedestrian and cyclist safety, road safety, on-street and public parking, parallel construction of projects and land use activities that will require further consideration. A condition requiring that Construction Traffic Management Plan (CTMP) be prepared prior to the start of construction for each stage of the work is included as proposed condition 17. The technical report recommends that if required, Site-Specific Traffic Management Plans (SSTMP) should be developed to manage constraints on access to affected properties.

For NoR 7 the AEE recommended specifically that some key land uses located adjacent to the corridors will need specific consideration for the management of construction traffic. This includes existing development and a primary collector road.

### Specialist Review

Mr Wes Edwards of Arrive Ltd has prepared a technical specialists report which reviews the notice of requirements for the Pukekohe Transport Network in relation to transport effects and responds to submissions that are about transport.

Mr Edwards notes that a key issue for these NORs is the interdependency of each of the Projects with each other and with other transport infrastructure projects in the area. He states that the two key issues for the hearing panel are if the consideration of alternatives is adequate and of the Projects are reasonably necessary.

Mr Edwards agrees with the requiring authority's assessment of alternatives at a macro scale but notes that 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.

Mr Edwards has identified a number of gaps in the requiring authority's assessment which relates to all NoRs and are set out in his report under the following headings: design standards, management of effects, integration of transport and land use, assessment of operational effects, road safety, active modes, public transport, freight, generic traffic, travel and emissions, property access, parking, and management of effects.

Mr Edwards has assessed each NoR and in regard to NoR 7, he states while some sections of this route are a new alignment, the RA 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 RA assesses the additional journey time for the right-turn detours to be less than one minute.

Mr Edwards believes that the longest detours are likely to occur along the Helvetia Road as the two proposed roundabouts will be 800m apart, and he expects 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 he expects few if any properties are likely to be affected.

Mr Edwards has addressed submissions and these are provided below in summarised form:

*“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.”*

Mr Edwards considers the assessment of alternatives is adequate at this scale, so he does not support these submission points.

*“Submission 5 (Morrison D and L, 17, 17A Butcher Road) request the active mode paths be located along the NZ Steel gas pipeline easement.”*

Mr Edwards considers there are issues with this alignment (access, severance, lighting, security) and does not support this submission point.

*“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.”*

Mr Edwards invites the RA to address this for the hearing.

*“Submission 11 (Burns R, 106 Beatty Road) requests the alignment is kept as far to the north-west as possible [...]”*

Mr Edwards considers the NoR's layout consistent with this request.



*“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.”*

Mr Edwards expected that access across the proposed active mode paths would be minimised, so he does not support this submission point.

*“Submission 9 is concerned the right turn out of Butcher Road would be unsafe. This intersection is proposed to be controlled by a roundabout”*

*“Submission 11 requests access from the 7:PNWA to both the north-western and south-eastern portions of a property for future development.”*

He notes property access on these roads is undesirable, particularly where alternate road access is available and so he does not support this submission point.

*“Submission 13 (Ministry of Education) requests changes to the CTMP”.*

This 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.” There are also additions or amendments to the wording of the CTMP condition to provide consistency with the CTMP conditions adopted for the Warkworth NoR and Airport to Botany NoR. Mr Edwards supports this submission point.

Generally, the requiring authority proposes to manage effects through management plans. Mr Edwards considers that the provided purpose of the CTMP is adequately described, but he considers that some amendments are required to the list of matters the CTMPs should address.

With regard to proposed condition 13 which relates to existing property access, Mr Edwards considers this may not provide for movement of all vehicles used on that property such as a large truck and trailer or agriculture machinery. He recommends that the condition is amended to require the access to be fit for purpose or adequate. He also recommends that the replacement or altered access be reasonable efficient, particularly with respect to additional journey length and time but acknowledges 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.

Overall, Mr Edwards supports NoR 7 with amendments to the conditions relating to existing property access, and the conditions specifying CTMP requirements.

### Planning Review

I rely on the expert opinion of Mr Edwards and the assessment in the AEE and technical report.

Concerning submissions, I recognise the Ministry of Education’s concerns but as there are no schools located along the proposed designation that would be affected request more information from the submitter.

I agree with the other recommendations by Mr Edwards which are also recommended through the Ministry of Education submission which relate to including public transport and all transport modes into the condition to be maintained and safely managed.

I particularly note Submission 3 (Cha 7, 157 Beatty Road) with regards to the requirement to designate the entire site and agree with Mr Edwards recommendation that this is further addressed by the RA.

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.

### **9.8.6 Construction Noise and Vibration**

#### Requiring Authority AEE

Effects on construction noise and vibration are addressed in section 11.5 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Construction Noise and Vibration Effects September 2023 by Joshua Dunkel, Siiri Wilkening and Claire Drewery.

The technical report states that the closest existing receivers are approximately 2m away from the construction boundary. With mitigation in place, the report states that most affected receivers could still intermittently receive noise levels above 85 dB LAeq. However, due to the setback distances to most of the proposed works and the use of equipment with lower source noise levels for large portions of the works, the report asserts that mitigated noise levels can comply with the 70 dB LAeq noise criterion for most of the construction works.

Three existing dwellings may experience vibration levels above the daytime Category B criterion, if a roller compactor is used on the construction boundary in the closest position to them. Mitigation, such as the use of non-vibratory compaction equipment within 8m of residential structures, is recommended by the report to avoid potential cosmetic damage.

Where an exceedance is predicted at any receiver that exists at the time of construction, the effects will be mitigated and managed through the CNVMP and Schedules. If a critical activity has to be carried out during the night-time in close proximity to residential receivers, consultation and mitigation measures will be essential. Any night-time works are likely to be limited in duration and will be managed through the CNVMP and a Schedule (proposed conditions 20 and 21).

It is recommended in the AEE that a Construction Noise and Vibration Management Plan (CNVMP) be prepared prior to construction and is included as proposed condition 20 and 21. There are also proposed conditions around what standards will be used to measure construction noise and vibration (proposed conditions 18 and 19).

### Specialist Review

Mr Rhys Hegley of Hegley Acoustic Consultants has prepared a review of the construction and operational noise and vibration assessment.

Mr Hegley states that the AEE and technical report contains a lot of generic information which 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.

Mr Hegley recommends that Condition 19 is changed to reflect the Waka Kotahi Condition 18 and add in requirements (18(b) and 18(c)) that set out the assessment and monitoring requirements for a situation where vibration exceeds the Category B criteria. He also noted that there appears to be an inconsistency. Firstly, the noise (Condition 18) and construction (Condition 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. Mr Hegley recommends clarity in these conditions. He also recommends that the CNVMP and Schedule of conditions (Condition 20 and 21) 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.

### Planning Review

It is noted in the AEE that the duration of construction of NoR 7 will take place over approximately 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.

The Ministry of Education (submission 13) is concerned about noise effects of construction on existing schools and education facilities, or any future schools developed in this area. The nearest existing schools are in Karaka, 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. 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 the submitter 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.

### 9.8.7 Operational Noise

#### Requiring Authority AEE

Effects on operational noise are addressed in section 11.6 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Operational Noise Effects September 2023 by Joshua Dunkel, Siiri Wilkening, Shivam Jakhu and Vitalii Zaiets.

The AEE states existing Protected Premises and Facilities (PPFs) within 100m from the proposed new road edge were assessed in urban areas, and 200m for rural areas, based on NZS6806. PPFs are assessed under different NZ6806 criteria for new roads and altered roads. There are 45 PPFs for altered roads and 6 for new roads which have been identified for NoR 7.

According to the AEE all PPFs for NoR 7 were predicted to receive noise levels within Category A (the desired noise criteria category) so there is no mitigation proposed. Further, ambient noise levels are likely to increase as the area urbanises, so the changes in noise levels due to the Project may not be as noticeable at the time.

#### Specialist Review

Mr Rhys Hegley, Hegley Acoustic Consultants has prepared a review of the construction and operational noise and vibration assessment. Mr Hegley notes that the approach in the requiring authority's technical assessments is to adopt a low noise road surface across all NoRs for the control of noise to current and future receivers, however 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 68061 provides for a PPF. Mr Hegley notes that 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 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, Mr Hegley states those developing the land in the future could potentially end up providing a significant portion of the necessary mitigation. The assessment asserts that there is no method to determine the noise a house being built would be exposed prior to the road's construction.

Mr Hegley recommends that the road surface Condition 27 be amended to match Waka Kotahi's Condition 26. Mr Hegley recommends 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. He also recommends 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) to Condition 28. The same changes are proposed for conditions 29 and 30 and changes to conditions 31 and 32.

### Planning Review

I note there have been multiple submissions with concerns regarding operational noise from traffic. These include submissions from Lisa Anne Whiteman (Submission 2), Jane Emma Telfer (submission 7), Chris and Angela Lynch (submission 9) and Robert Allan John Burns (Submission 11).

Considering that this land is currently zoned FUZ and has the potential to urbanise in the future it would be helpful if the requiring authority assesses the noise effects on activities that may arrive between designation and construction as stated by Mr Hegley. This assessment should include any mitigation that may be required and if mitigation in the form of noise barriers is required then the effects on landscape and visual should also be assessed.

It would be helpful for the requiring authority to provide a response at the hearing on the matters raised by submitters and the changes to conditions outlined by Rhys Hegley and the submitters as it is not clear at this time that the potential adverse operational effects in particular can be avoided, remedied, or mitigated.

## **9.8.8 Flood Hazard**

### Requiring Authority AEE

Effects on flood hazard are addressed in section 11.7 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Flood Hazard Effects 12/09/2023 by Justin Kirkman.

The AEE notes:

- NoR 7 crosses seven flow paths within the Whangapouri Stream catchment.
- Three culverts will need to be replaced near the Glenbrook rail line and Butcher Road. The upstream railway line culverts control the headwater and therefore the flood risk to the upstream properties.
- Existing residential dwellings are located upstream of the proposed crossings.
- All crossing have negligible risk, except;
- The residential building at 248 Helvetia Road that is already within the existing floodplain. This location has a high existing and future risk, caused by an undersized culvert beneath Helvetia Road.
- The 3.8°C climate change scenario would likely increase by 100mm to 400mm as a result. This would worsen the existing effect at 248 Helvetia Road.

The AEE proposes specific mitigation measures for this NoR:

- Adequately size culverts and bridges. Retain culvert sizes at the existing culverts near the Glenbrook rail line and Butcher Road to maintain the same flowrate and not cause new or exacerbate upstream flood risk.
- Attenuation for the 10yr and 100yr in the Whangapouri Stream catchment.

The AEE states that there may be some flood hazard effects during the construction phase (refer to section 11.7.1 of the AEE for the full list) however the details of the construction approach will be confirmed at detailed design and mitigation measures are included in the Construction Environmental Management Plan (CEMP) outlined in condition 14.

### Specialist Review

Mr Trent Sunich reviewed the Assessment of Flood Hazard. Mr Sunich agrees with the approach undertaken in the Assessment of Flood Hazard Effects and finds 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.

Mr Sunich assessed the submissions and noted concerns from Submitter 5 (Des Morrison). This submission raised concerns around the property at 17 Butcher Road, Pukekohe and that the likely effects and mitigations required may have been underestimated, given the planned residential development anticipated to occur within the catchment. The submission considered it critical that an integrated approach is taken so that all relevant effects are considered and comprehensively addressed. It suggested there may be better ways to address stormwater through provision for park or reserve areas.

Mr Sunich acknowledges that the analysis in the Assessment of Flood Hazard Effects includes allowance for maximum probable development (MPD) scenarios, including development Future Urban Zoned land. However, Mr Sunich supports the concept of integrated management and future catchment planning and acknowledged rezoning should aim to integrate and maximise efficiency of use of stormwater management devices. He has proposed an advice note that aligns with best practice.

Mr Sunich has reviewed the proposed conditions with Auckland Council Healthy Waters staff and has recommended changes to the flood hazard condition and an inclusion of an advice note. These changes relate to simplifying condition outcomes, referencing the relevant code of practice, the introduction of overland flow specific conditions for new and existing overland flows, and requiring the requiring authority to consult Auckland Council Healthy Waters when developing the Outline Plan. It would be useful to hear from the requiring authority on whether it is proposing a condition to that effect or considers existing conditions capture this situation.

Mr Sunich acknowledges that the requiring authorities technical report assesses construction effects in relation to stormwater and proposes a consent condition 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.

### Planning Review

It is noted that the impact of earthworks on flood risk will be considered as part of the regional consent process. Therefore, based on the comments from Trent Sunich I consider that the potential adverse effects on flooding during construction can be avoided, remedied, or mitigated, subject to the above, as the CEMP condition requirement for flood hazard to be assessed during construction and the requirements of the regional consent provisions in the AUP:OP will ensure that this effect is adequately addressed.

It is noted that there are no submissions raising concern about flooding. With regard to operational effects of flooding, there is nothing to suggest that the extent of the designation is not sufficient to provide for the alignment construction and operation and any associated works for flood mitigation techniques however, given that this is a changing space it is assumed that the Requiring Authority will prior to the Outline Plan stage review the effects of climate change in terms of the best information available at that time.

Therefore, it would be helpful for the requiring authority to provide a response at the hearing on changes to conditions suggested by Mr Sunich. I consider that subject to the above, and the proposed conditions as recommended to be amended the potential adverse effects on flooding can be avoided, remedied, or mitigated.

### **9.8.9 Terrestrial Ecology**

#### Requiring Authority AEE

Effects on ecology are addressed in section 11.8 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Ecological Effects, September 2023 by Ian Bredin and Sahar Firoozkoohi.

The AEE discusses construction and operation effects of/ on vegetation clearance, long-tailed bats, birds, and herpetofauna. Potential construction effects that relate to the activities authorised by the designation include the disturbance and displacement of roosts/ nests and individual (existing) long-tail bats, avifauna and herpetofauna due to construction activities (noise, light, dust etc). The assessment from AEE on these species is outlined below:

- The effects of vegetation removal have been assessed as low and therefore do not require any impact management.
- The effects on long-tail bats for NoR 7 is assessed as moderate which will require mitigation in the form of a Bat Management Plan (BMP). This is included within the Ecological Management Plan (EMP) as proposed condition 23 and 24 with the level of effect post mitigation being assessed as low.
- There is a Threatened and At-Risk (TAR) species of bird (Dabchick) within NoR 7 and the effects on these birds are considered moderate so require mitigation by an Avifauna Management Plan (AMP) which is included within the Ecological Management Plan (EMP) as proposed condition 23 and 24.

- There are two herpetofauna species which are considered TAR however the magnitude of effects on these was assessed as negligible due to the skinks being considered habitat generalists and the local extent of construction related effects. For these reasons there is no mitigation proposed.

The potential operational effects on ecological features are the loss in connectivity for indigenous fauna and disturbance and displacement of indigenous fauna and their nests/roosts. The effects on the long tail bat and birds were assessed as moderate so require mitigation in the form of a BMP and AMP which are included within the EMP as proposed condition 24. The effects on herpetofauna were assessed as low so no mitigation is proposed.

### Specialist Review

Mr Simon Chapman of Ecology New Zealand has prepared a technical memo assessing the adequacy of the information submitted by the requiring authority. Mr Chapman agrees with much of the assessment and management plan approach provided by the requiring authorities' Assessment of Ecological Effects.

However, he noted that 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. Mr Chapman recommends that a Bat Management Plan (BMP) is provided and certified in advance of surveys commencing. This should include information regarding how the survey design is 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.

With regard to birds, Mr Chapman notes that the assessment suggests as New Zealand falcon are a transient species, they do not need to be considered. 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.

With regard to invertebrates, Mr Chapman notes that 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.

Mr Chapman has reviewed the proposed designation conditions for NoRs 7, in particular, conditions 23 and 24, and considers that the potential ecological effects resulting from the proposed expressway project are likely to be adequately managed by those conditions.

### Planning Review

There are no SEAs within the proposed designation boundary.



I note that Submissions 5 (Des and Lorraine Morrison), 7 (Jane Emma Telfer) and 8 (Nicola Payne) make brief mention of ecological or environmental effects amongst their other concerns regarding the NoR. However I note that general concerns regarding the NOR's approach to ecological effects have been addressed in Mr Chapman's assessment.

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 changes to conditions suggested. 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.

### **9.8.10 Landscape and Visual**

#### Requiring Authority AEE

Effects on landscape and visual values are addressed in section 11.9 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Landscape and Visual Effects, September 2023 by Matthew Jones.

The AEE highlights a number of positive effects such as enhanced connectivity, landscape mitigation planting, and integration of active travel routes and recreational paths with Pukekohe's 'green network' of bush and vegetated riparian margins.

The adverse construction effects on landscape and visual values are summarised in the AEE as the construction footprint, waterbodies, exposed earthworks, reduced amenity, reduced visual amenity, and temporary effects. The effects on landscape character resulting from the construction of NoR 7 are anticipated to be low. Butcher Road will likely require minimal earthworks, whereas the upgrade of Helvetia Road will likely require fill works to make-up levels to enable the width expansion. The designation will introduce an additional roading corridor into the rural environment (zoned FUZ), however it will not be out of place or inconsistent with the existing landscape character of the area.

Low-moderate temporary visual effects are anticipated for properties immediately adjacent to the alignment (being retained), and low temporary effects for properties within the wider setting and from public viewpoints (road corridors and railway).

The landscape character operational effects included in the AEE are summarised as that while the project adds a new road element through this area, the areas is expected to change to an urbanised context due to the current zoning of FUZ.

The proposed designation will form a complementary element as the FUZ urbanises and any adverse effects on landscape character are assessed as low. It is anticipated that visual amenity effects for the operation of the project and its alignment (post-construction) will be low, as the alignment will likely require the limited removal of existing vegetation along existing road corridors and generally is integrated with the underlying topography. Furthermore, the underlying landform of the rural environment is gently undulating, resulting in reduced earthworks (mostly fill). Due to the gently undulating landform of the area, the construction of these the proposed roundabouts is anticipated to require only minimal earthworks.

Mitigation in the form of an Urban and Landscape Design Management Plan (ULDMP) is recommended and included as proposed condition 11.

### Specialist Review

Ms Rebecca Skidmore of RA Skidmore Urban Design Limited considered the adequacy of the information submitted by the Requiring Authority (Assessment of Landscape and Visual Effects and the Urban Design Evaluation ), responded to relevant submissions and recommended changes to the proposed conditions.

Ms Skidmore notes that she generally considers the NoRs are supported by robust urban design and landscape analysis.

The memo comments relating specifically to NoR 7 are summarised below:

- The memo considers that while currently accommodating a mix of rural, rural residential and light industrial activities, the NoR 7 corridor is fully located within a FUZ zone and will likely undergo urban transformation.
- Ms Skidmore indicates that 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. The UDE 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 uses.
- Ms Skidmore notes 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, she notes that 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.
- The memo also highlights that the southern end of Helvetia Road is located within the Helvetia tuff ring. This volcanic landform is not identified as an ONF or ONL in the AUP:OP. There is no assessment provided by the RA in relation to the effects on this volcanic landform. However given the existing modified nature of the landform, Ms Skidmore considers the contribution it makes to the landscape character of the existing environment will not be significantly affected.

Ms Skidmore considers the requirements of the conditions do not convey the specificity of recommendations made in both the UDE and the LVEA and she recommends a number of changes to address recommendations set out in the UDE.

In relation to the submissions, Ms Skidmore states:

*The submission by D. and L. Morrison [submitter 5] 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 [submitter 10] 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.*

*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.*

#### Planning Review

I note that some submitters consider that the proposed road is at odds to the rural environment. It is noted that the effects assessment is predicated on the basis that there is going to be a change in relation to the FUZ zoned land from rural to an urbanised environment, which may not necessarily come to pass. It would be helpful for the requiring authority to provide a response at the hearing on changes to conditions suggested by Ms Skidmore and respond to the points raised in the submissions regarding the change to the environment. I consider that subject to the above, and the proposed conditions as recommended to be amended the potential adverse effects on landscape and visual effects can be avoided, remedied, or mitigated.

#### **9.8.11 Historic Heritage and Archaeology**

Effects on historic heritage are addressed in section 11.10 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Effects on Historic Heritage September 2023 by Matthew Campbell.

The AEE states that for NoR 7 there are no known historic heritage or archaeological sites. However, there may be risks during construction of uncovering unrecorded archaeological and historic heritage sites. It is recommended that further research and survey should be undertaken to support applications for HNZPTA authority before construction commences. Damage or destruction of any previously unrecorded archaeological sites that are exposed during the works can be mitigated under the provisions of the authority, and the means of mitigation detailed in an Archaeological Management Plan prepared for the HNZPTA authority application.

#### Specialist Review

Ms Myfanwy Eaves, Auckland Council has made her assessment and notes that other than for NoR 6 and NoR 8 from a historic heritage perspective, she is satisfied that all matters have been addressed in the technical assessment submitted by the requiring authority.

#### Planning Review

No submissions were received in relation to historic heritage for NoR 7. It is considered there are no known archaeological sites within the NoR 7 designation, adequate information has been received and no condition is relevant for NoR 7. It is noted that the requiring authority has stated that applications for HNZPTA authority will be made before construction commences so that damage or destruction of any previously unrecorded archaeological sites that are exposed during the works can be mitigated under the provisions of the authority.

I adopt Ms Eaves advice and consider that the potential adverse effects on historic heritage can be avoided, remedied, or mitigated.

### **9.8.12 Arboricultural Effects**

#### Requiring Authority AEE

Effects on arboriculture are addressed in section 11.11 of the AEE which refers to the requiring authority's technical report Pukekohe Transport Network Assessment of Arboricultural Effects September 2023 by Craig Webb. The AEE notes the positive effect of allowing sufficient space to plant new trees.

There are a number of trees located within the proposed designation. However, there are no trees in NoR 7 that are protected under the relevant District Plan provisions of the AUP:OP. No mitigation is proposed.

#### Specialist Review

Mr Leon Saxon of Arborlab has prepared a memo covering an assessment of the submitted documents, response to relevant submissions and recommendations.

Mr Saxon notes that there are no trees protected by the District Plan provisions affected within or adjacent to the designation boundary. However, he also notes that 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. As such, Mr Saxon recommends that the condition for preparing a Tree Protection Management Plan should apply to all of the designations.

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.

Mr Saxon notes that none of the submissions raised any significant issues regarding trees currently protected by District Plan rules.

### Planning Review

I adopt the expert advice of Mr Saxon and agree with his proposed recommendations to the conditions.

#### **9.8.13 Community Effects**

##### Requiring Authority AEE

Effects on the community are addressed in Section 11.12 of the AEE.

The AEE recognises the Pukekohe Arterials (NoRs 4-7) provide alternative routes for through traffic to bypass the Pukekohe town centre, improving access for regional and freight traffic across centres while reducing congestion and maintaining connectivity to amenities for communities within the Pukekohe town centre area.

The AEE recognizes that number of the NoRs (including NoR 7) are new roads in undeveloped greenfield areas, resulting in less community impacts during construction. However, the acquisition of land will sever some properties and may prompt changes to some rural operations. Prior to construction, there may be a reduction in the existing rural community within the greenfield areas of the Project, as AT acquires properties and those properties become vacant.

Notwithstanding this, the AEE states the Future Urban Zone (FUZ) is planned to urbanise and the proposed transport networks will be implemented at the time that greenfield areas start to urbanise. Therefore, the AEE anticipates this to be a temporary effect as the community transitions into an urban area once the land is live zoned for urban use. The AEE notes that amenity values in both the existing and future urban areas could also be disrupted during construction due to dust and noise generated from construction. However, the AEE states that no adverse operational effects on the community are anticipated.

The AEE anticipates that all community effects during the construction of the Project will be temporary and can be minimised. 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 with throughout the construction works which is described in proposed condition 8. Access and trip disruption will be managed by the CTMP (proposed condition 17) and the SCEMP proposed as conditions of the designation. Construction effects on amenity values of property can be managed by engagement with stakeholders identified through the SCEMP, as well as through the development and implementation of the CVNMP (proposed condition 20) and the CEMP (proposed condition 14).

Overall, the AEE states that no adverse community impacts are anticipated from the operation of the Project and therefore no mitigation is required. However, through the implementation of the ULDMP (proposed condition 11) or Landscape Management Plan, a range of measures will be implemented to ensure the NoR is appropriately integrated into the surrounding landscape and urban context.

## Planning Review

I agree with the assessment above undertaken by the requiring authority.

By providing safe and efficient connections throughout the growth area, the NoR will positively impact on the health and well-being of the existing and future community. This positive effect is expressed in the submission by Balle Bros Fresh Produce Ltd (submission 4) which states it is imperative that forecast growth of Pukekohe, Paerata, Drury is well catered for in terms of roading infrastructure.

The Ministry of Education (MoE) submission is the only submission received in relation to potential direct effects on community or recreational facilities. The MoE submission is primarily in response to the number of existing schools located proximate to the NoRs, but also any future schools that will be developed in the area. As outlined in the MoE submission, there is potential for schools located near to the Project to be affected by traffic, noise and other nuisance effects arising from future construction works of the transportation network. The MoE is therefore seeking to ensure that appropriate conditions are included in the designations to mitigate any potential adverse effects associated with the construction of the proposed transport network. Those conditions relating to transport have been addressed in transport effects section above.

