NZ TRANSPORT AGENCY
WAKA KOTAHI

TE ARA HAUĀURU
NORTHWEST RAPID TRANSIT

PART 4 – RESOURCE MANAGEMENT ACT 1991 APPROVALS

NZ TRANSPORT AGENCY WAKA KOTAHI

HELEN HICKS AND KARYN SINCLAIR

15 DECEMBER 2025

New Zealand Government

Qualifications and experience of the authors

Helen Hicks

My name is Helen Elizabeth Hicks. I am currently employed by AECOM New Zealand Limited as an Associate Director – NZ Planning Team Lead. I have a Master of Science from the University of Auckland and am a full member of the New Zealand Planning Institute. I have the International Association of Public Participation (IAP2) Accreditation and regularly partake in public and stakeholder consultation and engagement.

I am currently the Environment and Planning Lead for Te Ara Hauāuru Northwest Rapid Transit and have been working in the Project team since October 2024.

I have authored the assessment of effects on the environment sections 4 to 21 in this application and the recommendations for conditions on the statutory approvals.

I have over 17 years' experience as an environmental planner. In particular, I specialise in obtaining statutory approvals for infrastructure projects. I have worked in both the private and public sectors and have worked on a number of transport projects including:

- Pukekohe Transport Network (New Zealand Transport Agency (NZTA) and Auckland Transport) – for the Detailed Business Case and designations as part of Te Tupu Ngātahi Supporting Growth Alliance.
- Drury Arterial Network (NZTA and Auckland Transport) – Detailed Business Case and designations as part of Te Tupu Ngātahi Supporting Growth Alliance.
- South Auckland Indicative Business Case (NZTA and Auckland Transport) – identifying the strategic transport network for the South Auckland growth areas.
- Additional Waitematā Harbour Crossing (NZTA).
- NZTA Loop Road (Whangārei) (NZTA).
- SeaPath (NZTA) – a proposed walking and cycling connection.

Karyn Sinclair

My name is Karyn Joy Sinclair. I am currently a Senior Principal Planner at Jacobs NZ Ltd. I have a Bachelor of Social Science from Waikato University and a Bachelor of Town Planning from Auckland University. I am a Fellow of the New Zealand Planning Institute and hold a certificate in Making Good Decisions (Chairs endorsement).

I was the Environment and Planning Lead for Te Ara Hauāuru Northwest Rapid Transit until September 2024. I have authored the statutory assessment section 22 and the summary of the assessment of alternatives in section 3.3.1 of this application.

I have over 35 years' experience primarily in infrastructure planning and consenting and as an Independent Commissioner. I have worked in both the public and the private sector and have worked on a number of infrastructure projects including:

- Environmental and Planning lead for Northwest Rapid Transit business case (June 2023 to October 2024).
- Planning and property lead on Eastern Busway.
- Planning team lead on Warkworth to Te Hana (consented as Warkworth to Wellsford) Roads of National Significance (RoNS).
- Planning team lead and lead witness for Pūhoi to Warkworth RoNS.
- Planning team lead on North Harbour Watermain (NH2) and lead planning witness for NH2 and Northern Interceptor.
- Planning lead and lead planning witness for Vector (then Mercury) tunnel.

Although this matter is not before the Environment Court, we confirm that we have read the Code of Conduct for expert witnesses as contained in section 9 of the Environment Court Practice Note 2023. We agree to

comply with that Code. Our qualifications as experts are set out above. We are satisfied that the matters which we address in this report are within our area of expertise, except where we state that we are relying on information provided by another person or expert. We have not omitted to consider material facts known to us.