The other requested changes to the proposed conditions relate to the MoE and schools being included as part of the Stakeholder Communication and Engagement Management Plan (SCEMP) and being included as a stakeholder in the Construction Traffic Management Plan (CTMP). As a component of a community that is potentially sensitive to the Project, particularly during the construction phase, inclusion of the MoE and schools as part of the SCEMP and CTMP is supported. Refer to the recommended amended conditions in Attachment 5 of this report.

It would be helpful to hear from the requiring authority on any potential impacts on schools and the changes to the conditions requested by the MoE as noted above.

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 requiring authority's response to the MoE's requested changes to the conditions.

### **9.8.14 Property and Land Use**

#### Requiring Authority AEE

Effects on property and land use are addressed in section 11.13 of the AEE. The assessment is summarised below:

- The AEE acknowledges that potential adverse effects on existing private properties have been reduced, where practicable through the development of the project concept design and the proposed designation boundary. It also acknowledges that the potential adverse effects on the development of private property may arise. However, development is not precluded within the proposed designated area.

- The requiring authority will work with landowners and developers under the process in s176(1)(b) to provide written consent for development within the proposed designations, provided those works will not prevent or hinder the work authorised by the proposed designation.
- A land use integration process (LIP) is included in the conditions for all NoRs, including NoR 7 (proposed condition 10). This sets out a process where developers can request information to inform land use development adjacent to the transport corridors. This will support development that may go ahead of the proposed transport corridors and provides opportunities to co-ordinate and integrate infrastructure and development.
- Section 11.13.1 of the AEE notes that land required for the permanent work will be acquired prior to construction and if temporary occupation is required, then the land 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 such as the development and implementation of a SCEMP, CTMP, Construction Noise and Vibration Management Plan (CNVMP) and Construction Environment Management Plan (CEMP) prior to the start of construction are noted as appropriately minimising disruption to affected properties and allow the continued use of the properties where practicable. Potential construction effects will generally be temporary.
- 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 timing for this process occurring is unstated in the AEE.

### Planning Review

Regarding submissions, I note that land use effects are raised by Soo-Hwan Cha (Submission 3), Des and Lorraine Morrison (Submission 5) and Sunhee Kim (Submission 16). Submission 3 and 16 raise the issue of the designation impacting on horticultural production at 157 Beatty Road. This site is entirely located inside the designation extent. Submission 5 also raises that their site (17 Butcher Road) has approximately 1/3 of the property is within the direct footprint of the designation which will limit future development. This submission also highlights considerable uncertainty generated by the 20-year lapse term.

In the period since the NoRs were served on Auckland Council, pursuant to Section 178(2) of the RMA, the proposed designations have affected normal property and land use activity on both adjacent land and particularly directly affected land. This is because as no person may do anything that would prevent or hinder the public work, project, or work to which the designation relates unless the person has the prior written consent of the requiring authority.

In terms of the effects on the directly affected land, while I note that the Public Works Act 1991 (PWA) is the legislative framework under entitled landowners receive compensation and this is a non-RMA process, the restrictions imposed on private property is an adverse land use effect. This is because the uncertainty that the designations can create for landowners can result in some landowners being reluctant to actively manage their land. Given the rural / farming land use and private plan changes located close to the NoR, this uncertainty could result in unmanaged land, production loss and disinvestment.

The proposed 20-year lapse period of the NoR adds to the uncertainty and this potential outcome. The LIP condition goes some way to assist with this however only when (and if) a landowner plans to urbanise their land. It may be helpful to go further and alleviate the effect of obtaining approval from the Requiring Authority over the next 20 years for permitted activities.

It would be helpful to hear from the requiring authority in response to the issues raised in relation to the property and land use effects by submitters and raised above about the impact of the lapse period. While it is noted that 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 will need permission from the Requiring Authority to undertake work on their own land, potentially for 20 years. Providing certainty on what can be done on the land without needing to seek approval from the Requiring Authority given the long lapse period would potentially assist many landowners and occupiers.

The timing for the process of removing the designation occurring is unstated in the AEE and there are no conditions related to this process. It would be useful to understand why.

It would also be useful to hear from the requiring authority as to whether potential impacts on properties and businesses raised in the above-mentioned submission are also appropriately addressed through the NoR design and alignment and proposed conditions.

At this time, I consider that the potential adverse effects on property and land use can potentially be appropriately remedied or mitigated, but this assessment is subject to the above information being provided and potentially changes to the NoR design and alignment and conditions to address how the ongoing use of the directly affected land will be enabled given the long lapse period sought.

### **9.8.15 Network Utility Effects**

#### Requiring Authority AEE

Effects on network utilities are addressed in section 11.14 of the AEE. The following network utilities are identified and being affected by NoR 7:

- Watercare – Watermain, sewer main and pipe assets.
- Counties Energy – ADSS fibre optic cable and medium and high voltage cables



To undertake work in accordance with a designation on land where there is an existing designation in place, the written consent of the requiring authority for the earlier designation is required under section 177(1)(a). This written approval has not been obtained at this stage but the AEE states will be obtained at a later date during the detailed design stage.

Where works are required by others on land subject to a designation or notice of requirement sections 176 and 178 apply. To mitigate effects on network utilities, a Network Utilities Management Plan (NUMP) (proposed condition 26) will be prepared prior to construction of the project. The NUMP will set out a framework for protecting, relocating and working in proximity to existing network facilities. The NUMP 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. Submissions to NoR 7 have been received from the following requiring authorities and network utilities:

- Telecommunications Submitters (submission 6)
- Watercare Services Limited (submission 12)
- Counties Energy Limited (submission 14)

The Telecommunication Submitters group point out that none of its group are listed in Section 11.14 of the AEE despite having existing infrastructure within and around the proposed designated boundaries. The Telecommunication submitters group therefore seek to ensure that existing and potential future telecommunications infrastructure in the Project corridors are adequately addressed and oppose the NoRs if their concerns are not addressed. The submission by the Telecommunication submitters group highlights that 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. This integration is provided for through the proposed Land Use Integration Process (LIP) condition, although as currently drafted this only applies to a Developer or Development Agency as defined in the conditions not to a network utility operator.

However, the Telecommunications Submitters group seek amendment to the proposed NUMP condition 26(d) and an advice note to be added to the NUMP conditions as shown in italics and underlined below:

*(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.*

### 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).

Watercare Services Limited's submission states that Watercare neither supports or opposes NoR 7 but seeks to ensure that any decisions made respond to the issues raised in this submission. In particular, that the works provided for under the NoR avoids, remedies or mitigates potential adverse effects on Watercare's ability to provide water and wastewater services now and in the future. In relation to NoR 7, Watercare acknowledges the engagement to date and seeks early engagement to enable opportunities to plan and future proof the delivery of assets to provide for well-functioning urban environments. In addition, 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. While supporting the proposed NUMP, SCEMP and Land use Integration Process (LIP) conditions, Watercare seeks that a new condition requiring the preparation of a "Network Utility Strategic Outcomes Plan" (NUSOP) be added to the NoR to futureproof assets in consultation with network utility operators such as Watercare. If the NUSOP condition is not included in the NoRs, Watercare seeks amendment to the proposed NUMP condition.

The Counties Energy submission indicates general support for the NoR but notes omissions in terms of the information about its existing overhead and underground infrastructure provided in the drawings submitted with the NoR. In addition, CEL require further consultation and detailed planning concerning parts of NoR which may impact the location and safe operation of its assets and 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.

There is no specific discussion about effects on the above utilities or assets in section 11 of the AEE.

Works within the existing road reserves (SH22, Burt Road and Runciman Road) 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. Access to the local road network subject to the NoR is managed through a Corridor Access Request process to Auckland Transport currently as the region's Road Controlling Authority. Therefore, a network utility would need to seek written consent from Auckland Transport and obtain a Works Approval Permit from Auckland Transport before undertaking works within the proposed designated land. Notwithstanding, proposed Condition 5 sets out when such works do not need Auckland Transport approval under section 176(1)(b) of the RMA.

As there is no further discussion on the effects on network utilities in the AEE, it is not clear if the mitigation proposed in the form of the NUMP (condition 26) and condition 5 is considered adequate. As noted above, the Telecommunication Group seeks amendment to proposed Condition 26 and Watercare seeks a new condition requiring the preparation of a Network Utility Strategic Outcomes Plan. It would be useful to hear from the requiring authority in relation to the changes sought.

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.

### **9.8.16 Effects conclusion**

In regard to the overall effects of the notice of requirement, I consider that subject to the further amendments to the conditions recommended above and included in Attachment 5 to this report, the potential adverse effects on the environment from the construction and operation of the NoR 7 can be appropriately avoided, remedied or mitigated.

## **9.9 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.

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

Highly productive land is defined in the National Policy Statement for Highly Productive Land 2022 (NPS-HPL) as:

*...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)*

Under clause 3.5(a) the land to be designated under this Notice of Requirement is not general rural zone nor rural production zone land. Therefore, the NPS-HPL is not relevant to NoR 7.

### **9.9.2 National Policy Statement on Urban Development 2020 (NPS-UD)**

The National Policy Statement on Urban Development (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 (Objective 1).

As stated in the AEE, within the NPS-UD Auckland is recognised as a Tier 1 urban environment and is therefore subject to a greater policy direction in terms of intensification and density of urban form. The NPS-UD directs that urban development is integrated with infrastructure planning and funding decisions and is strategic over the medium to long term.

The AEE states that the Pukekohe Transport Network will support and enable growth by protecting improved and new transport corridors that will support Auckland Council's growth aspirations for the growth areas of Drury West, Paerata and Pukekohe area, including intensification or density of growth resulting in more efficient urban land development.

I agree with these conclusions and consider that the NoRs, including NoR 7, will support and enable future growth that is proposed while also promoting and providing for active modes of transport.

I consider that the conditions, as recommended to be amended, will give effect to the NPS-UD.

### **9.9.3 National Policy Statement on Freshwater 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.

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.

However, in the AEE the relevant matters have been screened to inform the concept design, options assessment, the designation boundary, and future resource consents. The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-FW because:

- The options assessment assessed the ecological impacts of a variety of options including extent of effects on stream/ waterway ecology as well as the consideration of natural wetlands under the NPS-FM.
- Through the alternatives assessment and design refinement process the requiring authority have sought to avoid wetland areas and minimise impacts on rivers and waterbodies where practicable. Where avoidance is not practicable, design refinements have looked at ways to minimise effects.
- Stormwater discharge quality will be managed through the use of soft stormwater infrastructure where possible such as swales and stormwater wetlands. An integrated stormwater network will be designed at the detailed design/ regional consenting stage that is sensitive to receiving environments, recognising capacity constraints of streams and the importance of maintaining or enhancing the quality of freshwater.

I concur with this assessment under the NPS-FW and Council's ecology specialist also agrees with the management approach. It is noted that the rules relating to freshwater are subject to regional rules. In that regard, I agree that the NoRs give effect to the NPS-FW, subject to the conditions.

#### **9.9.4 National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB)**

The National Policy Statement for Indigenous Biodiversity (NPS-IB) is an essential part of our response to biodiversity decline in Aotearoa. It provides direction to councils to protect, maintain and restore indigenous biodiversity requiring at least no further reduction nationally.

The relevant provisions of the NPS-FM are assessed in section 12 of the AEE. In summary, the requiring authority finds that the Project will give effect to the NPS-IB because:

- The options development and assessment considered existing and likely sensitive ecological features and environments and sought to locate the designation boundary outside the Significant Natural Areas (mapped as Significant Ecological Areas (SEAs) in the AUP:OP).
- The Project seeks to maintain indigenous biodiversity through the implantation of the EMP as required by proposed condition 24.

I concur with this assessment and note that there are no SEA's which are within the proposed designation boundary and if the conditions are amended as suggested by Mr Chapman to address the NPS-IB Policy requirements, then I would consider that NoR gives effect to the NPS-IB.

#### **9.10 Regional Policy Statement (Chapter B of the AUP:OP) (RPS)**

The RPS sets the strategic direction for managing the use and development of natural and physical resources throughout Auckland. The following sections of the RPS are considered relevant to the NOR:

- Chapter B2 Tāhuhu whakaruruhau-ā-taone – Urban Growth and Form
- Chapter B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao – Infrastructure, transport and energy
- Chapter B4 Te tiaki taonga tuku iho – Natural heritage
- Chapter B5 Ngā rawa tuku iho me te āhua – Historic heritage and special character
- Chapter B6 Mana Whenua
- Chapter B7 Toitū te whenua, toitū te taiao – Natural resources
- Chapter B10 Ngā tūpono ki te taiao – Environmental risk

The requiring authority has assessed the Project against the relevant provisions of the RPS in Section 12 Table 12-1. Table 4-1 below sets out the RPS Chapters in the AUP:OP and the theme set out in table 12-1 of the AEE in which the RPS is addressed.

Table 41 AUP:OP RPS Chapter and Table 12-1 themes

<b>Chapter</b>	<b>Theme identified in table 12-1 of AEE</b>
B2 Tāhuhu whakaruruhau ā-taone - Urban growth and form	Urban growth and development capacity
	Natural hazards
	Urban form and quality design
B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy	Urban growth and development capacity
	Enabling infrastructure and transport
	Enabling infrastructure within an overlay and in addition to the above
B6 Mana Whenua	Manawhenua
B7 Toitū te whenua, toitū te taiao - Natural resources	Manawhenua
	Indigenous biodiversity and ecological values
	Freshwater
B9 Toitū te tuawhenua - Rural environment	Urban growth and development capacity
B10 Ngā tūpono ki te taiao - Environmental risk	Natural hazards

I generally agree with the requiring authority's assessment under the RPS provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed.

### 9.11 Auckland Unitary Plan - Chapter D overlays

NoR 7 is subject to a range of overlays in the AUP:OP including the following:

- D1: High Use Aquifer Management Areas Overlay [rp]
- D3: High-use Stream Management Areas Overlay [rp]

The provisions of Chapters D1 and D3 are regional provisions. Therefore, an assessment of these will be required at the regional resource consent stage. I concur with the assessment of the requiring authority in the AEE in relation to the objectives and policies of these overlays and have no further comments to add.

### 9.12 Auckland Unitary Plan - Chapter E Auckland-wide

NoR 7 is subject to a range of Auckland-wide provisions in the AUP:OP and the requiring authority have assessed the following:

- E1: Water quality and integrated management
- E11: Land disturbance – Regional
- E12: Land disturbance – District
- E15: Vegetation management and biodiversity
- E17: Trees in Roads
- E25: Noise and vibration
- E26: Infrastructure
- E27: Transport
- E36: Natural hazards and flooding

I generally agree with the requiring authority's assessment in section 12 and Table 12-1 of the AEE in relation to the provisions above subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs.

I note that Table 12 -1 did not consider the following Auckland -Wide Chapters:

- E2 Water quantity, allocation and use
- E3 Lakes, rivers, streams and wetlands
- E8 Stormwater - Discharge and diversion
- E9 Stormwater quality - High contaminant generating car parks and high use roads
- E24 Lighting

While I recognise that the effects of stormwater discharges (quality and quantity) are the subject of regional consents, it would be helpful if these had also been considered in Table 12.1. I also note that lighting effects have been recognised there is no assessment in terms of relevant objectives and policies.

### **9.13 Auckland Unitary Plan – Chapter H Zones**

Chapter H provisions are addressed in Section 12, Table 12-1 of the requiring authority's AEE. Most of the project located within the Future Urban Zone (H18 of the AUP:OP, with a small amount within Residential - Mixed Housing Suburban Zone.

I generally agree with the requiring authority's assessment under the RPS provisions subject to the changes recommended to conditions and the content and implementation of the management plans and processes proposed as part of the NoRs. 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 Appendix A to the AEE. Sections 5.1 of Appendix A to the AEE discuss the nature of the alternative assessment and design refinements that have taken place in relation to NoR 7.

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.

#### **9.14 Alternative sites, routes or methods – section 171(1)(b)**

The requiring authority has set out its specific project objectives in Form 18 and section 6 of the AEE. Section 4.5.4 of the Pukekohe Transport Network Assessment of Alternatives Report prepared by Vicky Hu, Alicia McKensie and Helen Hicks outlines the options considered. The assessment was necessary as to deliver the project works are proposed to be undertaken outside the existing legal road and AT does not have a right to undertake works on the land unless it relies on its power as a requiring authority to access the land.

The assessment of alternatives process as outlined in the AEE commenced at a broad scale and progressively narrowed down the area to a single preferred route. The process is summarised in section 5.1.1 of the AEE.

The AEE concludes that the designation is reasonably necessary to achieve the project objectives.

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.

#### **9.15 Necessity for work and designation – section 171(1)(c)**

The requiring authority has set out its specific project objectives for NoR 7 in Form 18 and section 6 of the AEE Table 6.1 of the AEE. These are listed in the AEE as follows:

- Improves connectivity in Pukekohe
- Supports Vision Zero and road safety outcomes
- Supports resilience and the existing transport network by providing new transport connections.
- Supports planned urban growth and the future transport network by providing new connections within new future urban communities.
- Supports travel choice by providing for all modes of transport.
- Contributes to mode shift and the transition to a low carbon transport network by providing for active modes and capacity for new public transport services.

The method of designation is reasonably necessary to achieve the objectives because it enables the identification and protection of the land required for the Project for an extended duration.

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.

#### **9.16 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. In this case the non-RMA documents are considered relevant.



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 Table 12.1 of the AEE. I generally concur with the assessments and conclusions of the AEE on any other matter and the range of other documents listed.

I consider that the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 NES (Soil) is a relevant other matter that has not been considered or given regard to specifically.

This NES provides a nationally consistent set of planning controls and soil contaminant values to ensure that land affected by contaminants in soil is appropriately identified and assessed before it is developed and, if necessary, the land is remediated, or the contaminants contained to make the land safe for human use.

In Form 18 the requiring authority has listed resource consent under the NES (Soil) as being required but are not sought at this time. It is considered the addition of an advice note to state this is appropriate to ensure this is captured as part of the designation.

#### **9.17 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:OP 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 7.1 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 decision 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	Requiring authorities 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 five 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 both Waka Kotahi and AT for all NoRs required to deliver the Pukekohe Transport Network. This 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. It is also noted that people who move into the area as the FUZ urbanises, will do so with knowledge of where the network will be. The fact that the network is unlikely to be implemented until urbanisation is (at least) confirmed is also noted.

As outlined in section 4.8.14, it would also be helpful to hear from the requiring authority in response to the issues raised on how the impact of the requested 20-year lapse period could be mitigated. 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.

### **9.18 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. There is nothing specific terms of NoR 7 that has been addressed. 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 in relation to NoR 7.

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.

## 9.19 Conclusions

The requiring authority has lodged NoR 7 under section 168 of the RMA for the Pukekohe North-West Arterial.

I consider that subject to the provision of the requested information and subject to conditions and with modifications as set out in this report that it is recommended to the requiring authority that NoR 7 should be confirmed for the following reasons:

- The notice 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 notice(s) of requirement.
- The notice of requirement is generally consistent with the relevant AUP:OP provisions.
- The notice of requirement is 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.

## 9.20 Recommendation and conditions

### 9.20.1 Recommendation

Subject to new or contrary evidence being presented at the hearing, and the requiring authority supplying adequate responses on issues raised in the body of the report, pursuant to section 171(2) of the RMA, it is recommended that the notice of requirement (NoR 7) be confirmed, subject to the amended and additional conditions and modifications, set out in Attachment 5 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 of requirement is consistent with and give effect to the relevant national environmental standards, national policy statements and the AUP:OP.
- 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.

### **9.20.2 Recommended conditions**

The conditions set recommended by the reporting planner for NoR 7 are set out in Attachment 5 to this report.

**Attachment 1: Copies of Submissions**

**Attachment 2: Franklin Local Board Resolution 28 November 2023**

**Attachment 3: Auckland Council Specialist Review**

**Attachment 4: Summary of Submissions**

**Attachment 5: Conditions**

# **ATTACHMENT TWO**

## **FRANKLIN LOCAL BOARD RESOLUTION 28 NOVEMBER 2023**





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**MEMO TO:** Joe McDougall - Planner

**COPY TO:** Denise Gunn

**FROM:** Denise Gunn - Democracy Advisor

**DATE:** 29 November 2023

**MEETING:** Franklin Local Board Meeting of 28/11/2023

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Please note for your action / information the following decision arising from the meeting named above:

**FR/2023/191**                      **Local Board Views on eight Notices of Requirement from Auckland Transport and Waka Kotahi for the Pukekohe Transport Network**

**FILE REF**                              CP2023/17428

**AGENDA ITEM NO.**              15

**15      Local Board Views on eight Notices of Requirement from Auckland Transport and Waka Kotahi for the Pukekohe Transport Network**

Resolution number FR/2023/191

MOVED by Member A Kinzett, seconded by Chairperson A Fulljames:

**That the Franklin Local Board:**

- a)      **whakarite - provide local board views on eight Notices of Requirement (NoRs) for the Pukekohe Transport Network as outlined in the below table 1: Franklin Local Board Feedback on Pukekohe Transport Network Notices of Requirement;**

o  
o      *Table 1: Franklin Local Board Feedback on Pukekohe Transport Network Notices of Requirement*

Notice	Project	View
NoR 1	Drury West Arterial	Support as part of the new connection to the Ngaakoeroa Train Station
NoR 2	Drury – Pukekohe Link	Recommend that the-Highway from Ramarama to Pukekohe retains space for four lanes rather than the proposed two lanes,

		noting that the population in Pukekohe is likely to significantly exceed current growth projections in response to the National Policy Statement for Urban Development.
NoR 3	Paerata Connections	Support
NoR 4	Pukekohe North-East Arterial	Support
NoR 5	Pukekohe South-East Arterial	Do not support using the Golding Road intersection as the outer ring road connection point. The board suggests that more thought is needed on how to connect across Mill Road, and that it would be preferable that connection into the southeast be at the same point as the proposed new north eastern intersection.
NoR 6	Pukekohe South-West Upgrade	Do not support the funneling of traffic past Pukekohe Hill Primary School (corner of Ward Street and Green Lane) as this will create safety and congestion issues.
		Do not support use of Helvetia Road as this proposal would split a residential community, create barriers to modal shift, and undermine the quality of life for those residents.
		Recommend that the programme reconsider the use of Gun Club Road and Patumahoe Road as part of the outer ring route as previously suggested, noting that this would support effective diversion of traffic from residential areas and the town centre and facilitate efficient freight movement
NoR 7	Pukekohe North-West Upgrade	Support the north-east and north-west (to the intersection of Gun Club Rd) sections of the ring road around Pukekohe as proposed.
NoR 8	Mill Road and Pukekohe East Road Upgrade	Support the four laning of Mill Rd to Harrisville Rd, but recommend more work done on an alternative connection point to the Pukekohe ring road. This would involve working with Waikato District Council because of the border issues in this area. , however the board notes that this is possible and has been undertaken as part of other notices in this package.

- b) **whakaae / agree that this programme of work is essential in supporting the future planning of Pukekohe-Paerata and south Drury, and future economic, environmental, social, and cultural well-being in the area**
- c) **tautoko / support the inclusion of cycling and walking infrastructure in general and recommend that the Pukekohe-Paerata Paths Plan is referenced when assessing the suitability of NoR notices**
- d) **tuhi ā taipitopito / note that that this package does not adequately address the needs of freight that are unique to the wider Pukekohe area or the likely negative impacts of freight traffic use of the network on significant quality of**

**life and safety in the local community**

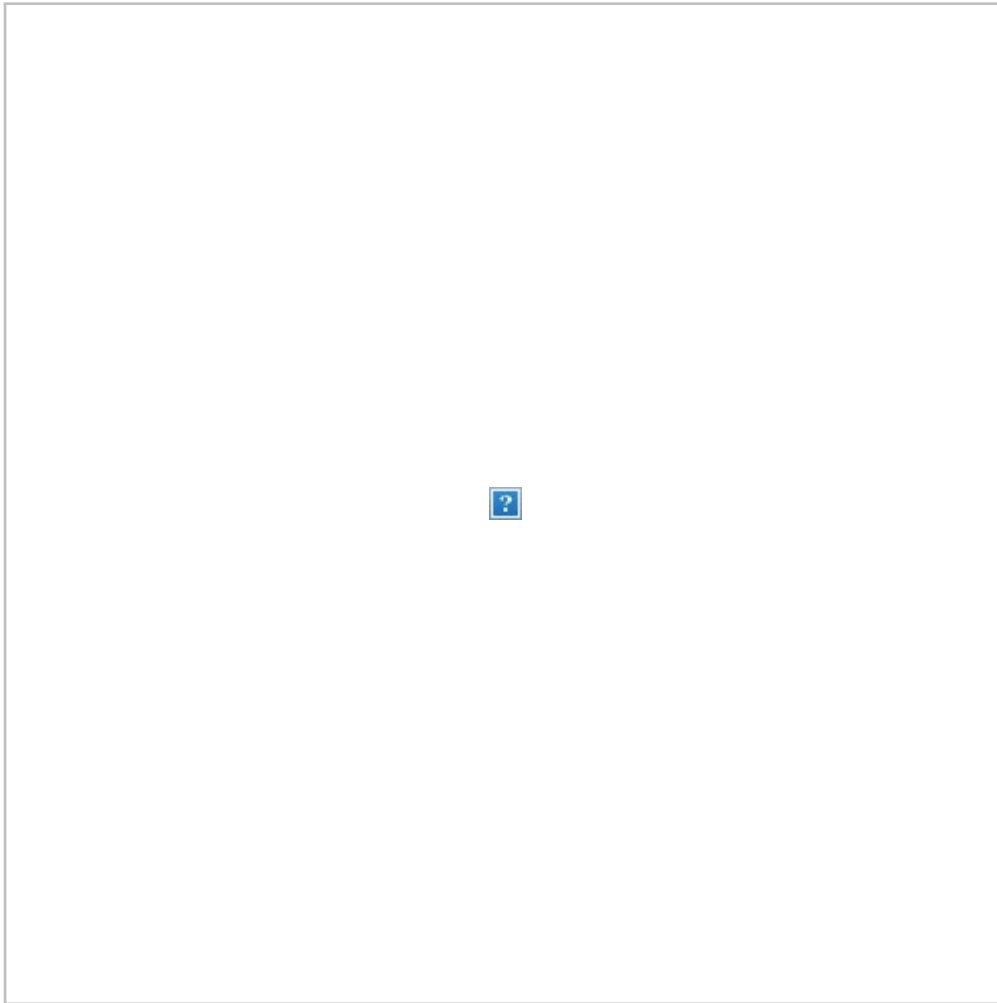
- e) recommend careful consideration on whether the scope of notices facilitates effective and safe freight movement which should be prioritised to enable carbon emissions to be reduced in line with regional and national climate policy**
- f) reiterate that it is essential that planning and designation of key intersection treatments e.g. the intersection of Blackbridge Road and State Highway 22 and the Bombay interchange are critical to achieving the purpose of this programme and strongly recommend these are considered in the context of the NoR process; however acknowledge that this is outside the scope of the Notice of Requirement process**
- g) recommend that the expansion of the NZ Steel site at Glenbrook, which will develop 300 hectares of industrial land and increase south-bound freight and general vehicle movements, is considered as part of the notice assessment**
- h) whakatau / appoint Deputy Chair Alan Cole to speak to the local board views at a hearing on the Notices of Requirement**
- i) tautapa / delegate authority to the chairperson of Franklin Local Board to make a replacement appointment in the event the local board member appointed in resolution h) is unable to attend the NoRs hearing.**

**CARRIED**

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**SPECIFIC ACTIONS REQUIRED:**

Denise Gunn  
Democracy Advisor, Franklin Local Board  
Phone 021 981 028  
Email [denise.gunn@aucklandcouncil.govt.nz](mailto:denise.gunn@aucklandcouncil.govt.nz)



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# **ATTACHMENT THREE**

## **AUCKLAND COUNCIL SPECIALIST REVIEWS (NORs1,3,4,5,6 & 7)**



# Arboricultural Memorandum

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<b>Prepared for:</b>	<b>Joe McDougall</b> <b>Auckland Council – Plans and Places</b> <b>Joe.mcdougall@aucklandcouncil.govt.nz</b>	Arborlab Limited PO Box 35 569, Browns Bay Auckland 0630 office@arborlab.co.nz arborlab.co.nz   09 379 3302
<b>Prepared by:</b>	<b>Leon Saxon</b> <b>027 495 7221</b> <b>leon@arborlab.co.nz</b>	Head Office 76D Paul Matthews Road, Albany Auckland 0632
<b>Date:</b>	<b>06 December 2023</b>	
<b>Re:</b>	<b>Arboricultural Assessment of 8 NOR's for the Pukekohe Transport Network</b>	<b>Job Ref. 37936</b>

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## 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 29<sup>th</sup> 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.



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## 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.

## Memo

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**To:** Karen Bell, Stantec

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**CC:** Joe McDougall, Central and South Planning, Plans and Place, Auckland Council  
Ana Maria d'Aubert, Consents Manager, Waikato District Council

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**Date:** 14 December 2023

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**Reference:** SGA Pukekohe Arterials NoRs – Urban Design and Landscape Review

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## 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 29<sup>th</sup> 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.<sup>1</sup>
- 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

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<sup>1</sup> Section 3.4, p. 19, AEE

important to consider the likely future environment for specific NoR areas.<sup>2</sup> 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.

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<sup>2</sup> 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.<sup>3</sup> 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.

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<sup>3</sup> 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.<sup>4</sup>
- 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 character<sup>5</sup>. 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.

<sup>4</sup> Point 1.3, p. 20, Urban Design Evaluation

<sup>5</sup> 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 UDE<sup>6</sup>. 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

<sup>6</sup> Point 3.3, p. 23 Urban Design Evaluation

design of construction facilities is appropriate and should be captured in the ULDMP requirements<sup>7</sup>. 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 scale<sup>8</sup>. 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.

<sup>7</sup> Section 7.1, p. 104, Landscape and Visual Effects Assessment

1.1 <sup>8</sup> 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 uses<sup>9</sup>. 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

<sup>9</sup> 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 intact<sup>10</sup>. 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.

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<sup>10</sup> 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 uses<sup>11</sup>. 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,

<sup>11</sup> 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.<sup>12</sup>

- 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

<sup>12</sup> 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 LVEA<sup>13</sup> 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 environment<sup>14</sup>. 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.

<sup>13</sup> Section 6.3.8, p. 97, Landscape and Visual Effects Assessment

<sup>14</sup> 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

**Auckland Council memorandum (technical specialist report to contribute towards Council's section 42A hearing report)**

14 December 2023

To: Karen Bell, Consultant Planner, Plans and Places, Auckland Council  
From: Trent Sunich, Consultant Stormwater Technical Specialist  
Cc: Joe McDougall, Policy Planner, Central and South Planning, Plans and Places

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**Subject: Pukekohe Transport Network Notices of Requirement – Stormwater and Flood Hazard Technical Assessment**

## 1.0 Introduction

This memorandum summarises the findings of my review on behalf of Plans and Places of the Auckland Council for the Pukekohe Transport Network Notices of Requirement (the NoRs). My assessment considers flood hazard effects during construction as well as the long-term effects of operating the arterial routes. Where applicable I have also sought advice from Healthy Waters specialists regarding the suitability of the flood hazard assessment and use of the flood hazard models and prediction tools and the proposed designation conditions.

A section of NoR 8 also passes through the Waikato District. I have assessed and reported on this in a separate memorandum to the Waikato District Council.

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 will be subject to future resource consent applications and assessment reflecting the stormwater management related rule sets in the Auckland Unitary Plan (AUP) or future equivalent planning frameworks. Notwithstanding this it is important to consider that suitable land area will be available within the designation to construct and operate the stormwater management devices 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 NoRs, 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. I have reviewed and reported on the Warkworth to Wellsford motorway project Notice of Requirement on behalf of Healthy Waters who the Auckland Council's stormwater network operator. I have also been the reporting stormwater technical specialist to Plan and Places of the Auckland Council for the proposed private plan changes 48, 49 and 50 and the Drury NoRs 1-5.

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 (Auckland Transport and Waka Kotahi), eight separate notices of requirement are sought to designate land for the purposes of constructing and operating arterial routes in and around the Pukekohe area to service projected growth in that part of the Auckland Region and will include provision for improved walking and cycling, public transport, and general traffic connections. The NORs are:

- NoR 1 Drury West Arterial: 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: 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 3 Paerata Connections: One new connection between the existing Sim Road (south) and the Paerata Rail Station and second new connection between the two extents of Sim Road across the NIMT.
- NoR 4 Pukekohe North-East Arterial: 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: 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: 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: 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: 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 each of the NoRs 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.

## **2.1 Catchment Overviews**

For geographical context, the NoRs are situated within four stormwater catchments being Ngakoroa Stream, Oira Stream, Whangapouri Stream and Tūtaenui Stream. The Tūtaenui Stream catchment ultimately flows to the Waikato River, while the remaining three catchments drain to the Manukau Harbour. An overview of the catchment is 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.
- Oira Creek catchment covers approximately 2,043 ha in total. This catchment extends from the northern side of the Pukekohe East Tuff Crater in the upper catchment and flows north along the eastern side of Paerata. Oira Creek flows into Drury Creek before discharging to Manukau Harbour.
- Whangapouri Creek catchment covers an area of approximately 5,270 ha including most of the Pukekohe urban area. The upper catchment includes Future Urban Zone and lower catchment is Rural zone. The Whangapouri Stream catchment includes heavily modified watercourses – both within Pukekohe and modified rural areas e.g. agricultural land.



- 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. The NoR routes and respective catchments are listed in the following table:

Catchment	NoR Route
Ngakoroa Stream	NoR 1, NoR 2, NoR 8
Oira Creek	NoR 2, NoR 3, NoR 4
Whangapouri Stream	NoR 2, NoR 3, NoR 4, NoR 5, NoR 6, NoR 7, NoR 8
Tutaenui Stream	NoR 4, NoR 5, NoR 6, NoR 8

## **2.2 Flood Hazard Determination and Risk Assessment**

In the context of constructing and operating each of the NoR routes, 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 (in the FUZ); and the ability to access property by residents and emergency vehicles.

In order to assess these flood hazard effects, a consistent methodology was applied for each NoR route where each step is summarised as follows:

- 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.

## **2.3 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 subsections for each NoR.

I have highlighted the moderate and high-risk model results and included commentary of potential mitigation options later in this memorandum.

<b>Overall Flood Risk</b>	<b>Negligible</b>		<b>Low</b>		<b>Moderate</b>		<b>High</b>
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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
<b>Negligible</b> (flood depth < 0.05 m on land and freeboard >0.5m to buildings)			
<b>Low</b> (flood depth 0.05 m to 0.15 m on land and freeboard <0.5m to buildings)			
<b>Moderate</b> (flood depth 0.15 m to 0.5 m on land and No freeboard to buildings)			
<b>High</b> (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 to flood hazard management which are 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).

Mitigation measures to achieve the outcomes are anticipated to comprise the following:

- Size culverts and bridges to meet proposed conditions on flood hazard outcomes.
- No attenuation in wetlands in the lower half of the catchment within the Project works are located.
- Attenuation for the 10yr and 100yr where wetlands are located in the upper half of the larger catchment.
- Provide diversion channels at the toe of fill embankments to prevent ponding.
- Offset flood volume displacement effects of filling in the floodplain.
- Maintain 1200mm freeboard to new bridge soffits using the 100-year ARI flood level with 3.8°

- Climate change hydrology.
- Extend culverts at the same diameter and replace culverts at the same diameter.
- Avoid lifting the crown of the road to prevent adverse effects upstream.
- Avoid lowering the road crown to cause effects downstream.

#### **2.4 NoR 1: Drury West Arterial**

NoR 1 is a new road connection from SH22 in the north, over the North Island Main Tunk (NIMT) Railway line, into a roundabout on Burt Road and terminating at the Drury to Pukekohe Link NoR 2. The catchment is rural at present with the upstream catchment undeveloped and majority pervious. The new road alignment crosses six overland flow paths and will include some earthworks filling in floodplain areas. The existing flooding is most prevalent toward the south of the NoR where the new road will cross the main branch of the Ngakoroa Stream. The future environment is planned to be fully developed as urban under the Future Urban Zone (FUZ) provisions of the Auckland Unitary Plan – Operative in part (AUP:OP).

Key features of the proposed road include the following:

- NoR 1 is a 1.6km new transport corridor extending south from the intersection of SH22 and Jesmond Road to the proposed Drury to Pukekohe Link (NoR 2).
- Three new bridges are proposed over existing NIMT rail line, and two tributaries of the Ngakoroa Stream.
- Three new stormwater wetlands are proposed and new culverts and swales.

#### **Flood Hazard Summary**

The flood hazards from the 100-year ARI flood with a 2.1° climate change adjustment to rainfall produces a mostly high flood risk in the floodplains surrounding the Ngakoroa Stream and included crossing of minor tributaries by NoR 1. Of the six flow path crossings, two areas (refer figure below) indicate moderate and high risk under current scenarios, with the remaining risk profiles being assessed as negligible under both climate change scenarios (2.1° and 3.8°):

2	110 Karaka Road, Drury	Agricultural land in the FUZ invert level 15.00m RL	Ngakoroa Train Station Park and Ride	2.1° CC: 15.20m RL 3.8° CC: 15.35m RL	Some moderate existing risk and negligible future risk
5 and 6	Ngakoroa Stream channel level RL 7.1m RL	Ngakoroa Stream Floodplain	Floodplain in the FUZ	2.1° CC: 10.20m RL 3.8° CC: 10.36m RL	High existing and future risk in floodplain, negligible existing and future risk out of floodplain.

Figure 1: NoR 1 Risk Areas

#### **2.5 NoR 2: Drury – Pukekohe Link**

NoR 2 is a new connection between Great South Road, Drury in the north, to a new connection north of Pukekohe (NoR 4 – Pukekohe North East Arterial). The alignment crosses eight (8) overland flowpaths and will include some earthworks filling in floodplain areas. The existing flood prone areas are at the major stream crossings in the South Drury Connection, the State Highway 22 Connection, and the Drury Paerata Link. The Paerata Arterial section follows a terrain ridgeline and therefore has no integration with floodplains and no need for culverts.

The future environment is planned to be FUZ to the north and west of the NoR2 alignment with a gap between the FUZ areas in the middle.

Key features of the proposed road include the following:

- NoR 2 provides a north south strategic corridor with two general traffic lanes proposed and active transport facilities on one side of the corridor. The total length of the NoR is 10.6km.
- A 24m wide cross section is proposed with two lanes for general traffic, with walking and cycling on one side of the corridor.
- Three new bridges are proposed over tributaries of the Ngakoroa Stream.
- Two new bridges are proposed over the Oria Creek and NIMT.
- Two bridges are proposed over tributaries of the Oira Creek.
- A series of wetlands, swales and culverts.

### Flood Hazard Summary

Drury – Pukekohe Link flood hazards from the 100-year ARI flood with a 2.1° climate change adjustment to rainfall will produce a mostly negligible flood risk due to the mostly uninhabited land upstream of flow path crossings. Regarding the findings at Point 3 (detailed in the figure below), the commercial and residential buildings are currently in the floodplain and the future amount of filling in the floodplain may generate a displacement effect and increase flood levels locally.

The effects of using a 3.8° climate change adjusted rainfall pattern compared to the 2.1° climate change pattern shows deeper flood depths in all eight flow path crossings for the NoR 2 road alignment.

3	767 Runciman Road, Site level RL 8.92m	Residential dwelling in Rural Zone.  Working agricultural and horticultural land uses with >0.5m depth	No change expected, Rural land use	2.1° CC: 9.73m RL 3.8° CC: 9.91m RL	Moderate existing and future risk to dwellings with <500mm freeboard and rural land with >0.5m depth.
3	763B Runciman Road, Site level RL 9.03m	Residential dwelling and lifestyle block in the Rural - Countryside Living Zone.	No change expected, Rural land use	2.1° CC: 9.75m RL 3.8° CC: 9.92m RL	Moderate existing and future risk to dwellings with <500mm freeboard and rural land with >0.5m depth.

Figure 2: NoR 2 Risk Areas

### 2.6 NOR 3: Paerata Connections

The Paerata Connections consist of two new road connections called NoR 3.1 (Northern Paerata Link) and NoR 3.2 (Southern Paerata Link). The catchments for NoR 3 are both small sub-catchments to the Whangapouri Stream. They contain rural land uses and some dwellings along Sim Road.

The Northern Link (NoR 3.1) does not cross any overland flowpaths. The Southern Link (NoR 3.2) crosses a single flow path. A culvert for this flow path has been designed and consented as part of the KiwiRail Paerata Station access road. The Paerata Connections (NoR 3) do not include earthworks filling in floodplain areas.

Key features of the proposed road include the following:

- The Sim to Sim Connection segment provides a new connection of approximately 400m between the two extents of Sim Road over the railway (NIMT).
- The Paerata Rail Station Connection segment provides a new transport corridor approximately 330m in length between the Paerata Rail Station (and NoR 2).

- One bridge is proposed over the NIMT to connect the two extents of Sim Road for the Sim to Sim Connection segment.
- One new stormwater wetland is proposed (shared with NoR 2) and a new culvert.

**Flood Hazard Summary**

The NoR 3 flood hazards from the 100-year ARI flood with a 2.1° climate change adjustment to rainfall only crosses a single flow path. The land uses in proximity of NoR 3 are rural. Therefore, a negligible flood risk exists to upstream land. The modelled 3.8° climate change scenario produced an overall higher flood level. However, the flood risk rating will remain negligible based on the land use being agricultural and no buildings in the vicinity.

**2.7 NOR 4: Pukekohe North-East Arterial**

NoR 4 connects Paerata Road in the west, to Pukekohe East Road in the south. The catchments for NoR 4 are in the Whangapouri Stream at either end and in the Oira Stream catchment through the mid-section. The route passes through rural land uses located in the FUZ and part is within the rural zone. The NoR 4 route crosses seven streams. These natural streams are located through the low elevation terrain in pastoral farmland. Each stream will need a bridge or a culvert to manage flows through the road crossing earthworks.

The environment is FUZ land with a section of mixed rural zone in the mid-section. As is stated in the Flood Hazard Report, the FUZ development is expected to avoid development in the stream areas and include green spaces as recreation parks and sporting fields.

Key features of the proposed road include the following:

- A 24m wide cross section is proposed with 2 lanes for general traffic and walking and cycling proposed on both or one side of the corridor.
- Seven bridges are proposed over the Whangapouri Creek, the NIMT, and other unnamed streams and tributaries.
- Six new stormwater wetlands are proposed and new culverts.

**Flood Hazard Summary**

The commercial and residential buildings at Point 1 detailed in the figure below are very close to the floodplain with the access to 1221 Paerata Road showing as flooded despite the building not showing as flooded. If these buildings are still present in the future at detailed design, there should be no increase to existing flood levels and no decrease in freeboard.

The residential buildings at points 4, 5 and 6 are located on terrain well above the adjacent streams, the project works will not likely have any influence on these properties.

The effects of using a 3.8° climate change adjusted rainfall pattern compared to the 2.1° climate change pattern shows deeper flood depths for points 2 through 6. The water depth at point 4 only increased by around 50mm mainly due to the weir present in the channel that controls flows and depths to this location.

The changes in flood depth at the other locations are minor and are a negligible flood risk to upstream properties. The 3.8° climate change flood depth at point 1 would begin to flood the residential dwelling at 1221 Paerata Road and the risk rating would then change to from moderate to high.

1	1221 Paerata Road building floor level: 43.5m RL	Residential building in the FUZ	Future Urban Development in the FUZ	2.1° CC: 43.5m RL 3.8° CC: 43.72m RL	Existing moderate risk to dwelling, freeboard <0.5m. Future low risk to dwellings in FUZ.
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Figure 3: NoR 4 Risk Areas

**2.8 NoR 5: Pukekohe South-East Arterial**



NoR 5 Pukekohe East Road in the east, to Svendsen Road in the south. The alignment passes through the Whangapouri Stream catchment in the northern half then through the Tatuanui Stream catchment in the southern half. The route is located in the FUZ at Pukekohe East Road, Golding Road and the new section of road between Golding Road and Station Road. The new section of road crosses Station Road and the NIMT to connect at Svendsen and Crosbie Roads in the existing urban area in Pukekohe. NoR 5 crosses four (4) overland flow paths.

Key features of the proposed road include the following:

- A 24m wide cross section is proposed with two lanes for general traffic with walking and cycling on the southern side of the corridor on Pukekohe East Road and on both sides for the remainder of the corridor.
- One bridge is proposed crossing Station Road and the NIMT.
- Five new stormwater wetlands are proposed and new and upgraded culverts.

### Flood Hazard Summary

The land uses upstream of Points 1, 2 and 3 (refer figure below) contain dwellings nearby that may be subject to flood effects if the upstream flood level caused by the NoR 5 alignment is not adequately managed. Future buildings nearby will be considered during future design stages to meet the flood hazard condition proposed on the NoR. The buildings in the floodplain along Station Road at Point 3 (refer figure below) are flooded due to the constrictive nature of the railway line and the drainage beneath. Additionally, earthworks in this floodplain may exacerbate flooding on these properties. A longer bridge or compensatory earthworks may be needed to avoid worsening flood effects on these properties. The designation extent is sufficient to find a solution to meet the designation conditions being sought.

Flooding at Point 4 (refer figure below) will likely remain unchanged as a result of the works. If adverse effects are found at this location, the effects can be managed with a channel and pipe network within the designation. The 3.8° climate change scenario has not been simulated for this catchment and the Auckland Council GIS does not provide information on this event at this location. As noted in previous sections the flood levels will likely increase by 100mm to 400mm as a result. The moderate risk locations would likely become high risk and low risk would become moderate risks.

2	65 Golding Road, building floor level: 59.4m RL	Residential Building in the FUZ	Future Urban Development in the FUZ	2.1° CC: 58.6m RL 3.8° CC: 59.6m RL	Moderate existing and future risk
3	124 Station Road, building floor levels: 58.0m RL RL	Residential Buildings in the FUZ	Future Urban Development in the FUZ	2.1° CC: 57.8m RL	Moderate existing and future risk
3	150 Station Road, building floor levels: 56.5m RL RL	Residential Buildings in the FUZ	Future Urban Development in the FUZ	2.1° CC: 57.8m RL	High risk existing and future risk
3	170 Station Road, building floor levels: 58.0m RL RL	Residential Buildings in the FUZ	Future Urban Development in the FUZ	2.1° CC: 57.8m RL	Moderate existing and future risk
3	194 Station Road, building floor levels: 58.2m RL RL	Residential Buildings in the FUZ	Future Urban Development in the FUZ	2.1° CC: 57.8m RL	Low risk existing and future risk

4	15 Austen Place, building floor levels: 55.0m RL RL	Industrial Buildings in Business - Light Industry Zone	Future Urban Development in the FUZ	2.1° CC: 55.0m RL	Moderate existing and future risk
4	44-46 Crosbie Road, building floor levels: 55.0m RL RL	Industrial Buildings in Business - Light Industry Zone	Future Urban Development in the FUZ	2.1° CC: 55.0m RL	Moderate existing and future risk

Figure 4: NoR 5 Risk Areas

## **2.9 NOR 6: Pukekohe South-West Upgrade**

NoR 6 is an active mode upgrade of existing roads in the existing urban area of Pukekohe and includes small, isolated areas of designation. NoR 6 is mostly in the Tatuanui Stream and Whangapouri Stream catchments. The alignment indicates small parcels of land where required. This land is needed primarily for localised areas of road widening and has no flood effect component for assessment.

### **Flood Hazard Summary**

NoR 6 includes designated areas for an active mode upgrade and driveway regrading. No changes to flooding are expected.

## **2.10 NoR 7: Pukekohe North-West Arterial**

NoR 7 upgrades Helvetia Road in the south and provides a new section of road between Helvetia/Gun Club/Heights Roads to Paerata Road in the north-east. NoR 7 is entirely in the Whangapouri Stream catchment and within the FUZ.

The NoR 7 route crosses seven (7) overland flow path. These flow paths are small headwater catchments to the Whangapouri Stream. Each flow path, except 6, 5 and 3, have culverts under an existing road. The flow paths 1, 2, 4 and 7 will require a lengthened or upgraded culvert capacity to manage the larger/wide, higher road embankment. The future environment will urbanise as FUZ is shown on both sides of the NoR 7 alignment.

Key features of the proposed road include the following:

- A 24m wide cross section is proposed with two lanes for general traffic and walking and cycling on both sides of the corridor.
- No bridges are proposed.
- Two new stormwater wetlands are proposed and new and upgraded culverts.

### **Flood Hazard Summary**

The NoR 7 flood hazards have been modelled in the Whangapouri Stream catchment for the 3.8° climate change scenario and the Auckland Council GIS floodplains have been used to assess the flood hazards for 2.1° climate change scenario. At points 2, 3 and 5, the upstream railway line culverts controls the headwater and therefore the flood risk to the upstream properties. The design proposed at these locations would include new culverts with the same diameter. This would maintain the same flowrate and not cause new or exacerbate upstream flood risk.

Land uses upstream of points 1, 4, 6 and 7 contain dwellings nearby that may be subject to flood effects if the upstream flood level caused by the NoR 7 alignment is not adequately managed. Sizing of culverts and bridges will need to meet the flood hazard conditions on the NoR. This is best undertaken at future design stages and will, in part, depend on the changes in land use and construction of new buildings at the time the road alignment is developed further for construction.