Contents

Appendices

Acronyms and abbreviations

Acronym/abbreviation	Definition
AEE	Assessment of Environmental Effects
AEP	Annual Exceedance Probability
Application	This Fast-track Approvals Act 2024 application for resource consents, designations and archaeological authorities for the Northwest Rapid Transit Project
ARI	Average recurrence interval
AT	Auckland Transport (or successor organisation)
AUP	Auckland Unitary Plan (Operative in Part)
BHCMP	Built Heritage Construction Management Plan
BPO	Best Practicable Option
CCMP	Coastal Construction Management Plan
CIA	Cultural Impact Assessment
CMA	Coastal Marine Area
CNVMP	Construction Noise and Vibration Management Plan
Council	Auckland Council
CSMP	Contaminated Land Management Plan
CTMP	Construction Traffic Management Plan
CVS	Cultural Values Statement
dB	Decibel
DBC	Detailed Business Case
DSI	Detailed Site Investigation
EIANZ	Environment Institute of Australia and New Zealand
EPO	Emerging Preferred Option
ESC	Erosion and Sediment Control
ESCP	Erosion and Sediment Control Plan
FTAA	Fast-track Approvals Act 2024
FUZ	Future Urban Zone
GD05	Auckland Council Guideline Document 05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region
GPS	Government Policy Statement on Land Transport 2024
Ha	Hectares
HAIL	Hazardous Activities and Industries List
HHA	Historic Heritage Area
HNZPT	Heritage New Zealand Pouhere Taonga
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
IBC	Indicative Business Case
IWG	Iwi Working Group
km	Kilometre(s)
km2	Square kilometres
km/h	Kilometers per hour
LAeq	Ambient average sound level in decibels (A-weighted, equivalent)
m	Metre(s)
m2	Square metres

Acronym/abbreviation	Definition
m3	Metres cubed
m/s	Metres/second
MACAA	Marine and Coastal Area (Takutai Moana) Act 2011
MCA	Multi Criteria Assessment
NES	National Environmental Standard
NES:CS	Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011
NES:F	National Environmental Standard for Freshwater 2020
NLTF	National Land Transport Fund
NoR	Notice of Requirement
NoR 1	Busway between Brigham Creek Rarawaru Station and north of Westgate Te Waiarohia Station (including stations, park and ride and all local road connections)
NoR 2	Busway between north of Westgate Te Waiarohia Station and north of Royal Road Mānutewhau station (including stations, park and ride and all local road connections)
NoR 3	Busway between Royal Road Mānutewhau Station and Te Whau River (including all stations and local road connections)
NoR 4	Brigham Creek Rarawaru station and Park and Ride
NoR 5	Westgate Te Waiarohia station
NoR 6	Royal Road Mānutewhau station
NoR 7	Lincoln Road Wai o Pareira station
NoR 8	Te Atatū Ōrangihina Station
NoR 9	Busway between Waterview interchange and west of Ivanhoe Road (including all stations and local road connections)
NoR 10	Busway between Ivanhoe Road and Ian McKinnon Drive (including all stations and local road connections
NoR 11	Point Chevalier station
NoR 12	Western Springs station
NPS	National Policy Statement
NPS-FM	National Policy Statement for Freshwater Management 2020 (as amended October 2024)
NPS-HPL	National Policy Statement for Highly Productive Land 2022
NPS-IB	National Policy Statement for Indigenous Biodiversity 2023
NPS-UD	National Policy Statement for Urban Development 2020
NUO	Network Utility Operator
NZCPS	New Zealand Coastal Policy Statement
NZS 6806	New Zealand Standards 6806:2010 Acoustics – Road traffic noise – New and altered roads
NZTA	New Zealand Transport Agency Waka Kotahi
ONF	Outstanding Natural Feature
Outline Plan	Outline Plan of Work
Part 2	Part 2 (The Project) of this Application
Part 3	Part 3 (Project Benefits) of this Application
Part 5	Part 5 (Heritage New Zealand Pouhere Taonga Act Approvals) of this Application
Part 6	Part 6 (Drawings and Attachments) of this Application
PC120	Proposed Plan Change 120
PPF	Protected Premise Facility in accordance with NZS 6806:2010
Project	Te Ara Hauāuru – Northwest Rapid Transit Project
Project Area	The Proposed Designation and the extent of the coastal occupation permits sought