There is flooding at 248 Helvetia Road which is caused by an undersized culvert beneath Helvetia Road. There is an opportunity to improve flooding for this dwelling at the expense of

causing downstream flood effects. This betterment should be investigated further at future design stages.

7	248 Helvetia Road, building floor levels: 67.2m RL	Residential building – FUZ within the existing floodplain	Future Urban Development in the FUZ	2.1° CC: 67.7m RL 3.8° CC: 67.7m RL	High existing and future risk
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Figure 5: NoR 7 Risk Areas

**2.11 NOR 8: Mill Road – Pukekohe East Road Upgrade:**

NoR 8 is an upgrade of the existing Pukekohe East Road and Mill Road and has sections located in both the Auckland and Waikato Regions. 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 passes through the Whangapouri Stream catchment, Tatuani Stream catchment and the Ngakoroa Stream catchment from west to east. The majority of the alignment is within the rural zone with only the most western part in the Pukekohe FUZ.

NoR 8 crosses two (2) overland flow paths. These flowpaths are both branches of the Ngakoroa Stream and already have culverts constructed under the existing road. Both culverts may need to be lengthened or upgraded to accommodate the widened road.

Key features of the proposed road 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 land uses upstream of Point 1 (refer figure below) located in the Auckland Region is farmland and floodplain with some dwellings nearby. Future buildings nearby will need to be considered when deciding on an acceptable level of flood hazard change. The downstream building at 155 Mill Road is located at a low elevation and may become flood prone as a result of the NoR 8 project works or as a result of climate change. This culvert crossing will likely not be altered and therefore the effects of lifting or lowering the road crest would have the most significant effect on flood levels. Lifting the road would reduce the freeboard to 144 Mill Road and lowering the road would exacerbate flooding to 155 Mill Road. No change in road crest elevation is therefore recommended to minimise flood effects.

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 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 6: NoR 8 Risk Areas

## 2.12 Flood Hazard Effects During Construction

In their Flood Hazard Report, the Requiring Authorities acknowledge 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, bridge 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) for 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 Authorities for their respective Notices of Requirement:

### Auckland Transport NoRs 1,3, 4, 5, 6, 7

#### 12 Flood Hazard

- 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 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 10% reduction in freeboard in a 1% AEP event for existing authorised community, commercial, industrial and network utility building floors;
  - (v) 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;
  - (vi) no new flood prone areas; and
  - (vii) 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 1% AEP rainfall event.
- 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.

### Waka Kotahi NoRs 2 and 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 NoRs are proposed to be constructed and operated in the catchments of Ngakoroa Stream, Oira Stream, Whangapouri Stream and Tūtaenui Stream. In brief, each NoR proposes the construction of new or widening to existing carriageways and the inclusion of additional transport modes using cut and fill techniques and in several cases the construction of new bridges across stream systems. Each NoR will be served by drainage infrastructure owned and operated by each Requiring Authority (i.e. Waka Kotahi and Auckland Transport) generally comprising formed open drains culverts, bridges, swales, stream diversions, piped reticulation and stormwater management device such as wetlands

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 routes. The Requiring Authorities have proposed a suite of stormwater management devices for each NoR route in line with current practice to address the effects of stormwater runoff from the impervious surfaces (e.g. stormwater contaminants, hydrology mitigation, flood peak flow attenuation). This has included provision within each designation boundary to construct and operate the management devices (e.g. treatment and attenuation wetlands). Effects assessment of the stormwater discharges will be assessed at a later date when regional consents are sought for each route and are therefore not assessed in further detail here. Several submissions have discussed the location of the wetland devices. I have assessed and responded to the submissions in Appendix 1 of this memorandum.

#### **4.1 Flood Hazard Assessment**

As a result of constructing and operating each NoR 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 across the various projects and does not carry through to risk assessments in the respective NoR conditions proposed by the Requiring Authorities. 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 each 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 of each NoR). 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 Region has 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 RFHA 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 NoRs is up to 20 years. The Requiring Authority's engineering consultant responded as follows<sup>1</sup>:

*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 NoRs against the applicable objectives and policies in the AUP.

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 each 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 notices 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.

#### **4.2 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 respective 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 each 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 1 Drury West Arterial:**

- Size culverts and bridges to meet proposed designation conditions on flood hazard outcomes.
- No attenuation in wetlands, attenuation will increase flow coincidence downstream.

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<sup>1</sup> Soft Lodgement Response: Pukekohe Comments Register, prepared by SGA, September 2023

- Provide diversion channels at the toe of fill embankments to prevent ponding.
- Maintain 1200mm freeboard to new bridge soffits using the 100-year ARI flood level with 3.8° Climate change hydrology.

**NoR 2 Drury – Pukekohe Link:**

- Size culverts and bridges to meet proposed designation conditions on flood hazard outcomes.
- No attenuation in wetlands in the lower half of the Ngakoroa and Oira Streams.
- Attenuation for the 10yr and 100yr where wetlands are located in the upper half of the Ngakoroa and Oira Streams

**NoR 3 Paerata Connections:**

- The Paerata Station Connection will connect to the station access road. A new culvert may be required at this flow path crossing and be sized to achieve the designation condition headwater effects.
- No flooding recommendations for the Sim to Sim Connection as this follows the terrain crest and has no flood water interaction.

**NoR 4 Pukekohe North-East Arterial:**

- Size culverts and bridges to meet proposed designation conditions on flood hazard outcomes.
- Attenuation for the 10yr and 100yr events in the Whangapouri, Ngakoroa and Oira Stream catchments
- Provide diversion channels at the toe of fill embankments to prevent ponding.
- Offset the flood volume displaced by filling in the floodplain with an equivalent volume of excavation within the floodplain.
- Maintain 1200mm freeboard to new bridge soffits using the 100-year ARI flood level with 3.8° Climate change hydrology.

**NoR 5 Pukekohe South-East Arterial:**

- Size culverts and the bridge over the NIMT railway to meet proposed designation conditions on flood hazard outcomes.
- Avoid lifting the crown of the road along Golding Road to prevent adverse effects upstream.
- Attenuation for the 10yr and 100yr in the Whangapouri and Tatuani Stream catchments
- Provide diversion channels at the toe of fill embankments to prevent ponding.
- Offset the flood volume displaced by filling in the floodplain with an equivalent volume of excavation within the floodplain.

**NoR 6 South-West Upgrade:**

The future design stages will need to meet the flood hazard outcomes included on the existing designation.

**NoR 7 Pukekohe North-West Arterial:**

- Size culverts and bridges to meet designation conditions on flood hazard outcomes.
- Retain culvert sizes at the existing culverts near the Glenbrook Rail Line and Butcher Road to maintain the same flowrate and not cause new or exacerbate upstream flood risk.
- Attenuation for the 10yr and 100yr in the Whangapouri Stream catchment.

**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 Tatuani Stream catchments.

**4.3 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 sections. This is based on the type of type of work that is anticipated to be carried out (e.g. culvert and bridge abutment 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 Authorities 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

Relevant submissions and their assessment have been tabulated in Appendix 1. I note there were no relevant submission for NoR 1 to assess.

## 6.0 Conditions

I have reviewed the conditions in consultation with Healthy Waters staff and have the following recommendations indicated in underlined (additions), with deletions (~~striketrough~~). I recommend the edits apply to both Requiring Authorities (i.e. Auckland Transport and Waka Kotahi). The recommended edits are common to all NoR Flood Hazard condition sets.

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 (currently, Auckland Code of Practice for Land Development for Subdivision Chapter 4: Stormwater Version 3.0, January 2022);
  - (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 Future Urban Zone
  - (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 developed in consultation with the Auckland Council Healthy Waters (or its equivalent), 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.

### Advice Note:

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.

### 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 Authorities are using both. Addition of reference to consult with Healthy Waters is self-explanatory as the body who hold regional flood hazard modelling information.
- The proposed advice note is self-explanatory.

## 7.0 Objective and Policies

The natural hazards and flooding related Auckland Unitary Plan objectives and policies relevant to the NoRs are listed as follows:

- B10 Environmental Risk:
  - B10.2.1 Objectives (1) – (6).
  - B10.2.2 Policies (3), (4), (5), (6) (7) (8) and (12).
- E36 Natural Hazards and Flooding:
  - E36.2 Objectives (1) – (6)
  - E36.3 Policies (1), (3), (4), (18), (20), (21), (23), (27), (29), (30) and (35).

Consistent with Chapter B10, the Requiring Authorities have identified and assessed current flood risk associated with the NoR routes and have used tools such as flood hazard mapping and the application of risk ratings to identify negligible, low, medium and high risk areas. This has led to decisions around the extent of the designation required and the type of mitigation methods proposed to be employed in the future subject to detailed design and associated post development flood hazard assessment with the designation alignments in place.

The Requiring Authorities have also sought to incorporate the influence of climate change projections consistent with Policy B10.2.2, 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 been assessed as part of the NoRs, the quantum of flood risk hazard is understood (with the information currently available) such that there is a pathway through the proposed designation conditions for mitigation. In consultation with Healthy Waters, I have also recommended condition edits as is discussed in the above section.

Further assessment is required during detailed design of the NoR routes where suitable performance requirements will need to be met as conditions of designations contributing to overall consistency with the B10 and E36 objectives and policies.

## **8.0 Conclusions and recommendations**

The assessment in this memorandum does not identify any reasons to withhold the NORs. The flood hazard assessment of the proposals considered by this memorandum that could be granted subject to recommended conditions, are for the following reasons:

- The Requiring Authorities have 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 through 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 Auckland Unitary Plan.



Trent Sunich  
Consultant Stormwater Technical Specialist



**Appendix 1: Relevant Submission Summary and Assessment**

**NoR 2: Drury to Pukekohe Link**

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
1	Lloyd Harrison and Evelina Ah-Wong 143 Tuhimata Road	We disagree with the use of rural zoned land for development. We feel that the land under NOR 2 for the purpose of Storm water Wetland/Attenuation Device is on the highest point of land, and would require extensive excavation for this purpose. The discharge from the Storm water Wetland/Attenuation Device planned for the west side of our property, is an area where the land is prone to landslides/creeping, which has already occurred.	We ask that the Storm water Wetland/Attenuation Device and discharge of, be moved approximately 150 metres further South/South East towards the natural low area, to avoid excessive excavation of land. This would then be within the FUZ and not encroach on rural zoned land	I support the functionality of the proposed wetland and I do not have a view on its exact location until further detailed design can be completed on route design and the associated requirements to manage stormwater runoff through the regional consent process to authorise the stormwater discharges.  This is a matter for the Requiring Authority to respond to with respect to this site selection.
28	Paerata 5 Farms Ltd 328 and 412 Sim Road	There is no appropriate stormwater solution for the arterial road network. The NoR material contains insufficient detail on the proposed stormwater solutions for treatment and attenuation including final location of devices and the overland flow from these devices. The locations of the devices do not have consideration of future roading connections to the P5FL landholding and their elevated position in relation to the lower land to the West of Sim Road will require appropriate geotechnical consideration for slope stability.  Future lot owners are at risk of stormwater bunds failing or spillways engaging and flooding occurring – there seems to be no allowance for easements or any other legal mechanism to allow for passage of this water between the devices, through the P5FL	Decline the NoR or amend it to respond to the concerns of the submitter	<ul style="list-style-type: none"> <li>In the flood hazard report the Requiring Authority has listed the functionality of the components of the stormwater management system which align with typical practice of green field stormwater management outlined in Guidance Document 01. In principle I agree with the proposed</li> </ul>

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
		<p>land and to the outlet on the downstream side of the site. The NoR also those projects and works to ensure a more efficient use of infrastructure and land should have sought integration (or combining) with the KiwiRail designation and the associated stormwater solutions for those projects and works to ensure a more efficient use of infrastructure and land.</p> <p>The submitter opposes the conditions as they do not address concerns of the submitter (outlined above) and in addition for following reasons:</p> <p>The project should not enable any increase in flood hazard (even by 50mm) on any sites.</p> <p>This creates an unacceptable hazard for which future developers and landowners will have to bear the costs of future technical work to mitigate the flood risk;</p> <p>Any new flood risk will devalue land by creating a "hazard" on sites where no such hazard existed.</p>		<p>functionality which will also be subject to future detailed design and regional resource consent applications for stormwater discharges.</p> <ul style="list-style-type: none"> <li>• I have recommended amendments to the NoR conditions to limit off site flood hazard related effects.</li> <li>• Other topics such as geotechnical matters, easements and coordination with other projects are matters for the Requiring Authority to respond to.</li> </ul>

**NoR 3: Paerata Connection**

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
6	Paerata 5 Farms Limited 328 and 412 Sim Road	<p>There is no appropriate stormwater solution for the arterial road network. The NoR material contains insufficient detail on the proposed stormwater solutions for treatment and attenuation including final location of devices and the overland flow from these devices. The locations of the devices do not have consideration of future roading connections to the P5FL landholding and their elevated position in relation to the lower land to the West of Sim Road will require appropriate geotechnical consideration for slope stability.</p> <p>Future lot owners are at risk of stormwater bunds failing or spillways engaging and flooding occurring – there seems to be no allowance for easements or any other legal mechanism to allow for passage of this water between the devices, through the P5FL land and to the outlet on the downstream side of the site. The NoR also should have sought integration (or combining) with the KiwiRail designation and the associated stormwater solutions for those projects and works to ensure a more efficient use of infrastructure and land.</p> <p>The submitter opposes the conditions as they do not address concerns of the submitter (outlined above) and in addition for following reasons:</p> <p>The project should not enable any increase in flood hazard (even by 50mm) on any sites.</p> <p>(i) This creates an unacceptable hazard for which future developers and landowners will have to bear the costs of future technical work to mitigate the flood risk;</p> <p>(ii) Any new flood risk will devalue land by creating a “hazard” on sites where no such hazard existed.</p>	Decline the NoR or amend it to respond to the concerns of the submitter	<ul style="list-style-type: none"> <li>• In the flood hazard report the Requiring Authority has listed the functionality of the components of the stormwater management system which align with typical practice of green field stormwater management outlined in Guidance Document 01. In principle I agree with the proposed functionality which will also be subject to future detailed design and regional resource consent applications for stormwater discharges.</li> <li>• I have recommended amendments to the NoR conditions to limit off site flood hazard related effects.</li> <li>• Other topics such as geotechnical matters, easements and coordination with other projects are matters for the Requiring Authority to respond to.</li> </ul>



**NoR 4: Pukekohe North-East Arterial**

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
4	Ken Vincent and Andrew Vincent, Pukekohe Industrial Park and Storage Limited 1199 Paerata Road	<p>The site affected is 1199 Paerata Road (SH22). The land on the eastern side of Whangapouri Creek is low-lying and subject to flooding from the Creek, and is undevelopable therefore. A second farm drain conveying overland flow enters the western boundary and discharges into the Whangapouri Creek to the east, through the centre of the site. The majority of the site is subject to a flood plain which the Submitter understands is caused by the downstream culvert beneath SH22 to the north being undersized, causing upstream flooding, including within the site.</p> <p>There is little analysis of the potential flood effects arising within the site from the proposed extent of battering. The Submitter understands this is because the resultant flood effects will be experienced outside of the subject site. The Submitter would support such an outcome.</p> <p>The Submitter supports NOR 4 on the basis that no flood effects or change in flood levels will arise on the subject site, as stated in the Flood Assessment supplied by the Requiring Authority.</p> <p>The Submitter supports the location of the North East Arterial Wetland 1 on the southern side of Butchers Road</p>	<p>Condition 12 Flood Hazard – given the extent of the flood plain in and around the Submitter’s property and with reference to the conditions for the North West NORs -</p> <p>i. Clause 12(a)(vii) should also refer to the 50%, 20%, 10% and 1% AEP rainfall events, not only the 1% AEP event.</p> <p>ii. Clause 12(b) should reference the 10% and 1% AEP flood levels, not only the 100 year ARI flood level.</p>	<p>I have recommended amendments to the NoR conditions, including provision for assessing the effects of smaller rainfall events (e.g. 10% AEP).</p>

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
10	Sir William Birch on behalf of Siobhan Ainsley 87 and 131 Pukekohe East Road	<p>A pre-application meeting for the Private Plan Change for part of 87 and part of 131 Pukekohe East Road, Pukekohe was held with senior Council Planners and officers of Water Care and Auckland Transport on 12 September 2023.</p> <p>A major concern is that the proposed location of a stormwater treatment pond on NOR 5 that provides for treatment from the wide roading on the southern side of Pukekohe East Road is in the centre of the land at 84 Pukekohe East Road that is planned for residential development. This does not make any sense and would be strongly opposed by our client. On the other hand it is a relatively simple matter to build the SW treatment pond either on the adjoining rural land owned by our client or somewhere in the proximity of the site shown on our attached concept plan to treat the runoff from Pukekohe East Road and the proposed residential development shown on our plan. It makes sense to have a single community owned pond to treat both the road water and the subdivision water and to design the ultimate subdivision to provide for this. This matter has been discussed with Supporting Growth and we hope to meet and explore this option further before the designations are finalised.</p>		<p>I support the functionality of the proposed wetland and I do not have a view on its exact location until further detailed design can be completed on route design and the associated requirements to manage stormwater runoff through the regional consent process to authorise the stormwater discharges.</p> <p>The Requiring Authority may wish to comment on the feasibility of moving the location of the wetland as requested in this submission.</p>

**NoR 5: Pukekohe South-East Arterial**

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
19	Sir William Birch on behalf of Siobhan Ainsley	<p>A pre-application meeting for the Private Plan Change for part of 87 and part of 131 Pukekohe East Road, Pukekohe was held with senior Council Planners and officers of Water Care and Auckland Transport on 12 September 2023.</p> <p>A major concern is that the proposed location of a stormwater treatment pond on NOR 5 that provides for treatment from the wide roading on the southern side of Pukekohe East Road is in the centre of the land at 84 Pukekohe East Road that is planned for residential development. This does not make any sense and would be strongly opposed by our client. On the other hand it is a relatively simple matter to build the SW treatment pond either on the adjoining rural land owned by our client or somewhere in the proximity of the site shown on our attached concept plan to treat the runoff from Pukekohe East Road and the proposed residential development shown on our plan. It makes sense to have a single community owned pond to treat both the road water and the subdivision water and to design the ultimate subdivision to provide for this. This matter has been discussed with Supporting Growth and we hope to meet and explore this option further before the designations are finalised.</p>		<p>I support the functionality of the proposed wetland and I do not have a view on its exact location until further detailed design can be completed on route design and the associated requirements to manage stormwater runoff through the regional consent process to authorise the stormwater discharges.</p> <p>The Requiring Authority may wish to comment of the feasibility of moving the location of the wetland as requested in this submission.</p>

**NoR 6: Pukekohe South-West Upgrade**

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
3	Ewen Campbell and Beverley Eileen McIntyre 1 Ward Street	A major rebuild of the area some years ago to install a traffic roundabout and improve floodwater egress certainly worked early this year when large rainfall events occurred. This area receives a significant amount of surface water running off Pukekohe hill.	We would hope that there would be no changes that would increase the likelihood of our house being flooded.	The outcome related NoR conditions, including my recommended edits aim to avoid the exacerbation of flood hazard as a result of the designation works.  It is noted this and surrounding properties are in the 1% AEP floodplain according to AC Geomaps.



**NoR 7: Pukekohe North-West Arterial**

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
5	Des Morrison 17 and 17A Butcher Road Pukekohe	As our Butcher Road property is at the lower end of the catchment, strategies, and solutions to mitigate flooding concerns in a Residential Mixed Housing Suburban zone are required. At present the assessment appears to be based on existing use and location of dwellings rather than the planned residential use. Accordingly, in our view, it may underestimate the likely effects and mitigations required. In particular, it may be that one stormwater attenuation device of the size proposed is not sufficient or the most appropriate way to address the effects of the arterial given the planned residential (medium density) development anticipated to occur within the catchment. We consider it is critical that an integrated approach is taken so that all relevant effects are considered and comprehensively addressed in a manner that supports and does not undermine the planned urban form for the area. It may be that there are better ways to address stormwater through provision for park or reserve areas which could act as a water sink capable of managing water volumes during the catastrophic weather events while at the same time providing further recreational facilities for the surrounding residential communities. These options do not appear to have been considered.	Seek that the NOR7 is declined unless or until the matters raised in this submission have been appropriately addressed, and/or agreement is reached for early sale of our property on the basis set out in this submission.	<p>The analysis in the Flood Hazard report includes allowance for maximum probable development (MPD) scenarios, including development Future Urban Zoned land that surrounds the submitters property.</p> <p>I support the concept of integrated management and future catchment planning associated with land use change and rezoning should aim to integrate and maximise efficiency of use of stormwater management devices. I have proposed an advice note in this regard and aligns with best practice in any case.</p>

**NoR 8: Mill Road and Pukekohe East Road Upgrade**

Submitter No.	Name	Submission Point/Issue Raised	Relief Sought	Technical Assessment
4, 5	<p>Lachlan Johnstone on behalf of Maimere Properties Ltd.</p> <p>Martha Johnstone on behalf of MC Johnstone, LJC Johnstone and LF Williams</p> <p>197 Pukekohe East Rd</p>	<p>We would require engineered storm water retention/detention systems to effectively manage all stormwater coming off the roads. The current stormwater management mechanisms are ineffective and contribute to the degradation of the ONF (Outstanding Natural Feature) alongside the road.</p>		<p>Viewing the design plans, the stormwater management proposal for this section of the designation adjacent to the ONF 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.</p>
9	<p>Rodney Cunningham</p> <p>80 Mill Road</p> <p>(located in the Waikato District)</p>	<p>Negative impacts on our property 80 Mill Rd Bombay. Notable immediate impacts include:</p> <ul style="list-style-type: none"> <li>Increased stormwater run off into our property at 80 Mill Rd, Bombay</li> </ul>		<p>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.</p>

## 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.

- |                               |   |
|-------------------------------|---|
| <b>1. Application details</b> | 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.   |
| <b>Applicant's name:</b>      | Te Tupu Ngātahi Supporting Growth Alliance, Auckland Transport (AT) and Waka Kotahi (NZTA)  |
| <b>Application number:</b>    | 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). |
| <b>Activity types:</b>        | Various   |
| <b>Site address:</b>          | 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.<sup>1</sup>
- 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.<sup>2</sup>
- 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,<sup>3</sup> 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.<sup>4</sup>
  - **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.<sup>5</sup>

#### 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.

<sup>1</sup> This document is included with each suite of NoR documents.

<sup>2</sup> Campbell 2023.

<sup>3</sup> Campbell 2023, Section 4.1.7, page 19.

<sup>4</sup> Campbell2023:19-22.

<sup>5</sup> 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 Heritage<sup>6</sup>, 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 villas<sup>7</sup>; 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: <b>199 Paerata Road</b>	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, <b>131 Pukekohe East Road</b>	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.<sup>8</sup>

<sup>6</sup> RMA Part 1 s2 Interpretation

<sup>7</sup> Paragraph 12, HNZPT submission (#5) to NoR4.

<sup>8</sup> 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.<sup>9</sup> The NoR is opposed by HNZPT:

Item	NoR6 Matters of concern	Remedy requested
3.	Property ID# 609265, Part Lot 3 DP 887, <b>59 Ward Street, Nehru Hall.</b>  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)

<sup>9</sup> Paragraphs 13-18, HNZPT submission (#8) to NoR6.



at 59 Ward Street, Pukekohe.<sup>10</sup> 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**,<sup>11</sup> 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), <b>144 Mill Road, Bombay</b> . <sup>12</sup>	Application for Archaeological Authority to allow destruction of any physical remains. <sup>13</sup>
5.	Possible pre-1900 villa at <b>188 Mill Road</b> , <sup>14</sup> <b>Bombay</b> 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.

<sup>10</sup> Part Lot 3 Deeds 887, Category B, scheduled for A (historical) ,B (social) and F (physical attributes).

<sup>11</sup> Paragraphs 9-11, HNZPT submission (#11) to NoR8.

<sup>12</sup> Property ID#11332397 (AC GeoMaps)

<sup>13</sup> 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.

<sup>14</sup> Property ID#11305495 (AC GeoMaps), PT Allotment 27 Parish Mangatāwhiri District.



## 6. Affected Parties

- 6.1. I consider the Franklin Heritage Forum<sup>15</sup> 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)”<sup>16</sup>.
- 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*<sup>17</sup> and I agree with this approach.

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<sup>15</sup> 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](mailto:franklinhistsociety@gmail.com)), Franklin Vintage Machinery Club ([www.vintagemachinery.co.nz](http://www.vintagemachinery.co.nz)), the Karaka Historical Society ([karakahistoricalociety@gmail.com](mailto:karakahistoricalociety@gmail.com)), Patumahoe History Group ([www.patumahoe.org.nz](http://www.patumahoe.org.nz)) and Papakura & District Historical Society Inc ([pdhs@papakuramuseum.org.nz](mailto:pdhs@papakuramuseum.org.nz)) to name some of the groups.

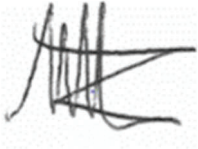
<sup>16</sup> Any external party that requires copies of these document can specify this through a separate legislative process.

<sup>17</sup> 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 above<sup>18</sup>, all other known heritage places have been avoided.

**Signed:**



**Dated:**

**6 December 2023**

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<sup>18</sup> 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 29<sup>th</sup> 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**

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# **PUKEKOHE TRANSPORT NETWORK**

## **REVIEW OF CONSTRUCTION AND OPERATIONAL NOISE AND VIBRATION ASSESSMENTS**

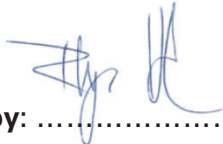
**Report No 23055.1v2**

**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 60806<sup>1</sup> provides for a PPF<sup>2</sup>.

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<sup>1</sup> 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 contours<sup>3</sup> publicly

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<sup>2</sup> Protected Premises and Facilities

<sup>3</sup> Appendix B of the AONE

available. This could potentially be achieved through a layer on the AUP<sup>4</sup> 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 development<sup>5</sup>, 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.

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<sup>4</sup> Auckland Unitary Plan – Operative in Part

<sup>5</sup> 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 surface<sup>6</sup>. 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

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<sup>6</sup> 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 C<sup>7</sup>. 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

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<sup>7</sup> 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 Proposal<sup>8</sup> and the Transmission Gully Proposal<sup>9</sup>.

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

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<sup>8</sup> <https://www.epa.govt.nz/assets/FileAPI/proposal/NSP000012/Boards-decision/ec6f94077d/Waterview-Final-decision-volume-1-Report-and-decision.pdf> from paragraph 925.

<sup>9</sup> <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 <sub>Aeq(24 hr)</sub> )	
	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<sub>Aeq(24 hr)</sub> 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 reduction<sup>10</sup>, 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.

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<sup>10</sup> 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 decision<sup>7</sup> 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.*

\*\*\*\*\*



12 December 2023

To: Karen Bell, Stantec, Reporting Planner

From: Wes Edwards, Arrive Ltd, Technical Specialist - Transport

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**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 growth<sup>1</sup> 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

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<sup>1</sup> 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 Prerequisites<sup>2</sup>*

<b>Staging</b>	<b>Timing</b>	<b>Infrastructure Prerequisite</b>
<b>Drury</b>		
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 <b>1,2: Drury West and South Drury Connection<sup>a</sup></b> Great South Road Upgrade
<b>Pukekohe and Paerata</b>		
Paerata South	Not before 2035+ (previously 2030+)	SH22 – Paerata Station Connection <b>2: Paerata Arterial<sup>b</sup></b> Paerata Station
Pukekohe East	Not before 2035+	<b>5: Pukekohe South East Arterial<sup>c</sup></b> <b>8: Mill Road Upgrade (Bombay Interchange and Harrisville Road)<sup>d</sup></b> Papakura-Pukekohe Rail Electrification
Pukekohe South West	Not before 2035+	<b>6: Pukekohe South West Upgrade<sup>e</sup></b> Papakura-Pukekohe Rail Electrification
Paerata West	Not before 2040+	SH22 – Paerata Station Connection <b>2: Drury-Paerata Link<sup>f</sup></b> <b>2: Paerata Arterial<sup>g</sup></b> SH22 Safety Improvements Paerata Station
Pukekohe Northeast	Not before 2040+	<b>4: Pukekohe North East Arterial<sup>h</sup></b> <b>2: Paerata Arterial<sup>g</sup></b> Papakura-Pukekohe Rail Electrification
Pukekohe Southeast	Not before 2040+	<b>5: Pukekohe South East Arterial<sup>c</sup></b> Papakura-Pukekohe Rail Electrification
Pukekohe Northwest	Not before 2040+	<b>7: Pukekohe North West Arterial<sup>i</sup></b> 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.

<sup>2</sup> 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”<sup>3</sup>.
- 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.

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<sup>3</sup> 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*”<sup>4</sup> and focuses “*more on desired outcomes and footprints*”.<sup>5</sup> 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.

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<sup>4</sup> *ibid*

<sup>5</sup> 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*”<sup>6</sup>.
- 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.

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<sup>6</sup> 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*”<sup>7</sup>
- 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.

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<sup>7</sup> Pg 33, ATE.

- 8.46 The ATE shows<sup>8</sup> 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 car<sup>9</sup>.
- 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:<sup>10</sup>

<sup>8</sup> Figure 3-15, page 35, ATE

<sup>9</sup> Section 3.2.3, ATE.

<sup>10</sup> 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 stated<sup>11</sup>:

*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) states<sup>12</sup>:

*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.<sup>13</sup>*

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), and<sup>14</sup>:

*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 states<sup>15</sup>:

*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.

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<sup>11</sup> The Case Against Cycle Paths, Macbeth, AG,

<sup>12</sup> <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>

<sup>13</sup> Technical Note TN002: Updated guidance on separated cycleways at side roads and driveways, NZTA, 2020.

<sup>14</sup> Page 36, Guide to Road Design Part 6A: Paths for Walking and Cycling, Austroads, 2017.

<sup>15</sup> 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:

1553.6.4. 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 CO<sub>2</sub> emissions can be estimated from the VKT estimate. In this case the Projects are estimated to result in an annual reduction in CO<sub>2</sub> 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 Roading 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.<sup>16</sup>*

- 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

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<sup>16</sup> 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 requirements<sup>17</sup>.*

- 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*”<sup>18</sup> 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*”<sup>19</sup>
- 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.

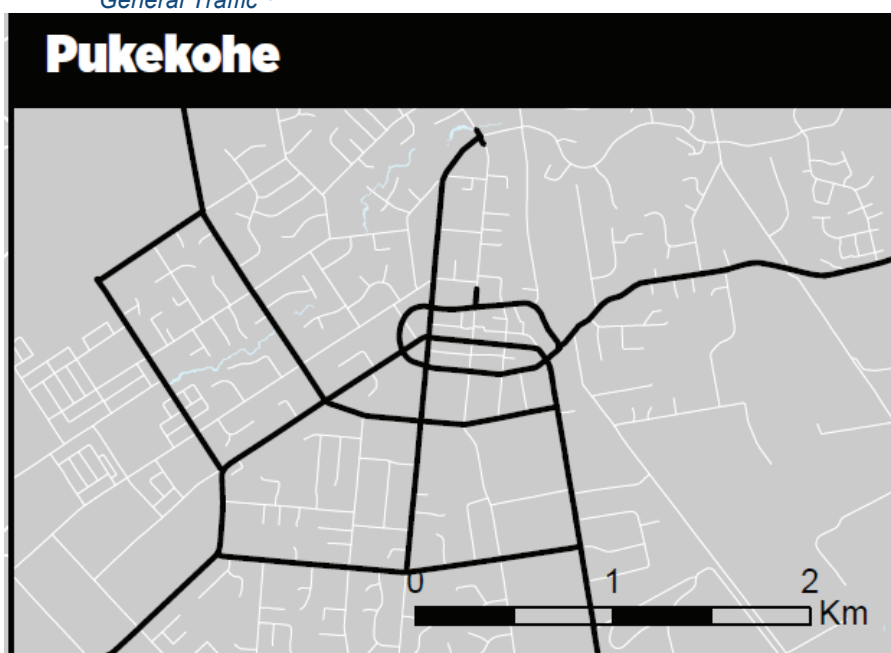
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<sup>17</sup> ibid

<sup>18</sup> Room to Move: *Tāmaki Makaurau Auckland’s Parking Strategy*, Auckland Transport, May 2023

<sup>19</sup> Page 41, Room to Move.

Figure 1: Strategic Transport Network – Pukekohe for Active Modes, Public Transport, Freight and General Traffic<sup>20</sup>



#### *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.

<sup>20</sup> 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.

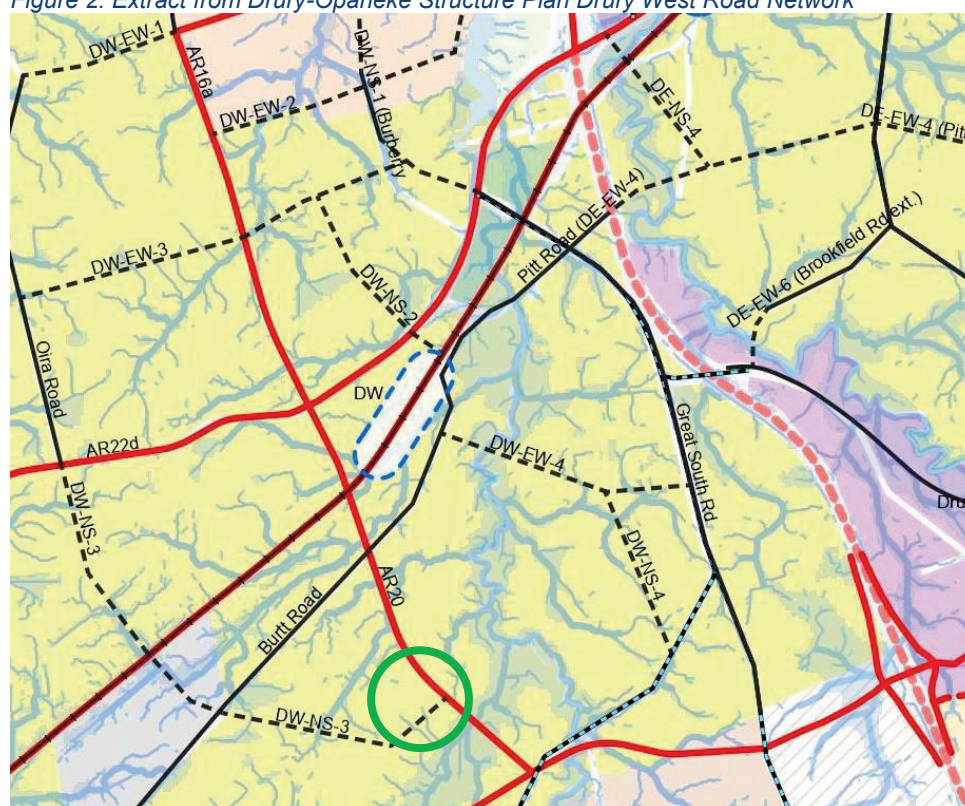
8.115 The section between Burt Road and Runciman Road is also a new section of road so no properties are currently accessed from it, although the alignment does cut through some properties and may displace existing access arrangements from Burt Road or Runciman Road.

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.”<sup>21</sup>
- 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.”<sup>22</sup> The expressway and the proposed Southern Motorway Drury South interchange were described as “needed to support the future place function of SH22”<sup>23</sup>, 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 highway<sup>24</sup>.
- 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.

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<sup>21</sup> Section 5.1.5.2, pg 69, ATE.

<sup>22</sup> Pg xv, Dury-Opāheke and Pukekohe-Paerata Structure Plan ITA, April 2019.

<sup>23</sup> Pg 42, DO and PP SP ITA.

<sup>24</sup> 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 SH22<sup>25</sup>. 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”<sup>26</sup>. 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.

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<sup>25</sup> Sim Road has a formed northern section, an unformed central section, and a formed southern section.

<sup>26</sup> 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.

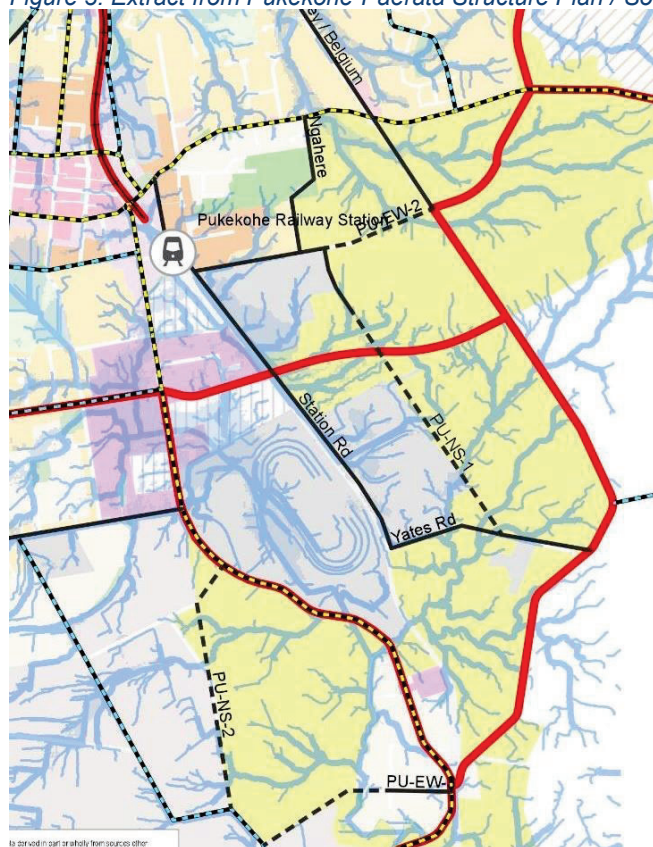
## **NOR5: Pukekohe South-East Arterial**



### 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*”<sup>27</sup>. As noted above, I consider the project is likely to result in poor safety outcomes at driveways.

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<sup>27</sup> 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.*<sup>28</sup>

- 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.

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<sup>28</sup> 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:<sup>29</sup>

- *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.

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<sup>29</sup> 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**

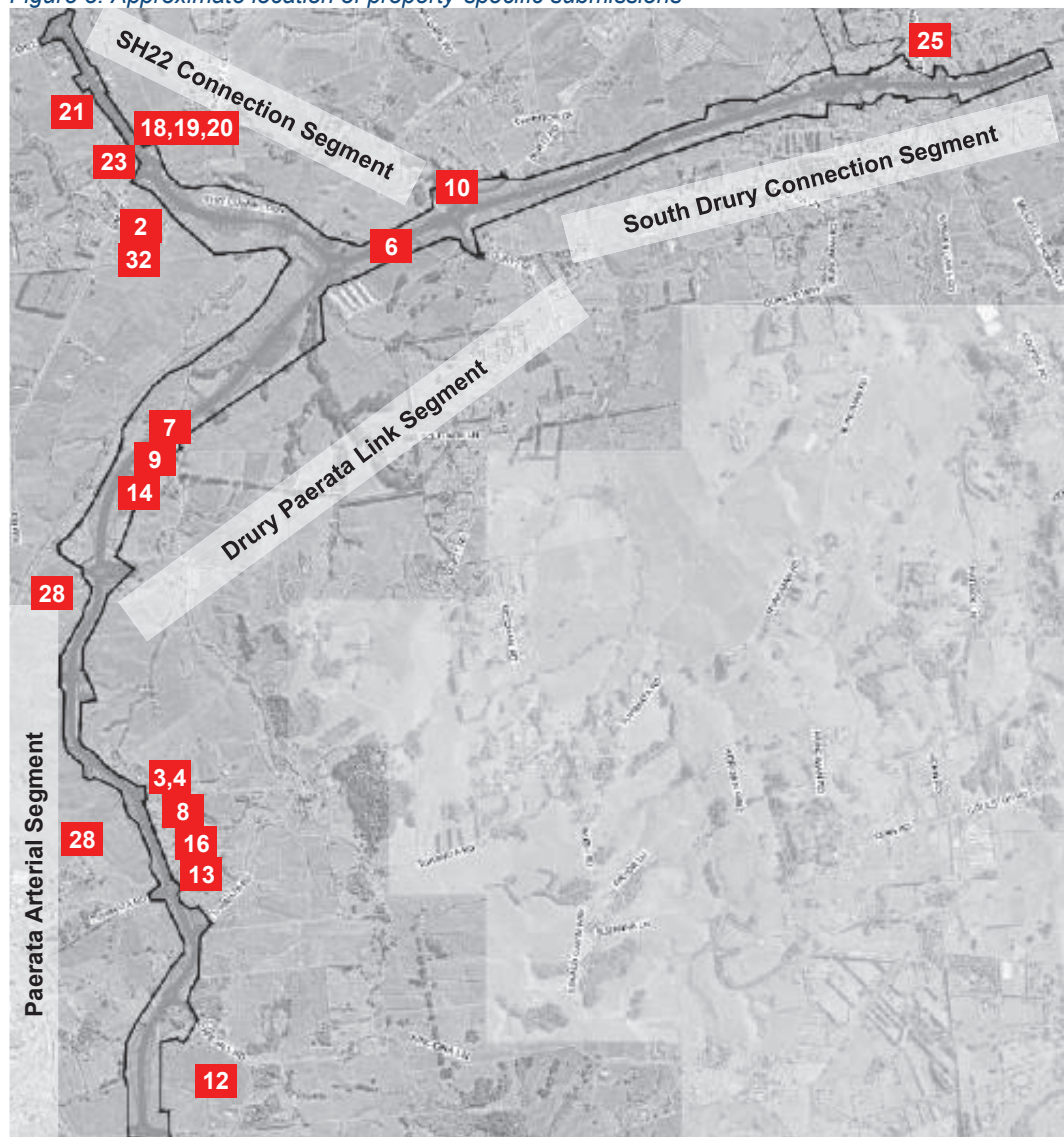
##### Submission Locations



- 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,<sup>30</sup> 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.

<sup>30</sup> 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 Road<sup>31</sup>) 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 DPL<sup>32</sup> 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”<sup>33</sup>, 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

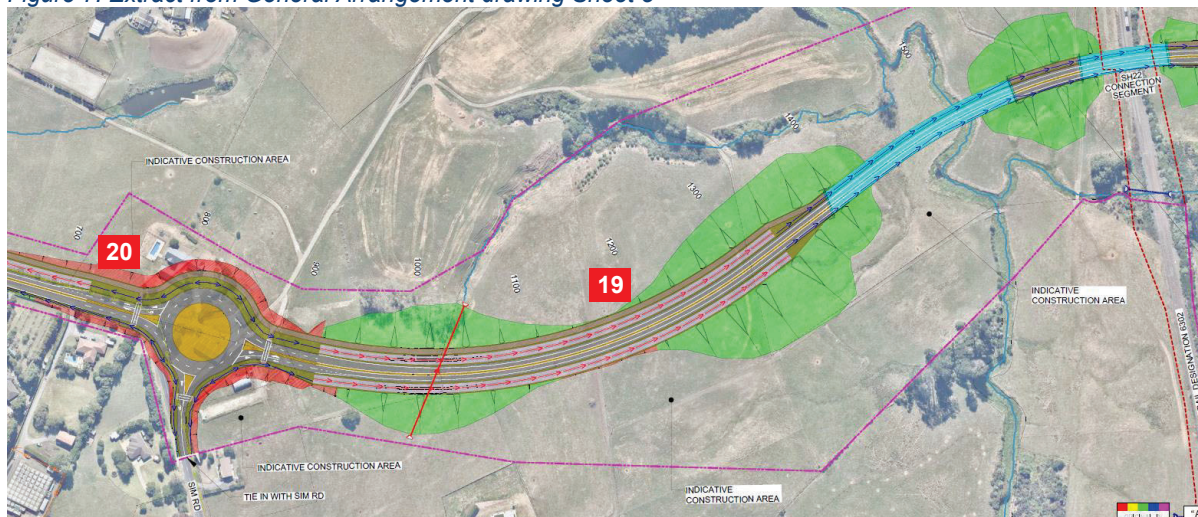
<sup>31</sup> Auckland Council Geomaps and the Form 18 identify the property as 357 Burt Road, the submission provides a mailing address of 337 which appears to be the residence on this property.

<sup>32</sup> Figure 4-4, page 38, AOA.

<sup>33</sup> 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 4<sup>34</sup>).

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.

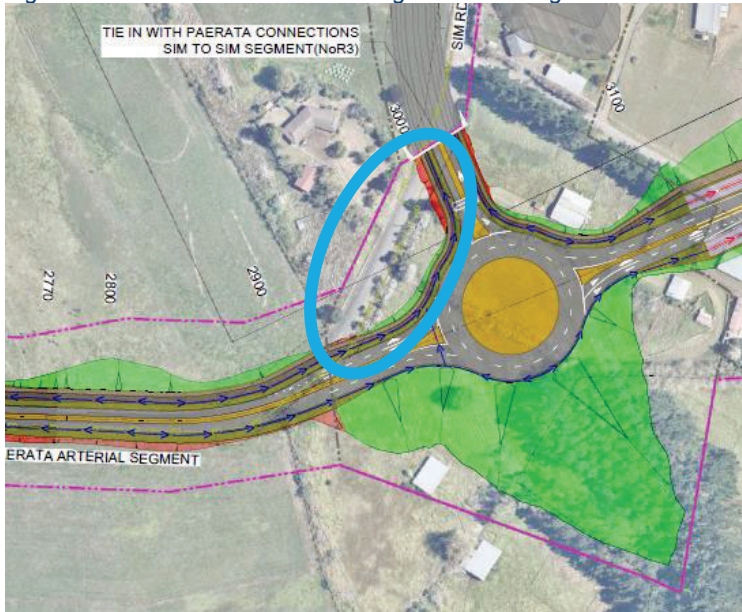
#### *Drury-Paerata Link Segment*

- 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.

<sup>34</sup> 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.

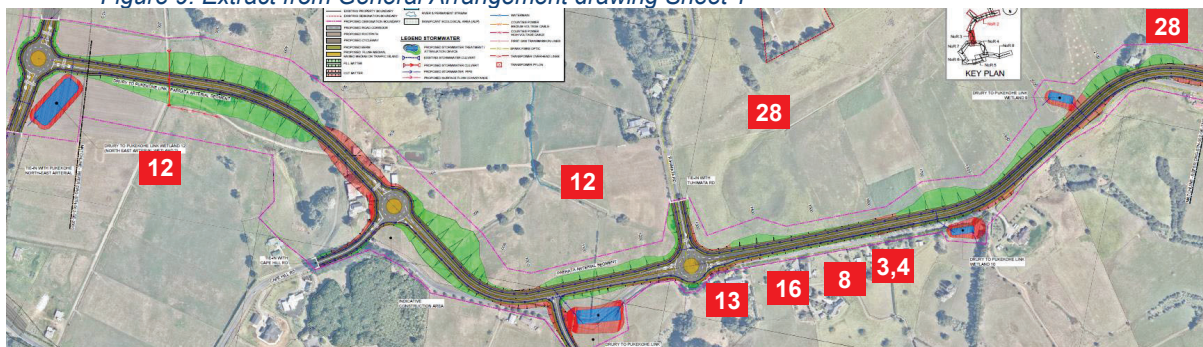
*Paerata Arterial Segment*

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.

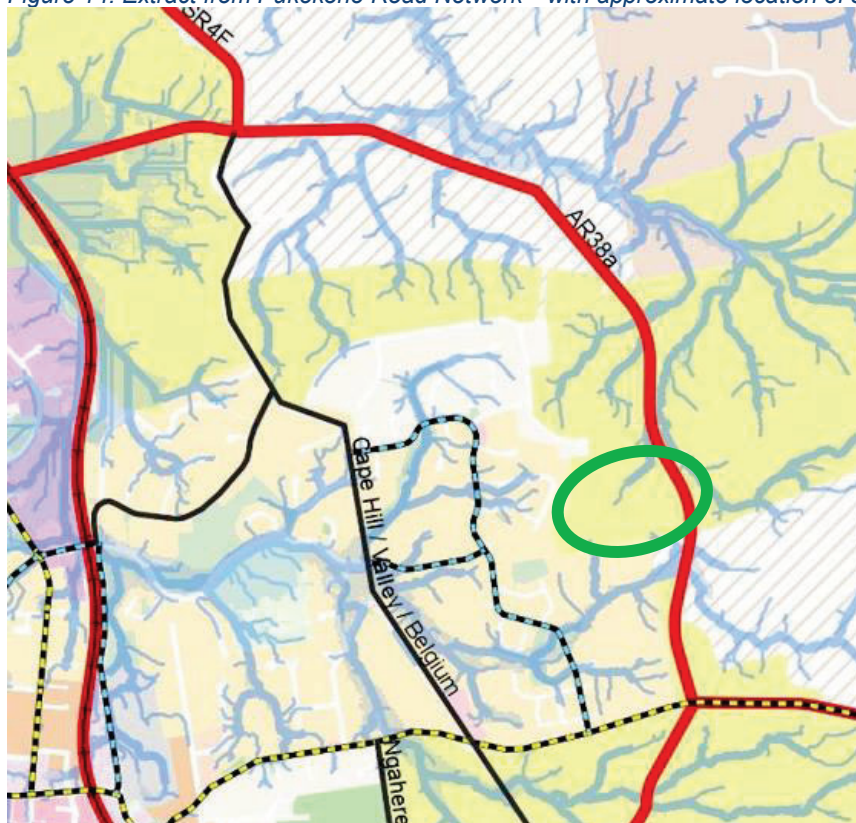
#### Design

- 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 Network<sup>35</sup> 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.