Acronym/abbreviation	Definition
Proposed Designation	The area defined by the Proposed Designation boundary as shown on the Proposed Designation Plans in Part 6
PSI	Preliminary Site Investigation
PWA	Public Works Act 1981
RLTP	Regional Land Transport Plan
RMA	Resource Management Act 1991
RoNS	Roads of National Significance
RPS	Regional Policy Statement
SCA	Special Character Area
SEA	Significant Ecological Areas
SQP	Suitably Qualified Person
SH16	State Highway 16

Defined terms

Term	Definition
Application	Application for resource consents, designation and archaeological approvals
BPO	Means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to: a. the nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects b. the financial implications, and the effects on the environment, of that option when compared with other options c. the current state of technical knowledge and the likelihood that the option can be successfully applied.
Coastal Environment	The CMA and the land landward of the CMA, as identified on the AUP plans
Completion of Construction	When construction of the Project (or part of the Project) is complete and it is available for use
Consents	The resource consents to authorise the Project
Flood Danger Rating	A flood risk rating determined by the assessment process outlined in Framework for Assessing Flood Risk at the Property-level (Auckland Council, August 2025)
Indicative Design	The indicative design of the Project within the Project Area as shown on the Indicative Design drawings in Part 6 that will be confirmed during detailed design
Manager	The Manager – Resource Consents of Council, or authorised delegate
Network Utility Operator	Has the same meaning as set out in section 166 of the RMA
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA
Project	Te Ara Hauāuru Northwest Rapid Transit
Project Area	The Proposed Designation and the extent of the coastal occupation permits sought
Proposed Designation	The area defined by the Proposed Designation boundary as shown on the Proposed Designation Plans in Part 6
Requiring Authority	NZ Transport Agency
SQP	Suitably Qualified Person – a person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence in the relevant field of expertise

1. Introduction

1.1 Notices of Requirement

This document (Part 4 of the Application) has been prepared to meet the relevant requirements of the Fast-track Approvals Act 2024 (FTAA) in relation to approvals under the Resource Management Act 1991 (RMA). It constitutes an assessment of the activity's effects on the environment as set out in Schedule 5 Clause 6 of the FTAA for resource consents and designations (Proposed Designations) for The Project. The Project's strategic context, background and need are described in Parts 2 and 3 of the Application and are not repeated here.

1.1.1 Requiring authority status

A notice of requirement (NoR) for a designation may only be given by a requiring authority. Section 166 of the RMA defines a requiring authority as:

"(a) a Minister of the Crown; or

(b) a local authority; or

(c) a network utility operator approved as a requiring authority under section 167."

NZTA is a network utility operator approved as a requiring authority under section 167(3) of the RMA for:

- constructing or operating (or proposing to construct or operate) (including maintaining, replacing, upgrading, improving, enhancing, expanding, realigning, and altering) rapid transit networks and projects and their ancillary structures, works and activities on a mode-neutral basis (either road or rail or both).[1]
- construction and operation (including the maintenance, improvement, enhancement, expansion, realignment and alteration) of any state highway or motorway.[2]
- constructing or operating (or proposing to construct or operate) and maintaining cycleways and shared paths.[3]

NZTA is the requiring authority for the Proposed Designations.

1.1.2 The Proposed Designations

To enable the construction, operation and maintenance of the Project, NZTA seeks twelve designations. The extent of the Proposed Designations (the area defined by the Proposed Designation boundary as shown on the Proposed Designation Plans in Part 6). is sufficient to construct, operate and maintain the Project. It includes (but is not limited to) areas for construction sites, compounds, access routes, stormwater infrastructure and other features required to appropriately manage effects.

The purpose of the Proposed Designations is to construct, operate, maintain, and improve a rapid transit corridor, and ancillary structures, works and activities.

The Proposed Designations are shown on the designation plans attached in Part 6. An overview of the NoRs is provided below in Figure 1-1 and Figure 1-2 and described in Table 1-1. The NoRs have been determined to allow flexibility in procurement, construction staging and to enable the transfer of stations to a subsequent operator (if needed in future).