<sup>35</sup> Figure 6-8, Southern ITA



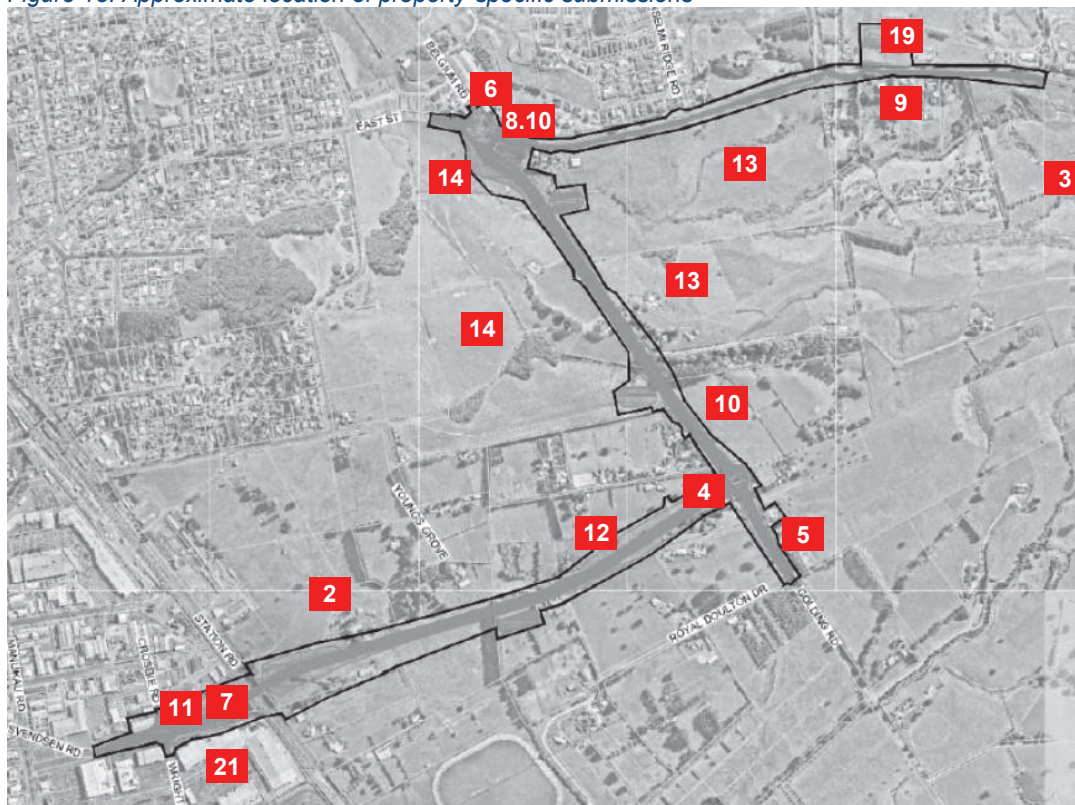
## NOR5: Pukekohe South-East Arterial

### 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 assessment<sup>36</sup>. The route refinement process considered three options in each of three segments<sup>37</sup>.
- 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.

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<sup>36</sup> Pages 83-91, AOA.

<sup>37</sup> 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”<sup>38</sup>.

- 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.

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<sup>38</sup> 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)<sup>39</sup>. 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

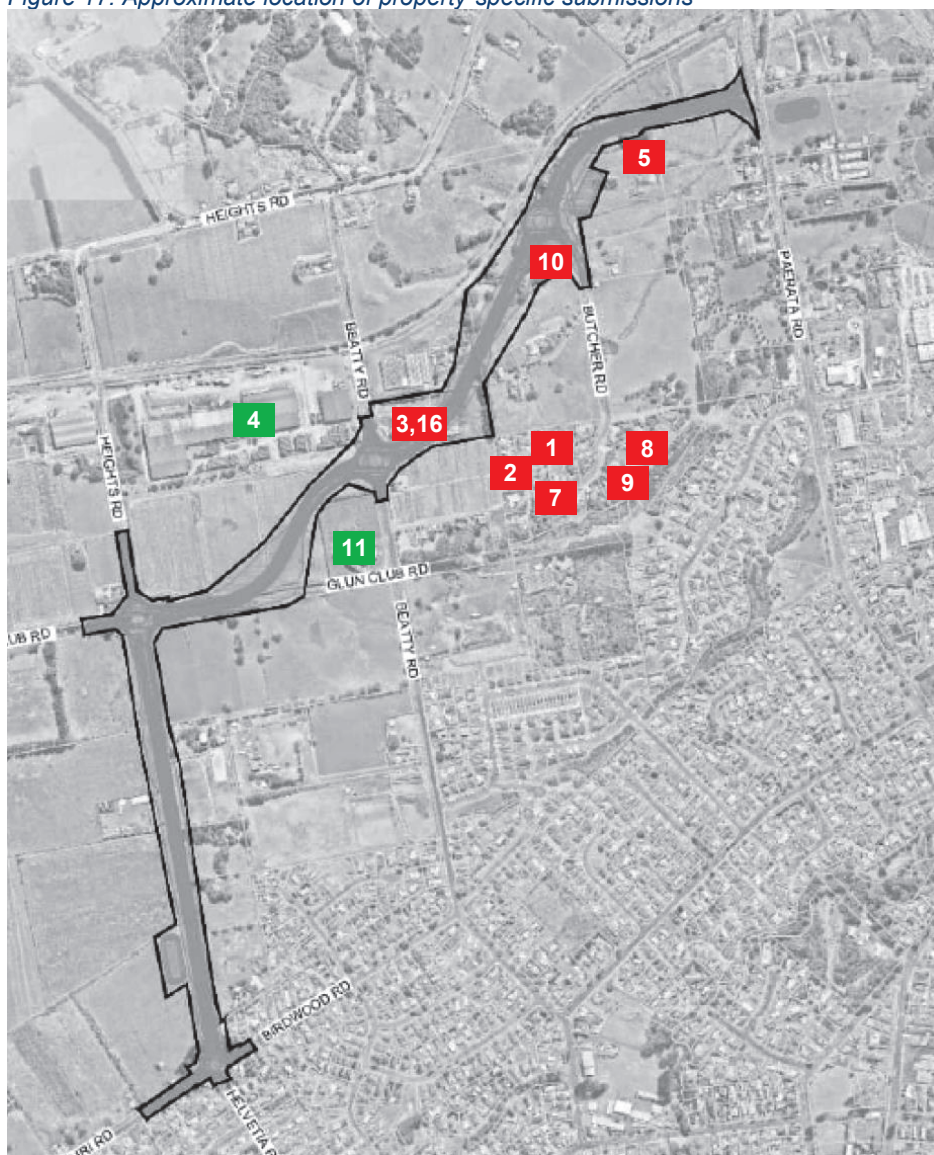
- 11.106 The following figure shows the approximate location of transport-related submissions.

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<sup>39</sup> 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

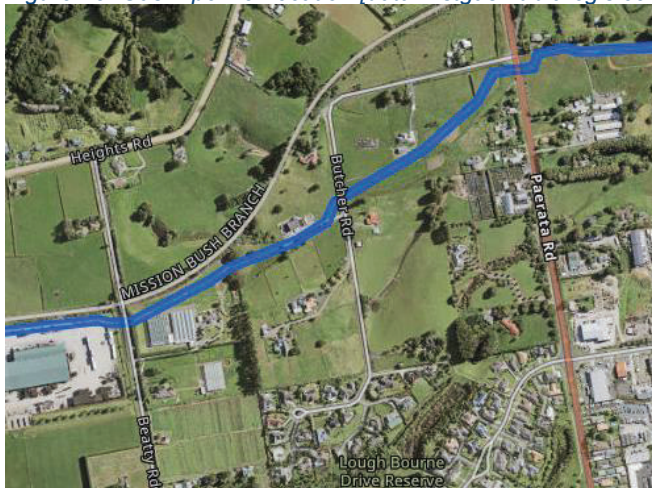
- 11.107 Submissions 1 (Lawson S and P, 110 Butcher Road), 2 (Whiteman L, 112 Butcher Road), 3 (Cha S, 157 Beatty Road), 7 (Telfer J, 101 Butcher Road), 8 (Payne N, 97 Butcher Road), 9 (Lynch C and A, 99 Butcher Road), 10 (Polwart D and P, 36 and 62 Butcher Road), and 16 (Kim S, 157 Beatty Road) are 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 considered<sup>40</sup>. The more recent refinement and assessment process considered seven options in two segments with all but one option using part or all of Heights Road<sup>41</sup>. 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

<sup>40</sup> Pages 97-102, AOA.

<sup>41</sup> 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.”*<sup>42</sup>
- 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.

<sup>42</sup> 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** <sup>[4.4, 5.21, 6.13]</sup> 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)** <sup>[MoE]</sup> to manage vehicular and pedestrian traffic near **educational facilities schools** <sup>[MoE]</sup> 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**, <sup>[MoE]</sup> pedestrians and cyclists, **on existing roads** <sup>[MoE]</sup>;
  - (vi) methods to maintain **vehicle** <sup>[MoE]</sup> access to **and within** <sup>[MoE]</sup> property and/or private roads **for all transport modes** <sup>[MoE]</sup> 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)** <sup>[MoE]</sup> to manage vehicular and pedestrian traffic near **educational facilities schools** <sup>[MoE]</sup> 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**, <sup>[MoE]</sup> pedestrians and cyclists, **on existing roads** <sup>[MoE]</sup>;
  - (vi) methods to maintain **vehicle** <sup>[MoE]</sup> access to **and within** <sup>[MoE]</sup> property and/or private roads **for all transport modes** <sup>[MoE]</sup> 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 Roding 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 FOUR**

## **SUMMARY OF SUBMISSIONS (NORs1,3,4,5,6 & 7)**



**Summary of Submissions - Pukekohe: Drury West Arterial (NoR 1) Auckland Transport**

Sub #	Submitter	Position	Property where stated	Key issues	Relief sought
1	Telecommunications Submitters	Oppose in part	Access to existing and future assets.	Access to existing and future telecommunications assets.	Changes to the proposed conditions.
2	Fisher & Paykel Healthcare Limited	Support	300-458 Karaka Road	Employment and other positive effects.	Approve.
3	KiwiRail Holdings Limited	Support	Designation 6302, NIMT, Burt Road  Drury West / Ngaakoora Station; extends south from Ngaakoora Rail Station	Engagement; integration between network utility providers.	Changes to the proposed conditions.
4	McKean Family Trust	Oppose in part	826 Runciman Road	Noise and vibration during construction. Operational noise. Transport effects during construction. Landscape and visual effects.	Changes to the proposed conditions.
5	Watercare Services Limited	Neutral		Access to existing and future assets. Enabling better integration between network utility providers through communication and collaboration.	Changes to the proposed conditions.
6	Ministry of Education	Neutral		Traffic, noise and other nuisance effects on existing and future schools.	Changes to the proposed conditions.
7	Counties Energy Limited	Support with amendments		Access to existing and future assets. Integration between network utility providers through communication and collaboration.	Changes to the proposed conditions.
8	The Campaign for Better Transport Incorporated	Neutral		Support cycle infrastructure: agree 20 year lapse, ability to review the impacts of rail electrification.	None stated.





**Summary of Submissions - Pukekohe: Paerata Connections (NoR 3) Auckland Transport**

Sub #	Submitter	Position	Property where stated	Key issues	Relief sought
1	Telecommunications Submitters	Oppose in part		Access to future and existing telecommunications (network utilities) assets.	Changes to the proposed conditions.
2	YWMP Limited	Support		Improve transportation efficiency and safety. Support urban growth.	none stated
3	KiwiRail Holdings Limited	Support		Engagement, communication, and collaboration	Changes to the proposed conditions.
4	Watercare Services Limited	Neutral with amendments		Integration between network utility providers	Changes to the proposed conditions.
5	Ministry of Education	Neutral	existing and future schools	Traffic, noise and other nuisance effects arising from construction works.	Changes to the proposed conditions.
6	Paerata 5 Farms Limited	Oppose	412 Sim Road and 328 Sim Road	Effects on property. Impacts on development of the Future Urban zoned land. Lack of alignment between KiwiRail and Supporting Growth Alliance projects. Alternatives assessment. Road design. Stormwater. Geotech information. Lapse period impact. Road design and urban environment outcomes. Conditions.	Decline or amend designation
7	Counties Energy Limited	Support with amendments		Integration between network utility providers	Changes to the proposed conditions.
8	The Campaign for Better Transport Incorporated	Neutral		cycle infrastructure; rail electrification	None stated



Summary of Submissions - Pukekohe: Pukekohe North-East Arterial (NoR 4) Auckland Transport					
Sub #	Submitter	Position	Property where stated	Key issues	Relief sought
1	Gerald Baptist	Neutral	1173 Paerata Road	Safe and clear view access from the driveway to SH22. Stream maintenance and beautification.	None stated
2	Telecommunications Submitters	Oppose in part		Access to future and existing telecommunications (network utilities) assets.	Changes to conditions
3	Stephen Smith	Support	70A Lisle Farm Drive	Site access. Efficient route. Minimises earthworks. Protects riparian ecological values.	The proposed route within the designation to stay the same or move no further westwards. <b>Hard to follow</b>
4	Pukekohe Industrial Park and Storage Limited	Support with amendments	Not specified	Site access. A reduction in the extent of battering. Potential flooding effects.	Changes to the proposed conditions.
5	Heritage New Zealand Pouhere Taonga	Support		The protection of historic heritage; construction effects.	Changes to the proposed conditions.
6	Simon John Burgoyne	Neutral		Consultation and engagement	Consultation and engagement
7	KiwiRail Holdings Limited	Support		Integration between network utility providers; Communication and collaboration.	Changes to the proposed conditions.
8	Watercare Services Limited	Neutral		Integration between network utility providers; Communication and collaboration.	Changes to the proposed conditions.
9	Ministry of Education	Neutral	Existing and future schools	Traffic, noise and other nuisance effects	Changes to the proposed conditions.
10	Siobhan Ainsley	Neutral		Stormwater treatment.	A single community owned stormwater pond to treat stormwater.
11	Counties Energy Limited	Support with amendments		Integration between network utility providers; Communication and collaboration.	Changes to the proposed conditions.
12	The Campaign for Better Transport Incorporated	Neutral		cycle infrastructure; rail electrification; road safety	None stated.



Summary of Submissions - Pukekohe: NOR 5 Pukekohe South-East Arterial ( Auckland Transport)					
Sub #	Submitter	Position	Property where stated	Key issues	Relief sought
1	Holy Properties Ltd	Oppose	124 Station Road	Property values.	Remove designation from 124 Station Road.
2	Franklin Agricultural and Pastoral Society	Oppose	Showgrounds 58 Station Road, Pukekohe	Traffic noise and heavy traffic movements. Extensive earthworks.	Re-routing to reduce impact on showgrounds.
3	Cade Hubert Daroux	Oppose	140 Pukekohe East Rd,	noise, dust and vibration effects; pedestrian connections; Preservation of specific trees on private land; Property; Communication and engagement.	Remove designation
4	Chris Feng	Oppose	104 Golding Road	Unusable divided property. Specific tree loss.	Relocation of designation.
5	DH and IM Mills Properties	Oppose	107 and 107a Golding Road	Earthworks; loss of usable property; access; residential amenity; uncertainty; security and safety during construction.	Move the roundabout eastward or use an alternative route replacing the proposed roundabout.
6	Telecommunications Submitters	Oppose in part		Access to future and existing telecommunications (network utilities) assets.	Changes to the proposed conditions.
7	Enviro NZ Services Limited	Oppose	10 Austen Place	Uncertainty; environmental, social and economic effects; designation area; social and community infrastructure.	Remove designation or modify.
8	Xiaoli Chen	Neutral		Project timeframes	No sale of submitters property
9	Bernard Kennelly	Oppose	98B Pukekohe East Rd	Designation footprint excessive.	Alteration to route and design.
10	Kevin Golding	Oppose		Native trees at 97 Golding Road.	Installation of traffic lights rather than a roundabout to preserve native trees.
11	Crosten Investments Ltd	Oppose	6 Austen Place & 50 & 52 Crosbie Road	Traffic safety in front of primary school / congestion.	Formation of the South-Eastern arterial route via Kitchener Road, Pukekohe.
12	Shao Jie Zheng	Oppose	108A Golding Road, Pukekohe	Road alignment; Creation of irregular shaped land parcels; Significant batters; Site access; Lapse date; Stakeholder input into management plans	Decline designation or amend the alignment so that it does not bisect the submitter's land. Changes to proposed conditions.
13	OMAC Limited and Next Generation Properties Limited	Oppose in part	47 Golding Road and 50 Pukekohe East Road	statutory provisions; alternatives; Extent of designation; Plan objectives	modify and reduce the designation footprint or withdraw entirely.

14	Aedifice Development No.1 Limited	Oppose in part	2 and 19 Golding Road	Statutory provisions; alternatives; extent of designation.	modify and reduce the designation footprint or withdraw entirely.
15	KiwiRail Holdings Limited	Support		Integration between network utility providers through communication and collaboration.	Changes to the proposed conditions.
16	The Campaign for Better Transport Incorporated	Neutral		cycle infrastructure; diversion attributes of the route.	None stated.
17	Watercare Services Limited	Neutral		Integration between network utility providers through greater communication and collaboration.	Changes to the proposed conditions.
18	Ministry of Education	Neutral	existing and future schools	Traffic, noise and other nuisance effects.	Changes to the proposed conditions.
19	Siobhan Ainsley	Neutral	Part of 87 and part of 131 Pukekohe East Road	Stormwater treatment.	A single community owned stormwater treatment pond.
20	Counties Energy Limited	Support with amendments		Integration between network utility providers through greater communication and collaboration.	Changes to the proposed conditions.
21	Pukekohe Mega Trustees Limited and Wrightson Way Limited	Oppose	12 Wrightson Way, Pukekohe	Alternatives; location and extent of designation; adverse effects; lapse period.	Decline designation or modify the designation boundary and ensure efficient safe access during construction and operation.

**Summary of Submissions - Pukekohe South-West Upgrade (NoR 6) Auckland Transport**

Sub #	Submitter	Position	Property where stated	Key issues	Relief sought
1	Kathryn Cole	Support with amendments	117 Princes Street	Traffic, construction, design, noise.	That construction work is carried out during the day. That consultation takes place. That traffic safety is considered.
2	Gloria Ann Mayor	Oppose	111 Nelson Street	Property, design	That the propose cycleway be installed on the other side of the road.
3	Ewen C & Beverley E McIntyre	Oppose	1 Ward Street	Property, visual amenity, design, flooding	Removal of proposed slip lane. Instead use the land on the south side of Ward St and the undeveloped land to the east of Queen St and South of Nelson St. End cycleway at the walkway to Parsot Place and divert cyclists onto that road. Redesign the intersection of Ward, Queen, and Nelson.
4	Jade Baker	Neutral	43 Nelson Street	Property, design, lapse period	Clearly differentiate between permanent and temporary requirements. Provide estimated timeframes for temporary use. Communicate different compensation methods.
5	Telecommunications Submitters	Oppose in part		Access to future and existing assets	Changes to conditions - inclusion of a LIP ( <b>Local Implementation Plan?</b> )
6	Christine & Brent McMahon	Oppose	73 West St	Property, privacy, parking	Avoidance of 73 West St
7	Boyd Scott and Penny Farrer	Oppose	99 Nelson st	Access, compensation	Place cycleway on the other side of Nelson Street or use Kitchener Rd instead.
8	Heritage New Zealand Pouhere Taonga	Oppose	Nehru Hall	Heritage values	Part removal of the designation affecting Nehru Hall. amendments to the Urban and Landscape Design Management Plan ('ULDMP'), and Historic Heritage Management Plan (HHMP).
9	Rachel Simpson and Michael Hickmott	Oppose	60 Helvetia Road	Property, design, visual amenity, construction noise, parking, access during construction, privacy,	Withdraw designation, or provide compensation and minimise construction effects.
10	Watercare Services Limited	Neutral		Access to future and existing assets	Changes to conditions
11	Ministry of Education	Neutral		Construction traffic, stakeholder engagement and consultation.	Changes to conditons to ensure MoE and schools in SCEMP. Ensure conditions are consistent with the Te Tupu Ngātahi Warkworth NoR.

12	Counties Energy Limited	Support with amendments		Access to future and existing assets; consultation	Changes to conditions. Further consultation concerning the location and safe operation of assets
13	Pukekohe Mega Trustees Limited and Wrightson Way Limited	Oppose	12 Wrightson Way	Design, traffic	Withdraw designation unless: (a) the proposed arterial alignment is shifted to the north; (b) effective and safe access is provided for customers to PMC, in both the construction and operation phase; (c) the PMC loading areas can continue to be efficiently, effectively, and safely used during both the construction and operation phase.
14	The Campaign for Better Transport Incorporated	Neutral		20-year lapse period, cycle infrastructure.	



Summary of Submissions - Pukekohe North-West Upgrade (NoR 7) Auckland Transport					
Sub #	Submitter	Position	Property where stated	Key issues	Relief sought
1	Stuart John Lawson and Paulene Anne Lawson	Support with amendments	110 Butcher Road	Traffic, construction, design, noise.	That construction work is carried out during the day. That consultation takes place. That traffic safety is considered.
2	Lisa Anne Whiteman	oppose	112 Butcher Road	Design, traffic, noise, pollution, property values	Withdraw designation and improve the existing road
3	SOO-HWAN CHA	oppose	157 Beatty Road	Property, economic productivity	Modify designation boundary so that only the land essential for road construction is purchased. Ensure the remaining land, along with the glasshouse and residential structures, remain untouched
4	Balle Bros Fresh Produce Ltd	support	Properties in the vicinity of 166, 185 Heights Rd Pukekohe	Infrastructure supporting growth	Accept designation
5	Des and Lorraine Morrison	oppose	17 Butcher Road	Design, infrastructure, traffic, ecology, property	Withdraw designation unless matters raised in the submission have been appropriately addressed, and or agreement is reached for early sale of property.
6	Telecommunications Submitters	oppose in part		Access to future and existing telecommunication assets	Changes to conditions - including inclusion of a LIP.
7	Jane Emma Telfer	oppose	101 Butcher Road	Design, ecology, noise, safety, fragmented community, alternatives, cost	To use existing infrastructure
8	Nicola Payne	oppose	97 Butcher Road	Design, ecology	Utilise existing roads and develop alternatives.
9	Chris and Angela Lynch	oppose	99 Butcher Road	Visual, design, safety, noise	Develop alternative routes and upgrade existing roads.
10	David and Teresa Polwart	oppose	62 Butcher Rd	Property, design, uncertain timeframes, compensation and lapse period, alternatives.	Alternative route using Heights Road
11	Robert Allan John Burns	support	106 Beatty Road	Design, noise, visual amenity, access, planting, compensation	route remains as far to the north-west of the site (106 Beatty Road?) as possible. Noise mitigation, planting and two accesses to the proposed route. Purchase of 106 Beatty Road.

12	Watercare Services Limited	Neutral with amendments		access to future and existing assets	Changes to conditions
13	Ministry of Education	Neutral with amendments	Existing and future schools	Traffic, noise and other construction effects, stakeholder engagement.	Changes to conditions
14	Counties Energy Limited	Support with amendments		Access to future and existing assets	Changes to conditions
15	The Campaign for Better Transport Incorporated	Neutral		Traffic, design	Amendments to improve multi modal transport
16	Sunhee Kim	oppose	157 Beatty Road	Property, design, economic productivity	Modify the designation boundary so that only the land essential for road construction is purchased. Ensure that the remaining land, along with the glasshouse and residential structures, remain untouched.

**ATTACHMENT FIVE**  
**CONDITIONS (NORs1,3,4,5,6 & 7)**



## Pukekohe Transport Network – Proposed Conditions for Auckland Transport NoRs

**NoR 1 – Drury West Arterial**  
**NoR 3 – Paerata Connections**  
**NoR 4 – Pukekohe North East Arterial**  
**NoR 5 – Pukekohe South East Arterial**  
**NoR 6 – Pukekohe South West Upgrade**  
**NoR 7 – Pukekohe North West Arterial**  
**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.
AUP	Auckland Unitary Plan
BPO or Best Practicable Option	Has the same meaning as in section 2 of the RMA 1991.
CEMP	Construction Environmental Management Plan
Certification of material changes to management plans and CNVMP Schedules	<p>Confirmation from the Manager that a material change to a plan or CNVMP Schedule has been prepared in accordance with the condition to which it relates.</p> <p>A material change to a management plan or CNVMP Schedule shall be deemed certified:</p> <ul style="list-style-type: none"> <li>(a) where the Requiring Authority has received written confirmation from Council that the material change to the management plan is certified;</li> <li>(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</li> <li>(c) five working days from the submission of the material change to a CNVMP Schedule where no written confirmation of certification has been received.</li> </ul>
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 24.
Construction Works	Activities undertaken to construct the Project excluding Enabling Works
Council	Auckland Council
CTMP	Construction Traffic Management Plan
Developer	Any legal entity that intends to master plan or develop land adjacent to the designation
Development Agency	Public entities involved in development projects
<u>Educational facilities</u>	<p><u>Facility used for education to secondary level.</u></p> <p><u>Includes:</u></p>

Acronym/Term	Definition
	<p>•<u>Schools and outdoor education facilities; and</u></p> <p>•<u>Accommodation, administrative, cultural, religious, health, retail, and communal facilities accessory to the above.</u></p> <p><u>Excludes:</u></p> <p>•<u>Care centres; and</u></p> <p>•<u>Tertiary education facilities</u></p>
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.
Enabling works	<p>Includes, but is not limited to, the following and similar activities:</p> <ul style="list-style-type: none"> <li>(a) geotechnical investigations (including trial embankments)</li> <li>(b) archaeological site investigations</li> <li>(c) formation of access for geotechnical investigations</li> <li>(d) establishment of site yards, site entrances and fencing</li> <li>(e) constructing and sealing site access roads</li> <li>(f) demolition or removal of buildings and structures</li> <li>(g) relocation of services</li> <li>(h) establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and planting)</li> </ul>
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 features 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 Auckland Council, or authorised delegate
Mana Whenua	<p>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:</p> <ul style="list-style-type: none"> <li>• Ngaati Te Ata Waiohua</li> <li>• Ngāti Tamaoho</li> <li>• Te Ākitai Waiohua</li> <li>• Ngāti Whanaunga</li> </ul> <p><b>Note:</b> other iwi and hapu not identified above may have an interest in the Project and should be consulted.</p>
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.

Acronym/Term	Definition
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 Auckland Transport.
RMA	Resource Management Act (1991)
SCEMP	Stakeholder Communication and Engagement Management Plan
Stage of Work	Any physical works that require the development of an Outline Plan.
<u>Stakeholders</u>	<p><u>Stakeholders to be identified in accordance with Condition [x], which may include as appropriate:</u></p> <ul style="list-style-type: none"> <li><u>a) Adjacent owners and occupiers;</u></li> <li><u>b) Adjacent business owners and occupiers;</u></li> <li><u>c) Central and local government bodies;</u></li> <li><u>d) Community groups;</u></li> <li><u>e) Developers;</u></li> <li><u>f) Development agencies;</u></li> <li><u>g) Educational facilities; and</u></li> <li><u>h) Network utility operators.</u></li> </ul>
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.
ULDMP	Urban and Landscape Design Management Plan

No R(s) )	No.	Condition
<b>General Conditions</b>		
<b>All</b>	<b>1</b>	<p><b>Activity in General Accordance with Plans and Information</b></p> <p>(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.</p> <p>(b) Where there is inconsistency between:</p> <ul style="list-style-type: none"> <li>(i) the Project description and concept plan in Schedule 1 and the requirements of the following conditions, the conditions shall prevail;</li> <li>(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.</li> </ul>
<b>All</b>	<b>2</b>	<p><b>Project Information</b></p> <p>(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:</p> <ul style="list-style-type: none"> <li>(i) the status of the Project;</li> <li>(ii) anticipated construction timeframes;</li> <li>(iii) contact details for enquiries;</li> <li>(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;</li> <li>(v) a subscription service to enable receipt of project updates by email; and</li> <li>(vi) when and how to apply for consent for works in the designation under s176(1)(b) of the RMA.</li> </ul> <p>(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.</p>
<b>All</b>	<b>3</b>	<p><b>Designation Review</b></p> <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"> <li>(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</li> <li>(ii) give notice to Auckland Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified above.</li> </ul>
<b>All</b>	<b>4</b>	<p><b>Lapse</b></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>
<b>All</b>	<b>5</b>	<p><b>Network Utility Operators (Section 176 Approval)</b></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"> <li>(i) operation, maintenance and urgent repair works;</li> <li>(ii) minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations;</li> <li>(iii) minor works such as new service connections; and</li> <li>(iv) the upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility.</li> </ul> <p>To the extent that a record of written approval is required for the activities listed above, this condition shall constitute written approval.</p>



No R(s )	No.	Condition
<b>Pre-construction Conditions</b>		
1, 3, 7	<b>6</b>	<b>Outline Plan</b> (a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA. (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. (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: <ul style="list-style-type: none"> <li>(i) Construction Environmental Management Plan;</li> <li>(ii) Construction Traffic Management Plan;</li> <li>(iii) Construction Noise and Vibration Management Plan;</li> <li>(iv) Urban and Landscape Design Management Plan;</li> <li>(v) Ecological Management Plan; and</li> <li>(vi) Network Utilities Management Plan.</li> </ul>
4	<b>6</b>	<b>Outline Plan</b> (a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA. (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. (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: <ul style="list-style-type: none"> <li>(i) Construction Environmental Management Plan;</li> <li>(ii) Construction Traffic Management Plan;</li> <li>(iii) Construction Noise and Vibration Management Plan;</li> <li>(iv) Urban and Landscape Design Management Plan;</li> <li>(v) Historic Heritage Management Plan;</li> <li>(vi) Ecological Management Plan; and</li> <li>(vii) Network Utilities Management Plan.</li> </ul>
5	<b>6</b>	<b>Outline Plan</b> (a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA. (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. (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: <ul style="list-style-type: none"> <li>(i) Construction Environmental Management Plan;</li> <li>(ii) Construction Traffic Management Plan;</li> <li>(iii) Construction Noise and Vibration Management Plan;</li> <li>(iv) Urban and Landscape Design Management Plan;</li> <li>(v) Ecological Management Plan;</li> <li>(vi) Tree Management Plan; and</li> <li>(vii) Network Utilities Management Plan.</li> </ul>
6	<b>6</b>	<b>Outline Plan</b> (a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA. (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. (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: <ul style="list-style-type: none"> <li>(i) Construction Environmental Management Plan;</li> <li>(ii) Construction Traffic Management Plan;</li> <li>(iii) Construction Noise and Vibration Management Plan;</li> <li>(iv) Urban and Landscape Design Management Plan; and</li> <li>(v) Historic Heritage Management Plan</li> </ul>

No R(s) )	No.	Condition
		(vi) Network Utilities Management Plan.
<b>All</b>	<b>7</b>	<p><b>Management Plans</b></p> <p>(a) Any management plan shall:</p> <ul style="list-style-type: none"> <li>(i) be prepared and implemented in accordance with the relevant management plan condition;</li> <li>(ii) be prepared by a Suitably Qualified Person(s);</li> <li>(iii) include sufficient detail relating to the management of effects associated with the relevant activities and/or Stage of Work to which it relates;</li> <li>(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"> <li>a. been incorporated; and</li> <li>b. where not incorporated, the reasons why.</li> </ul> </li> <li>(v) be submitted as part of an Outline Plan pursuant to s176A of the RMA, with the exception of SCEMPs and CNVMP Schedules; and</li> <li>(vi) once finalised, uploaded to the Project website or equivalent virtual information source.</li> </ul> <p>(b) Any management plan developed in accordance with Condition 7(a) may:</p> <ul style="list-style-type: none"> <li>(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;</li> <li>(ii) except for material changes, be amended to reflect any changes in design, construction methods or management of effects without further process; and</li> <li>(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.</li> </ul> <p>(c) Any material changes to the SCEMPs, are to be submitted to the Council for information.</p>
<b>All</b>	<b>8</b>	<p><b>Stakeholder and Communication and Engagement Management Plan (SCEMP)</b></p> <p>(a) A SCEMP shall be prepared in consultation with stakeholders, community groups and organisations prior to any Outline Plan being submitted.</p> <p>(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:</p> <ul style="list-style-type: none"> <li>(i) At least 18 months prior to any Outline Plan being submitted, the Requiring Authority shall identify: <ul style="list-style-type: none"> <li>A. The properties whose owners will be engaged with;</li> <li>B. A list of key stakeholders, community groups, organisations and business who will be engaged with;</li> <li>C. Methods and timing to engage with landowners and occupiers whose access is directly affected.</li> </ul> </li> <li>(ii) The SCEMP shall include: <ul style="list-style-type: none"> <li>A. Detailed of (b)(i)A to C;</li> <li>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);</li> <li>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;</li> <li>D. Methods for engaging with Mana Whenua, to be developed in consultation with Mana Whenua;</li> <li>E. Methods to communicate key project milestones and the proposed hours of construction activities including outside of normal working hours and</li> </ul> </li> </ul>

No R(s )	No.	Condition
		<p>on weekends and public holidays, to the parties identified in (b)(i)A and B above; and</p> <p>F. 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>
1, 3, 5, 7	9	<p><b>Cultural Advisory Report</b></p> <p>(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;</p> <p>(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:</p> <ul style="list-style-type: none"> <li>(i) identifies the cultural sites, landscapes and values that have the potential to be affected by the construction and operation of the Project;</li> <li>(ii) sets out the desired outcomes for management of potential effects on cultural sites, landscapes and values;</li> <li>(iii) identifies traditional cultural practices within the area that may be impacted by the Project;</li> <li>(iv) identifies opportunities for restoration and enhancement of identified cultural sites, landscapes and values within the Project area;</li> <li>(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 Urban and Landscape Design Management Plan and the Cultural Monitoring Plan referred to in Conditions 11 and 16; and</li> <li>(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.</li> </ul> <p>(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.</p> <p>(d) Conditions 9(b) and (c) above will cease to apply if:</p> <ul style="list-style-type: none"> <li>(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</li> <li>(ii) Mana Whenua have not provided a Cultural Advisory Report within six months prior to start of Construction Works.</li> </ul>
	9	<p><b>Cultural Advisory Report</b></p> <p>(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.</p> <p>(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:</p> <ul style="list-style-type: none"> <li>(i) identifies the cultural sites, landscapes and values that have the potential to be affected by the construction and operation of the Project;</li> <li>(ii) sets out the desired outcomes for management of potential effects on cultural sites, landscapes and values;</li> <li>(iii) identifies traditional cultural practices within the area that may be impacted by the Project;</li> <li>(iv) identifies opportunities for restoration and enhancement of identified cultural sites, landscapes and values within the Project area;</li> </ul>

No R(s )	No.	Condition
		<ul style="list-style-type: none"> <li>(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 Urban and Landscape Design Management Plan, Historic Heritage Management Plan and the Cultural Monitoring Plan referred to in Conditions <b>11</b>, <b>16</b> and <b>22</b>; and</li> <li>(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.</li> <li>(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.</li> <li>(d) Conditions <b>9(b)</b> and (c) above will cease to apply if: <ul style="list-style-type: none"> <li>(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</li> <li>(ii) Mana Whenua have not provided a Cultural Advisory Report within six months prior to start of Construction Works.</li> </ul> </li> </ul>
<b>All</b>	<b>1</b>	<p><b>Land use Integration Process (LIP)</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>(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 <b>2(a)(iii)</b>.</li> <li>(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.</li> <li>(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: <ul style="list-style-type: none"> <li>(i) responding to requests made to the Requiring Authority for information regarding design details that could assist with land use integration; and</li> <li>(ii) receiving information from a Developer or Development Agency regarding master planning or land development details that could assist with land use integration.</li> </ul> </li> <li>(d) Information requested or provided under Condition <b>9(c)</b> above may include but not be limited to the following matters: <ul style="list-style-type: none"> <li>(i) design details including but not limited to: <ul style="list-style-type: none"> <li>A. boundary treatment (e.g. the use of retaining walls or batter slopes);</li> <li>B. the horizontal and vertical alignment of the road (levels);</li> <li>C. potential locations for mid-block crossings; and</li> <li>D. integration of stormwater infrastructure.</li> </ul> </li> <li>(ii) 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</li> <li>(iii) 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.</li> </ul> </li> <li>(e) 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.</li> <li>(f) 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:</li> </ul>

No R(s )	No.	Condition
		<p>(i) 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;</p> <p>(ii) 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</p> <p>(iii) details of any requests to co-ordinate the forward work programme, where appropriate, with Development Agencies and Network Utility Operators.</p> <p>(g) The record shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work</p>
<p>1, 3, 4, 6, 7All</p>	<p>1</p>	<p><b>Urban and Landscape Design Management Plan (ULDMP)</b></p> <p>(a) A ULDMP shall be prepared prior to the Start of Construction for a Stage of Work.</p> <p>(b) The objective of the ULDMP(s) is to:</p> <p>(i) Enable integration of the Project's permanent works into the surrounding landscape and urban context; and</p> <p>(ii) Ensure that the Project manages potential adverse landscape and visual effects as far as practicable and contributes to a quality urban environment.</p> <p>(c) Mana Whenua shall be invited to participate in the development of the ULDMP(s) 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 ULDMP.</p> <p>(d) Key stakeholders identified through Condition 8(b)(i)B shall be invited to participate in the development of the ULDMP at least six (6) months prior to the start of detailed design for a Stage of Work.</p> <p>(e) The ULDMP shall be prepared in general accordance with:</p> <p>(i) Auckland Transport's Urban Roads and Streets Design Guide;</p> <p>(ii) Waka Kotahi Urban Design Guidelines: Bridging the Gap (2013) or any subsequent updated version;</p> <p>(iii) Waka Kotahi Landscape Guidelines (2013) or any subsequent updated version;</p> <p>(iv) Waka Kotahi P39 Standard Specification for Highway Landscape Treatments (2013) or any subsequent updated version; and</p> <p>(v) Auckland's Urban Ngahere (Forest) Strategy or any subsequent updated version.</p> <p>(f) To achieve the objective, the ULDMP(s) shall provide details of how the project:</p> <p>(i) Is designed to integrate with the adjacent urban (or proposed urban) and landscape context, including the surrounding existing or proposed topography, urban environment (i.e. centres and density of built form), natural environment, landscape character and open space zones;</p> <p style="padding-left: 40px;">(ia) <u>resolves any potential conflict between placemaking aspirations within local communities and the scale and operation of the Project.</u></p> <p style="padding-left: 40px;">(ib) <u>enables buildings and spaces to positively address and integrate with the corridor.</u></p> <p>(ii) Provides appropriate walking and cycling connectivity to, and interfaces with, existing or proposed adjacent land uses, public transport infrastructure and walking and cycling connections;</p> <p>(iii) Promotes inclusive access (where appropriate); and</p> <p>(iv) Promotes a sense of personal safety by aligning with best practice guidelines, such as:</p> <p style="padding-left: 40px;">A. Crime Prevention Through Environmental Design (CPTED) principles;</p> <p style="padding-left: 40px;">B. Safety in Design (SID) requirements; and</p> <p style="padding-left: 40px;">C. Maintenance in Design (MID) requirements and anti-vandalism/anti-graffiti measures.</p> <p>(v) <u>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.</u></p>

No R(s )	No.	Condition
		<p>(g) <u>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:</u></p> <ul style="list-style-type: none"> <li>(i) A concept plan – which depicts the overall landscape and urban design concept, and explain the rationale for the landscape and urban design proposals;</li> <li>(ii) Developed design concepts, including principles for walking and cycling facilities and public transport; and</li> <li>(iii) Landscape and urban design details – that cover the following: <ul style="list-style-type: none"> <li>A. Road design – elements such as intersection form, carriageway gradient and associated earthworks contouring including cut and fill batters and the interface with adjacent land uses and existing roads (including slip lanes), benching, spoil disposal sites, median width and treatment, roadside width and treatment;</li> <li>B. Roadside elements – such as lighting, fencing, wayfinding and signage;</li> <li>C. architectural and landscape treatment of all major structures, including bridges and retaining walls;</li> <li>D. Architectural and landscape treatment of noise barriers;</li> <li>E. Landscape treatment of permanent stormwater control wetlands and swales;</li> <li>F. Integration of passenger transport;</li> <li>G. Pedestrian and cycle facilities including paths, road crossings and dedicated pedestrian/ cycle bridges or underpasses;</li> <li>H. Historic heritage places with reference to the HHMP (Condition 2); and</li> <li>I. Re-instatement of construction and site compound areas, driveways, accessways and fences.</li> </ul> </li> </ul> <p>(h) The ULDMP shall also include the following planting details and maintenance requirements:</p> <ul style="list-style-type: none"> <li>(i) planting design details including: <ul style="list-style-type: none"> <li>A. Identification of existing trees and vegetation that will be retained and any planting requirements under the Ecological Management Plan (Condition 24). Where practicable, mature trees and native vegetation should be retained;</li> <li>B. Street trees, shrubs and ground cover suitable for the location;</li> <li>C. treatment of fill slopes to integrate with adjacent land use, streams, riparian margins and open space zones;</li> <li>D. planting of stormwater wetlands;</li> <li>E. Integration of any planting requirements required by conditions of any resource consents for the project; and</li> <li>F. Re-instatement planting of construction and site compound areas as appropriate.</li> </ul> </li> <li>(ii) A planting programme including the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of works in each Stage of Work; and</li> <li>(iii) Detailed specifications relating to the following: <ul style="list-style-type: none"> <li>A. Weed control and clearance;</li> <li>B. Pest animal management (to support plant establishment);</li> <li>C. Ground preparation (top soiling and decompaction);</li> <li>D. Mulching; and</li> <li>E. Plant sourcing and planting, including hydroseeding and grassing, and use of eco-sourced species.</li> </ul> </li> </ul> <p><b>Advice Note:</b></p> <p><i>This designation is for the purpose of construction, operation and maintenance of an arterial transport corridor and it is not for the specific purpose of “road widening”. Therefore, it is not intended that the front yard definition in the Auckland Unitary Plan which applies a set back from a designation for road widening purposes applies to this designation. A set back is not required to manage effects between the designation boundary and any proposed adjacent sites or lots.</i></p>



No R(s )	No.	Condition
5	1	<p><b>Urban and Landscape Design Management Plan (ULDMP)</b></p> <p>(a) A ULDMP shall be prepared prior to the Start of Construction for a Stage of Work.</p> <p>(b) The objective of the ULDMP(s) is to:</p> <ul style="list-style-type: none"> <li>(i) Enable integration of the Project's permanent works into the surrounding landscape and urban context; and</li> <li>(ii) Ensure that the Project manages potential adverse landscape and visual effects as far as practicable and contributes to a quality urban environment.</li> </ul> <p>(c) Mana Whenua shall be invited to participate in the development of the ULDMP(s) 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 ULDMP.</p> <p>(d) Key stakeholders identified through Condition 8(b)(i)B shall be invited to participate in the development of the ULDMP at least six (6) months prior to the start of detailed design for a Stage of Work.</p> <p>(e) The ULDMP shall be prepared in general accordance with:</p> <ul style="list-style-type: none"> <li>(i) Auckland Transport's Urban Roads and Streets Design Guide;</li> <li>(ii) Waka Kotahi Urban Design Guidelines: Bridging the Gap (2013) or any subsequent updated version;</li> <li>(iii) Waka Kotahi Landscape Guidelines (2013) or any subsequent updated version;</li> <li>(iv) Waka Kotahi P39 Standard Specification for Highway Landscape Treatments (2013) or any subsequent updated version; and</li> <li>(v) Auckland's Urban Ngahere (Forest) Strategy or any subsequent updated version.</li> </ul> <p>(f) To achieve the objective, the ULDMP(s) shall provide details of how the project:</p> <ul style="list-style-type: none"> <li>(i) Is designed to integrate with the adjacent urban (or proposed urban) and landscape context, including the surrounding existing or proposed topography, urban environment (i.e. centres and density of built form), natural environment, landscape character and open space zones; <ul style="list-style-type: none"> <li>(ia) <u>resolves any potential conflict between placemaking aspirations within local communities and the scale and operation of the Project.</u></li> <li>(ib) <u>enables buildings and spaces to positively address and integrate with the corridor.</u></li> </ul> </li> <li>(ii) Provides appropriate walking and cycling connectivity to, and interfaces with, existing or proposed adjacent land uses, public transport infrastructure and walking and cycling connections;</li> <li>(iii) Promotes inclusive access (where appropriate); and</li> <li>(iv) Promotes a sense of personal safety by aligning with best practice guidelines, such as: <ul style="list-style-type: none"> <li>A. Crime Prevention Through Environmental Design (CPTED) principles;</li> <li>B. Safety in Design (SID) requirements; and</li> <li>C. Maintenance in Design (MID) requirements and anti-vandalism/anti-graffiti measures.</li> </ul> </li> <li>(v) <u>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.</u></li> </ul> <p>(g) The ULDMP(s) shall include:</p> <ul style="list-style-type: none"> <li>(i) A concept plan – which depicts the overall landscape and urban design concept, and explain the rationale for the landscape and urban design proposals;</li> <li>(ii) Developed design concepts, including principles for walking and cycling facilities and public transport; and</li> <li>(iii) Landscape and urban design details – that cover the following: <ul style="list-style-type: none"> <li>A. Road design – elements such as intersection form, carriageway gradient and associated earthworks contouring including cut and fill batters and the interface with adjacent land uses and existing roads (including slip lanes), benching, spoil disposal sites, median width and treatment, roadside width and treatment;</li> <li>B. Roadside elements – such as lighting, fencing, wayfinding and signage;</li> </ul> </li> </ul>

No R(s )	No.	Condition
		<p>C. Architectural and landscape treatment of all major structures, including bridges and retaining walls;</p> <p>D. Architectural and landscape treatment of noise barriers;</p> <p>E. Landscape treatment of permanent stormwater control wetlands and swales;</p> <p>F. Integration of passenger transport;</p> <p>G. Pedestrian and cycle facilities including paths, road crossings and dedicated pedestrian/ cycle bridges or underpasses;</p> <p>H. Historic heritage places with reference to the HHMP (Condition <b>22</b>); and</p> <p>I. Re-instatement of construction and site compound areas, driveways, accessways and fences.</p> <p>(h) The ULDMMP shall also include the following planting details and maintenance requirements:</p> <p>(i) planting design details including:</p> <p>A. Identification of existing trees and vegetation that will be retained and any planting requirements under the Ecological Management Plan (Condition <b>24</b>) and Tree Management Plan (Condition <b>25</b>). Where practicable, mature trees and native vegetation should be retained;</p> <p>B. Street trees, shrubs and ground cover suitable for the location;</p> <p>C. treatment of fill slopes to integrate with adjacent land use, streams, Riparian margins and open space zones;</p> <p>D. planting of stormwater wetlands;</p> <p>E. Integration of any planting requirements required by conditions of any resource consents for the project; and</p> <p>F. Re-instatement planting of construction and site compound areas as appropriate.</p> <p>(ii) A planting programme including the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of works in each Stage of Work; and</p> <p>(iii) Detailed specifications relating to the following:</p> <p>A. Weed control and clearance;</p> <p>B. Pest animal management (to support plant establishment);</p> <p>C. Ground preparation (top soiling and decompaction);</p> <p>D. Mulching; and</p> <p>E. Plant sourcing and planting, including hydroseeding and grassing, and use of eco-sourced species.</p> <p><b>Advice Note:</b></p> <p><i>This designation is for the purpose of construction, operation and maintenance of an arterial transport corridor and it is not for the specific purpose of “road widening”. Therefore, it is not intended that the front yard definition in the Auckland Unitary Plan which applies a set back from a designation for road widening purposes applies to this designation. A set back is not required to manage effects between the designation boundary and any proposed adjacent sites or lots.</i></p>
<b>Specific Outline Plan Requirements</b>		
<b>All</b>		<p><b>Flood Hazard</b></p> <p>For the purpose of Condition <b>12</b>:</p> <p>(a) ARI – means Average Recurrence Interval</p> <p>(b) AEP – means Annual Exceedance Probability</p> <p>(c) Existing authorised habitable floor – means the floor level of any room (floor) in a residential building which is authorised 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.</p> <p>(d) 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>



No R(s )	No.	Condition
		<p>(e) 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>(f) Pre-Project development – means existing site condition prior to the Project (including existing buildings and roadways).</p> <p>(g) Post-Project development – means site condition after the Project has been completed (including existing and new buildings and roadways).</p>
<b>All</b>	<b>1</b>	<p><b>Flood Hazard</b></p> <p>(a) The Project shall be designed to achieve the following flood risk outcomes:</p> <ul style="list-style-type: none"> <li>(i) <del>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;</del></li> <li>(ii) <del>no more than a 10% reduction in freeboard in a 1% AEP event for existing authorised habitable floors with a freeboard of over 150mm;</del></li> <li>(iii) <del>no increase in 1% AEP flood levels for existing authorised community, commercial, industrial and network utility building floors that are already subject to flooding;</del></li> <li>(iv) <del>no more than 10% reduction in freeboard in a 1% AEP event for existing authorised community, commercial, industrial and network utility building floors;</del></li> <li>(v) <u>Maintain the minimum freeboard requirement outlined in the relevant code of practice at time the Outline Plan is submitted (currently, Auckland Code of Practice for Land Development for Subdivision Chapter 4: Stormwater Version 3.0, January 2022);</u></li> <li>(vi) <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 Future Urban Zone or 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;</u></li> <li>(vii) <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></li> <li>(viii) <u>no loss in conveyance capacity or change in alignment of existing overland flow paths, unless provided by other means;</u></li> <li>(ix) no new flood prone areas; and</li> <li>(x) <del>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 time the Outline Plan is submitted. The assessment of flood hazard shall be undertaken for the 10% and 1% AEP rainfall events.</del></li> </ul> <p>(b) Compliance with this condition shall be demonstrated in the Outline Plan <u>developed in consultation with the Auckland Council Healthy Waters (or its equivalent)</u>, which shall include flood modelling of the pre-Project and post-Project <u>1% AEP/100-year ARI</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>
<b>All</b>	<b>1</b>	<p><b>Existing property access</b></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 Plan shall demonstrate how safe, <u>adequate, and efficient</u> reconfigured or alternate access will be provided, unless otherwise agreed with the landowner.</p>