---

[1] The Resource Management (Approval of NZ Transport Agency as a Requiring Authority) Notice 2023 (as published in the *New Zealand Gazette*, 18 September 2023, Notice No. 4371) .https://gazette.govt.nz/notice/id/2023-go4371

[2] The Resource Management (Approval of Transit New Zealand as Requiring Authority) Order 1992, The Resource Management (Approval of Transit New Zealand as Requiring Authority) Notice 1994 (as published in the New Zealand Gazette, 3 March 1994, No. 20, page 978) https://web.archive.org/web/20160211090608/https://www.gazette.govt.nz/notice/id/1994-go1500

[3]The Resource Management (Approval of NZ Transport Agency as a Requiring Authority) Notice 2015 (as published in the New Zealand Gazette, 19 November 2015, Issue No. 126, Notice No. 106) https://gazette.govt.nz/notice/id/2015-go6742

Table 1-1: NoRs for the Project

NOR number	Description
NoR 1	Busway between Brigham Creek Rarawaru station and north of Westgate Te Waiarohia station (including stations, Park and Ride and all local road connections)
NoR 2	Busway between north of Westgate Te Waiarohia station and north of Royal Road Mānutewhau station (including stations, Park and Ride and all local road connections)
NoR 3	Busway between Royal Road Mānutewhau Station and Te Whau River (including all stations and local road connections)
NoR 4	Brigham Creek Rarawaru station including Park and Ride
NoR 5	Westgate Te Waiarohia station
NoR 6	Royal Road Mānutewhau station
NoR 7	Lincoln Road Wai o Pareira station
NoR 8	Te Atatū Ōrangihina station
NoR 9	Busway between Waterview interchange and west of Ivanhoe Road (including all stations and local road connections)
NoR 10	Busway between Ivanhoe Road and Ian McKinnon Drive (including all stations and local road connections)
NoR 11	Point Chevalier station
NoR 12	Western Springs station

Figure 1-1: Proposed Designations overview – West

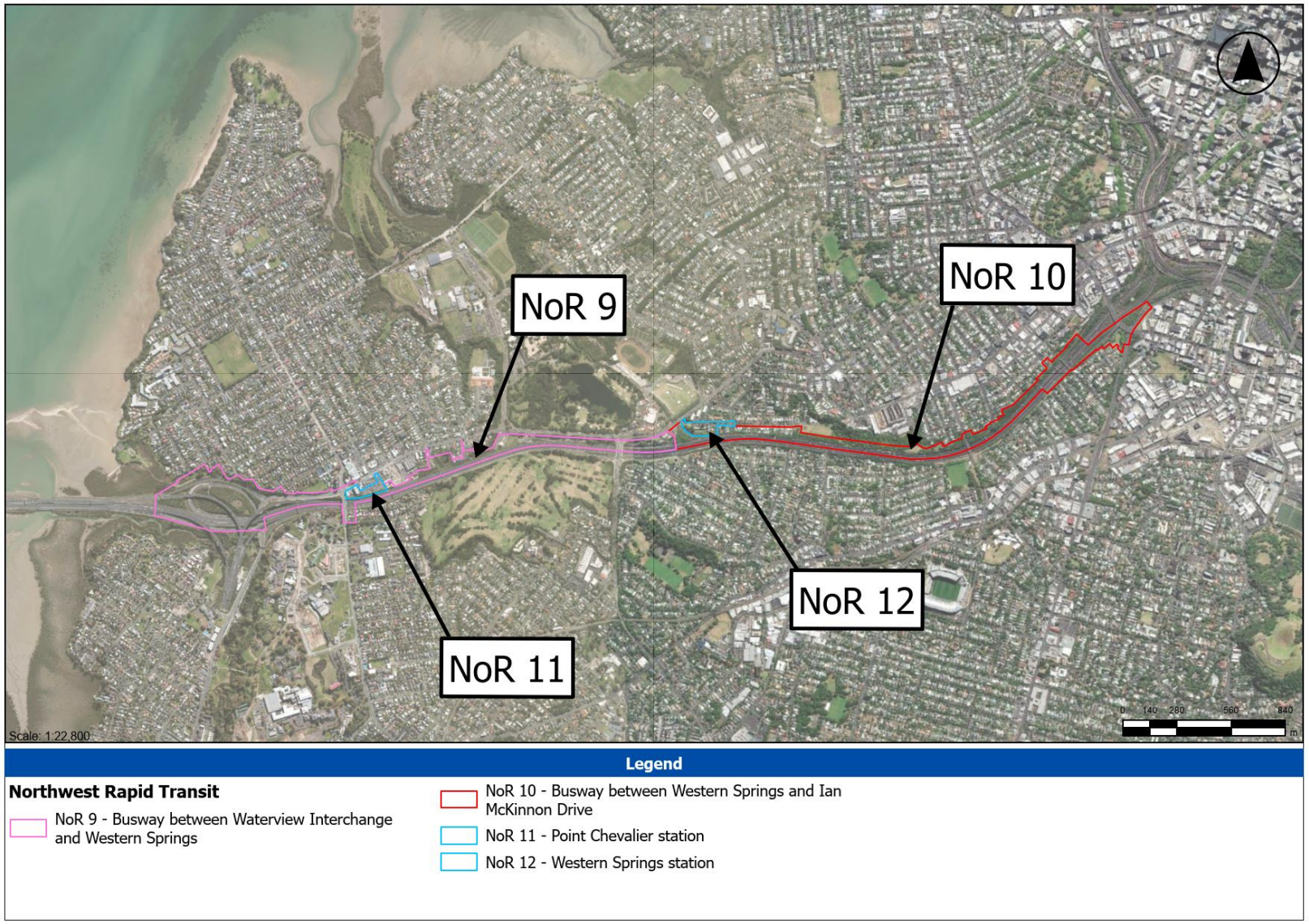


Figure 1-2: Proposed Designations overview – East

1.2 Resource consents

NZTA seeks all necessary resource consents required to construct, operate and maintain the Project (excluding consents under regulation 45 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020). Table 1-1 sets out the resource consents sought in this Application for the Project.

Table 1-2: Resource consents sought

Resource consent	Proposed lapse date	Proposed expiry date
Land disturbance activity		
Land use consents (s.9(1)) Disturbance of potentially contaminated material (NES:CS)	25 years	Unlimited duration
Land use consents (s.9(2)) – Earthworks, vegetation alteration and removal	25 years	Unlimited duration
Coastal consents and permits		
Coastal marine area (s.12) Construction and use of structures (including temporary occupation for construction) in the coastal marine area. Occupation of the seabed and ancillary activities at Wai-o-Pareira / Henderson Creek and Huruhuru Creek such as disturbance of substrate and alternation or removal of mangroves.	25 years	35 years from the date of commencement
Works in watercourses		
Land use (s.13) New or upgraded structures in, on, under or over the bed of rivers, streams (including intermittent streams) works in watercourses, structures, stormwater infrastructure, erosion protection and temporary diversions. Placement, use, alteration or reconstruction of a culvert in, on, or over the bed of a river (NES:F).	25 years	35 years from date of commencement
Diversion of water		
Water permit (s.14) Diversion of groundwater and dewatering during construction, diversion of stormwater associated with new permanent impervious structures, diversion of stormwater associated with new permanent impervious structures.	25 years	35 years from date of commencement
Discharge of stormwater		
Land use (s.9(2)) Development of all new impervious surfaces for high use roads and carparking at Brigham Creek.	25 years	Unlimited duration
Discharge permit (s.15) Discharge of stormwater runoff from new impervious surfaces into or onto land or water within the Project Area including busway, stations and park and ride, updates to local roads and new and upgrades of stormwater infrastructure. Other discharges of contaminants (from contaminated land) into air, or into water, or onto land.	25 years	35 years from date of commencement

Overall the consents are sought as discretionary activities.