No R(s )	No.	Condition
<b>Construction Conditions</b>		
All	1	<p><b>Construction Environmental Management Plan (CEMP)</b></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"> <li>(i) the roles and responsibilities of staff and contractors;</li> <li>(ii) details of the site or project manager and the Project Liaison Person, including their contact details (phone and email address);</li> <li>(iii) the Construction Works programmes and the staging approach, and the proposed hours of work;</li> <li>(iv) details of the proposed construction yards including temporary screening when adjacent to residential areas, locations of refuelling activities and construction lighting;</li> <li>(v) methods for controlling dust and the removal of debris and demolition of construction materials from public roads or places;</li> <li>(vi) methods for providing for the health and safety of the general public;</li> <li>(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;</li> <li>(viii) procedures for incident management;</li> <li>(ix) procedures for the refuelling and maintenance of plant and equipment to avoid discharges of fuels or lubricants to Watercourses;</li> <li>(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;</li> <li>(xi) procedures for responding to complaints about Construction Works; and</li> <li>(xii) methods for amending and updating the CEMP as required.</li> </ul> <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>
All	1	<p><b>Complaints Register</b></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"> <li>(i) The date, time and nature of the complaint;</li> <li>(ii) The name, phone number and address of the complainant (unless the complainant wishes to remain anonymous);</li> <li>(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;</li> <li>(iv) The outcome of the investigation into the complaint;</li> <li>(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.</li> </ul> <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>
All	1	<p><b>Cultural Monitoring Plan</b></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</p>

No R(s )	No.	Condition
		<p>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> <ul style="list-style-type: none"> <li>(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;</li> <li>(ii) Requirements and protocols for cultural inductions for contractors and subcontractors;</li> <li>(iii) Identification of activities, sites and areas where cultural monitoring is required during particular Construction Works;</li> <li>(iv) Identification of personnel to undertake cultural monitoring, including any geographic definition of their responsibilities; and</li> <li>(v) Details of personnel to assist with management of any cultural effects identified during cultural monitoring, including implementation of the Accidental Discovery Protocol</li> </ul> <p>(b) Please 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><b>Advice Note:</b> 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>
All	1	<p><b>Construction Traffic Management Plan (CTMP)</b></p> <ul style="list-style-type: none"> <li>(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: <ul style="list-style-type: none"> <li>(i) methods to manage the effects of temporary traffic management activities on traffic;</li> <li>(ii) measures to ensure the safety of all transport users;</li> <li>(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 schools</u> or to manage traffic congestion;</li> <li>(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;</li> <li>(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, <del>on existing roads</del>;</li> <li>(vi) methods to maintain <del>vehicle</del> 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;</li> <li>(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;</li> <li>(viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/public/stakeholders/emergency services);</li> <li><del>(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;</del></li> </ul> </li> </ul>

No R(s)	No.	Condition																																																										
		<p>(x) details of minimum network performance parameters during the construction phase, including any measures to monitor compliance with the performance parameters; and</p> <p>(xi) details of any measures proposed to be implemented in the event of thresholds identified in (x) being exceeded.</p> <p>(b) <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 replacement.</u></p>																																																										
<b>All</b>	<b>1</b>	<p><b>Construction Noise Standards</b></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><b>Table 18.1: Construction noise standards</b></p> <table border="1"> <thead> <tr> <th>Day of week</th> <th>Time period</th> <th>L<sub>Aeq</sub>(15min)</th> <th>L<sub>AFmax</sub></th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;"><b>Occupied activity sensitive to noise</b></td> </tr> <tr> <td rowspan="4">Weekday</td> <td>0630h - 0730h</td> <td>55 dB</td> <td>75 dB</td> </tr> <tr> <td>0730h - 1800h</td> <td>70 dB</td> <td>85 dB</td> </tr> <tr> <td>1800h - 2000h</td> <td>65 dB</td> <td>80 dB</td> </tr> <tr> <td>2000h - 0630h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td rowspan="4">Saturday</td> <td>0630h - 0730h</td> <td>55 dB</td> <td>75 dB</td> </tr> <tr> <td>0730h - 1800h</td> <td>70 dB</td> <td>85 dB</td> </tr> <tr> <td>1800h - 2000h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td>2000h - 0630h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td rowspan="4">Sunday and Public Holidays</td> <td>0630h - 0730h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td>0730h - 1800h</td> <td>55 dB</td> <td>85 dB</td> </tr> <tr> <td>1800h - 2000h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td>2000h - 0630h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>Other occupied buildings</b></td> </tr> <tr> <td rowspan="2">All</td> <td>0730h – 1800h</td> <td>70 dB</td> <td></td> </tr> <tr> <td>1800h – 0730h</td> <td>75 dB</td> <td></td> </tr> </tbody> </table> <p>(b) Where compliance with the noise standards set out in Table 18.1 is not practicable, the methodology in Condition 21 shall apply.</p>	Day of week	Time period	L <sub>Aeq</sub> (15min)	L <sub>AFmax</sub>	<b>Occupied activity sensitive to noise</b>				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	<b>Other occupied buildings</b>				All	0730h – 1800h	70 dB		1800h – 0730h	75 dB	
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<b>All</b>	<b>1</b>	<p><b>Construction Vibration Standards</b></p> <p>(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.</p> <p><b>Table 19.1 Construction vibration criteria</b></p> <table border="1"> <thead> <tr> <th>Receiver</th> <th>Details</th> <th>Category A</th> <th>Category B</th> </tr> </thead> <tbody> </tbody> </table>	Receiver	Details	Category A	Category B																																																						
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No R(s)	No.	Condition			
		Occupied Activities sensitive to noise	Night-time 2000h - 0630h	0.3mm/s ppv	2mm/s ppv
			Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
		Other occupied buildings	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
		All other buildings	At all other times	Tables 1 and 3 of DIN4150-3:1999	
		<p><i>*Category A criteria adopted from Rule E25.6.30.1 of the AUP</i></p> <p><i>**Category B criteria based on DIN 4150-3:1999 building damage criteria for daytime</i></p> <p>(b) Where compliance with the vibration standards set out in Table 19.1 is not practicable, the methodology in Condition 21 shall apply</p>			
All	2	<p><b>Construction Noise and Vibration Management Plan (CNVMP)</b></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 18 and 19 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 shall as a minimum, address the following:</p> <ul style="list-style-type: none"> <li>(i) Description of the works and anticipated equipment/processes;</li> <li>(ii) Hours of operation, including times and days when construction activities would occur;</li> <li>(iii) The construction noise and vibration standards for the project;</li> <li>(iv) Identification of receivers where noise and vibration standards apply;</li> <li>(v) A hierarchy of management and mitigation options, including any requirements to limit night works and works during other sensitive times, including Sundays and public holidays as far practicable;</li> <li>(vi) Methods and frequency for monitoring and reporting on construction noise and vibration;</li> <li>(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.</li> <li>(viii) Contact details of the Project Liaison Person;</li> <li>(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;</li> <li>(x) Procedures and requirements for the preparation of a Schedule to the CNVMP (Schedule) for those areas where compliance with the noise [Condition 18] and/or vibration standards [Condition 19 Category B] will not be practicable;</li> <li>(xi) Identification of trigger levels for undertaking building condition surveys, which shall be Category B day time levels;</li> <li>(xii) Procedures and trigger levels 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.</li> <li>(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.</li> </ul>			

No R(s )	No.	Condition
		(xiv) Requirements for review and update of the CNVMP.
<b>All</b>	<b>2</b>	<p><b>Schedule to a CNVMP</b></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 to which it relates by a Suitably Qualified Person, in consultation with the owners and occupiers of sites subject to the Schedule, when:</p> <ul style="list-style-type: none"> <li>(i) Construction noise is either predicted or measured to exceed the noise standards in Condition 18, except where the exceedance of the <math>L_{Aeq}</math> criteria is no greater than 5 decibels and does not exceed: <ul style="list-style-type: none"> <li>a. 0630 – 2000: 2 period of up to 2 consecutive weeks in any 2 months, or</li> <li>b. 2000 – 0630: 1 period of up to 2 consecutive nights in any 10 days.</li> </ul> </li> <li>(ii) Construction vibration is either predicted or measured to exceed the Category B standard at the receivers in Condition 19.</li> </ul> <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"> <li>(i) Construction activity location, start and finish dates;</li> <li>(ii) The nearest neighbours to the construction activity;</li> <li>(iii) The predicted noise and/or vibration level for all receivers where the levels are predicted or measured to exceed the applicable standards and predicted duration of the exceedance;</li> <li>(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;</li> <li>(v) The proposed mitigation options that have been selected, and the options that have been discounted as being impracticable and the reasons why;</li> <li>(vi) 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</li> <li>(vii) Location, times and types of monitoring;</li> </ul> <p>(c) The Schedule shall be submitted to the Manager for certification 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.</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 certification 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>
<b>4, 6</b>	<b>2</b>	<p><b>Historic Heritage Management Plan (HHMP)</b></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"> <li>(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;</li> <li>(ii) Methods for the identification and assessment of potential historic heritage places within the Designation to inform detailed design;</li> <li>(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;</li> </ul>

No R(s )	No.	Condition
		<ul style="list-style-type: none"> <li>(iv) Any unrecorded archaeological sites or post-1900 heritage sites within the Designation, which shall also be documented and recorded;</li> <li>(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;</li> <li>(vi) Specific areas to be investigated, monitored and recorded to the extent these are directly affected by the Project;</li> <li>(vii) The proposed methodology for investigating and recording post-1900 historic heritage sites (including buildings) that need to be destroyed, demolished or 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;</li> <li>(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;</li> <li>(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: <ul style="list-style-type: none"> <li>A. security fencing or hoardings around historic heritage places to protect them from damage during construction or unauthorised access;</li> <li>B. measures to mitigate adverse effects on historic heritage sites that achieve positive historic heritage outcomes such as increased public awareness and interpretation signage; and</li> <li>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 16.</li> </ul> </li> </ul> <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><b>Accidental Discoveries</b></p> <p><b>Advice Note:</b></p> <p><i>The requirements for accidental discoveries of heritage items are set out in Rule E11.6.1 of the AUP</i></p>
1, 3, 4, 5, 7	2	<p><b>Pre-Construction Ecological Survey</b></p> <ul style="list-style-type: none"> <li>(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: <ul style="list-style-type: none"> <li>(i) Confirming whether the species of value within the Identified Biodiversity Areas recorded in <i>Schedule [2]<sup>1</sup>: Identified Biodiversity Areas</i> are still present;</li> <li>(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.</li> </ul> </li> </ul>

<sup>1</sup> Schedule 2 for NoR 1 Drury West Arterial, NoR 3 Paerata Connections, NoR 4 Pukekohe North East Arterial, NoR 5 Pukekohe South East Arterial, NoR 7 Pukekohe North West Arterial



No R(s)	No.	Condition
		(b) If the ecological survey confirms the presence of ecological features of value in accordance with Condition 23(a)(i) and that effects are likely in accordance with Condition 23(a)(ii) then an Ecological Management Plan (or Plans) shall be prepared in accordance with Condition 24 for these areas (Confirmed Biodiversity Areas).
1, 4, 5, 7	2	<p><b>Ecological Management Plan (EMP)</b></p> <p>(a) An EMP shall be prepared for any Confirmed Biodiversity Areas (confirmed through Condition 23) 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 (identified in <i>Schedule [2]<sup>2</sup>: Identified Biodiversity Areas</i>) as far as practicable. The EMP shall set out the methods that will be used to achieve the objective which may include:</p> <p>(i) If an EMP is required in accordance with Condition 23(b) for the presence of long tail bats:</p> <ul style="list-style-type: none"> <li>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.</li> <li>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;</li> <li>C. Details of areas where vegetation is to be retained where practicable for the purposes of the connectivity of long tail bats;</li> <li>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);</li> <li>E. Details of measures to minimise operational disturbance from light spill; and</li> <li>F. Details of where opportunities for advance restoration / mitigation planting have previously been identified and implemented.</li> </ul> <p>(ii) If an EMP is required in accordance with the Condition 23(b) for the presence of Threatened or At-Risk birds (excluding wetland birds):</p> <ul style="list-style-type: none"> <li>A. How the timing of any Construction Works shall be undertaken outside of the bird breeding season (September to February) where practicable; and</li> <li>B. Where works are required within the area identified in the Confirmed Biodiversity Area (identified in <i>Schedule [2]<sup>3</sup>: Identified Biodiversity Areas</i>) during the bird breeding season, methods to minimise adverse effects on Threatened or At-Risk birds.</li> </ul> <p>(iii) If an EMP is required in accordance with Condition 23(b) for the presence of Threatened or At-Risk wetland birds:</p> <ul style="list-style-type: none"> <li>A. How the timing of any Construction Works shall be undertaken outside of the bird breeding season (September to February) where practicable;</li> <li>B. Where works are required within the Confirmed Biodiversity Area (identified in <i>Schedule [2]<sup>4</sup>: Identified Biodiversity Areas</i>) during the bird season, methods to minimise adverse effects on Threatened or At-Risk wetland birds;</li> <li>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;</li> </ul>

<sup>2</sup> Schedule 2 for NoR 1 Drury West Arterial, NoR 4 Pukekohe North East Arterial, NoR 5 Pukekohe South East Arterial, NoR 7 Pukekohe North West Arterial

<sup>3</sup> Schedule 2 for NoR 1 Drury West Arterial, NoR 4 Pukekohe North East Arterial, NoR 5 Pukekohe South East Arterial, NoR 7 Pukekohe North West Arterial

<sup>4</sup> Schedule 2 for NoR 1 Drury West Arterial, NoR 4 Pukekohe North East Arterial, NoR 5 Pukekohe South East Arterial, NoR 7 Pukekohe North West Arterial



No R(s) )	No.	Condition
		<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> <ul style="list-style-type: none"> <li>ii. 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;</li> <li>iii. 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;</li> <li>iv. minimising the disturbance from the works if construction works are required within 50 m of a nest, as advised by a Suitably Qualified Person;</li> <li>v. adopting a 10m setback where practicable, between the edge of Wetlands and construction areas (along the edge of the stockpile/laydown area); and</li> <li>vi. minimising light spill from construction areas into wetlands.</li> </ul> <p><b>Advice Note:</b>  <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> <ul style="list-style-type: none"> <li>(i) Stream and/or wetland restoration plans;</li> <li>(ii) Vegetation restoration plans; and</li> <li>(iii) Fauna management plans (eg avifauna, herpetofauna, bats).</li> </ul>
3	2	<p><b>Ecological Management Plan (EMP)</b></p> <p>(a) An EMP shall be prepared for any Confirmed Biodiversity Areas (confirmed through Condition 23) 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 (identified in Schedule 2]<sup>5</sup>: Identified 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"> <li>(i) If an EMP is required in accordance with Condition 23(b) for the presence of long tail bats: <ul style="list-style-type: none"> <li>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.</li> <li>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;</li> <li>C. Details of areas where vegetation is to be retained where practicable for the purposes of the connectivity of long tail bats;</li> <li>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);</li> <li>E. Details of measures to minimise operational disturbance from light spill; and</li> <li>F. Details of where opportunities for advance restoration / mitigation planting have previously been identified and implemented.</li> </ul> </li> </ul> <p><b>Advice Note:</b>  <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> <ul style="list-style-type: none"> <li>(i) Stream and/or wetland restoration plans;</li> </ul>

<sup>5</sup> Schedule 2 for NoR 3 Paerata Connections

No R(s )	No.	Condition
		<p>(ii) <i>Vegetation restoration plans; and</i>            (iii) <i>Fauna management plans (eg avifauna, herpetofauna, bats).</i></p>
<b>5All</b>	<b>2</b>	<p><b>Tree Management Plan</b></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]<sup>6</sup>: Trees to be included in the Tree Management Plan.</i></p> <p>(b) The Tree Management Plan shall:</p> <ul style="list-style-type: none"> <li>(i) confirm that the trees listed in Schedule [3] still exist; and</li> <li>(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:           <ul style="list-style-type: none"> <li>A. planting to replace trees that require removal (with reference to the ULDMP planting design details in Condition 11);</li> <li>B. tree protection zones and tree protection measures such as protective fencing, ground protection and physical protection of roots, trunks and branches; and</li> <li>C. methods for work within the rootzone of trees that are to be retained in line with accepted arboricultural standards.</li> </ul> </li> <li>(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.</li> </ul>
<b>All</b>	<b>2</b>	<p><b>Network Utility Management Plan (NUMP)</b></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> <ul style="list-style-type: none"> <li>(i) provide access for maintenance at all reasonable times, or emergency works at all times during construction activities;</li> <li>(ii) protect and where necessary, relocate existing network utilities;</li> <li>(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</li> <li>(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.</li> </ul> <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>
<b>Operational Conditions</b>		
<b>All</b>	<b>2</b>	<p><b>Low Noise Road Surface</b></p> <p>(a) <u>Asphaltic mix surface shall be implemented within twelve months of completion of construction of the Project.</u></p> <p>(b) <u>The asphaltic mix surface shall be maintained to retain the noise reduction performance as far as practicable. <del>phallic concrete surfacing (or equivalent low noise road surface) shall be implemented within 12 months of Completion of Construction of the project</del></u></p>

<sup>6</sup> Schedule 3 for NoR 5 Pukekohe South East Arterial

No R(s)	No.	Condition
		<p><del>(c) Any future resurfacing works of the Project shall be undertaken in accordance with the Auckland Transport Reseal Guidelines, Asset Management and Systems 2013 or any updated version and asphaltic concrete surfacing (or equivalent low noise road surface) shall be implemented where:</del></p> <p><del>(i) The volume of traffic exceeds 10,000 vehicles per day; or</del></p> <p><del>(ii) The road is subject to high wear and tear (such as cul de sac heads, roundabouts and main road intersections); or</del></p> <p><del>(iii) It is in an industrial or commercial area where there is a high concentration of truck traffic; or</del></p> <p><del>It is subject to high usage by pedestrians, such as town centres, hospitals, shopping centres and schools.</del></p> <p><del>Prior to commencing any future resurfacing works, the Requiring Authority shall advise the Manager if any of the triggers in Condition 29(c)(i) – (iv) are not met by the road or a section of it and therefore where the application of asphaltic concrete surfacing (or equivalent low noise road surface) is no longer required on the road or a section of it. Such advice shall also indicate when any resealing is to occur.</del></p>
All		<p><b>Traffic Noise</b></p> <p>(a) For the purposes of Conditions 28 to 39:</p> <p>(b) Building-Modification Mitigation – has the same meaning as in NZS 6806;</p> <p>(c) Design year has the same meaning as in NZS 6806;</p> <p>(d) Detailed Mitigation Options – means the fully detailed design of the Selected Mitigation Options, with all practical issues addressed;</p> <p>(e) Habitable Space – has the same meaning as in NZS 6806;</p> <p>(f) Identified Noise Criteria Category – means the Noise Criteria Category for a PPF identified in <i>Schedule [3]<sup>7</sup>: Identified PPFs Noise Criteria Categories</i>;</p> <p>(g) Mitigation – has the same meaning as in NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;</p> <p>(h) 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>(i) NZS 6806 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;</p> <p>(j) Protected Premises and Facilities (PPFs) – means only the premises and facilities identified in green, orange or red in <i>Schedule [3]<sup>8</sup>: Identified PPFs Noise Criteria Categories</i>; (update to NZS 6806 definition of PPF)</p> <p>(k) Selected Mitigation Options – means the preferred mitigation option resulting from a Best Practicable Option assessment undertaken in accordance with NZS 6806 taking into account any low noise road surface to be implemented in accordance with Condition 27; and</p> <p>(l) Structural Mitigation – has the same meaning as in NZS 6806.</p>
All	2	<p>The Noise Criteria Categories identified in <i>Schedule [3]<sup>9</sup>: Identified PPFs Noise Criteria Categories</i> at each of the PPFs shall be achieved where practicable and subject to Conditions 27 to 39 (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 <u>Noise Criteria Categories above criteria</u> do not need to be complied with at a PPF where:</p> <p>(a) The PPF no longer exists; or Agreement of the landowner has been obtained confirming that the Noise Criteria Category does not need to be met.</p>

<sup>7</sup> Schedule 3 for NoR 1 Drury West Arterial, NoR 3 Paerata Connections, NoR 4 Pukekohe North East Arterial, NoR 7 Pukekohe North West Arterial; Schedule 4 for NoR 5 Pukekohe South East Arterial

<sup>8</sup> Schedule 3 for NoR 1 Drury West Arterial, NoR 3 Paerata Connections, NoR 4 Pukekohe North East Arterial, NoR 7 Pukekohe North West Arterial; Schedule 4 for NoR 5 Pukekohe South East Arterial

<sup>9</sup> Schedule 3 for NoR 1 Drury West Arterial, NoR 3 Paerata Connections, NoR 4 Pukekohe North East Arterial, NoR 7 Pukekohe North West Arterial; Schedule 4 for NoR 5 Pukekohe South East Arterial

No R(s )	No.	Condition
		Achievement of the <del>Noise Criteria Categories</del> 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.
All	2	As part of the detailed design of the Project, a Suitably Qualified Person shall determine the Selected Mitigation Options for the PPFs <del>identified on Schedule [3]<sup>10</sup>: Identified PPFs Noise Criteria Categories</del> .  <u>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) (unclear if should be in both AT and WK)</u>  <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>
All	3	Prior to construction of the Project, a Suitably Qualified Person shall develop the Detailed Mitigation Options for the PPFs <del>identified in Schedule [3]<sup>11</sup>: Identified PPFs Noise Criteria Categories</del> , taking into account the Selected Mitigation Options.  <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>
All	3	If the Detailed Mitigation Options would result in the <del>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</del> at any relevant PPF, compared to the design criteria of condition 28, 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 <del>accordance with NZS 6806</del> prior to implementation.
All	3	The Detailed Mitigation Options shall be implemented prior to completion of construction of the Project and, <del>where practicable and effective, prior to the commencement of construction with</del> the exception of <del>is</del> any low-noise road surfaces, which shall be implemented within twelve months of completion of construction.
All	3	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 <sub>Aeq(24h)</sub> inside Habitable Spaces ('Category C Buildings').
All	3	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.
All	3	For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition 34 above if:  (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

<sup>10</sup> Schedule 3 for NoR 1 Drury West Arterial, NoR 3 Paerata Connections, NoR 4 Pukekohe North East Arterial, NoR 7 Pukekohe North West Arterial; Schedule 4 for NoR 5 Pukekohe South East Arterial

<sup>11</sup> Schedule 3 for NoR 1 Drury West Arterial, NoR 3 Paerata Connections, NoR 4 Pukekohe North East Arterial, NoR 7 Pukekohe North West Arterial; Schedule 4 for NoR 5 Pukekohe South East Arterial

No R(s) )	No.	Condition
		<p>(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 <b>34</b> above (including where the owner did not respond within that period); or</p> <p>(d) The building owner cannot, after reasonable enquiry, be found prior to completion of construction of the Project.</p> <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>
<b>All</b>	<b>3</b>	<p>Subject to Condition <b>35</b> above, within six months of the assessment undertaken in accordance with Conditions <b>34</b> and <b>35</b>, the Requiring Authority shall write to the owner of each Category C Building advising:</p> <p>(a) If Building-Modification Mitigation is required to achieve 40 dB LAeq(24h) inside habitable spaces; and</p> <p>(b) The options available for Building-Modification Mitigation to the building, if required; and</p> <p>(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.</p>
<b>All</b>	<b>3</b>	<p>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.</p>
<b>All</b>	<b>3</b>	<p>Subject to Condition <b>35</b>, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition <b>37</b> if: The Requiring Authority has completed Building Modification Mitigation to the building; or</p> <p>(a) An alternative agreement for mitigation is reached between the Requiring Authority and the building owner; or</p> <p>(b) 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 <b>35</b> (including where the owner did not respond within that period); or</p> <p>(c) The building owner cannot, after reasonable enquiry, be found prior to completion of construction of the Project.</p>
<b>All</b>	<b>3</b>	<p>The Detailed Mitigation Options shall be maintained so they retain their noise reduction performance as far as practicable.</p>