It is intended that the exercise of these consents can be undertaken in stages, as procurement allows and as such the proposed conditions of consent will apply to all delivery stages (if relevant) unless specifically noted to apply to a geographical area.

1.2.1 No existing consents – section 30(3)

Auckland Council has jurisdiction over the area where the approvals are sought. NZTA notified Auckland Council, in accordance with section 30(3) of the FTAA of its intention to apply for approvals under the FTAA on 24 September 2025. NZTA sought confirmation that there are no existing resource consents of the kind referred to in s30(3)(a) being existing consents under section 124C(1)(c) or 165ZI of the RMA. This check is undertaken to ensure the approvals sought do not compete with the use of natural resources authorised to

another consent holder, or if the subject activity could not be carried out until the expiry of the existing consent for the same natural resource.

On 8 December 2025, Auckland Council confirmed that there are no existing resource consents in the Project Area (the Proposed Designation and the extent of the coastal occupation permits sought), to which section 30(3)(a) of the FTAA applies. The letter received confirming this is attached in Part 6.

2. Structure and approach of this AEE

2.1 Structure

This document provides an assessment of effects on the environment as required by Schedule 5, clause 4 of the FTAA. This document also provides information to satisfy the requirement in Schedule 5, clause 12(b) for a Notice of Requirement.

Section 3 outlines the statutory context for the Project and RMA approvals sought. A thematic assessment against the relevant matters of national and regional planning documents is provided in Section 22.3.

-A summary of the actual and potential effects of the Project is in Table 21-1. Where there are recommended conditions of consent for the Proposed Designations and resource consents, these are provided in Appendix A and Appendix B in response to the effects identified in this AEE.

2.2 Approach to design and assessment of effects

This AEE and the supporting technical specialist reports (provided in Part 6) are based on comprehensive investigations. These have helped identify an appropriate corridor and Indicative Design (the indicative design of the Project within the Project Area as shown on the Indicative Design drawings in Part 6 that will be confirmed during detailed design). These investigations included environmental and engineering assessments, public and stakeholder consultation, and iterative design refinement to address environmental constraints. The resulting proposal has adverse effects that in my opinion are minor or are able to be appropriately mitigated within the boundaries of the Site and conditions recommended on the Proposed Designations and resource consents.

The Indicative Design can be constructed within the Site, including all ancillary components, such as construction laydown spaces and stormwater infrastructure. The final design of the Project will be confirmed at the detailed design stage, and will comply with the conditions of consent and Proposed Designations. A future Outline Plan process will be undertaken as provided for in section 176A of the RMA. Outline plans for the Project will likely be submitted in stages to reflect the staged implementation of construction.

The technical assessment reports have been prepared to reflect an assessment of the Indicative Design, and include sensitivity testing for alternate positions and arrangements within the Proposed Designation. While I do not provide an overview of every specialist's sensitivity testing in the following summaries of potential effects, I am satisfied that the conditions proposed for the resource consents and the Proposed Designation are sufficient to avoid, remedy and mitigate any effects that may arise from changes in design and alignment within the Proposed Designation and extent of coastal permits.

3. Statutory context

3.1 Government Policy Statement on Land Transport 2024

The Government Policy Statement (GPS) on Land Transport 2024-34[4], outlines strategic priorities for the next decade, including major public transport Projects like Northwest Rapid Transit. The GPS on Land Transport influences decisions on how the National Land Transport Fund (NLTF) is invested and sets the direction for the types of transport activities that should be included in Regional Land Transport Plans (RLTPs) to receive funding.

The Project is identified as a priority rapid transit project for the Government within the public transport funding activity class.

The key strategic priorities of the GPS include:

- economic growth and productivity (the overarching strategic priority);
- increased maintenance and resilience;
- safety; and
- value for money.

The Project strongly aligns with the priority of supporting economic growth and productivity through delivering a rapid transit corridor that provides an efficient public transport connection between residential growth areas and areas of employment.

The GPS sets an expectation to consider alternative funding sources to deliver the design, consenting, property acquisition and construction phases of the Project. The development of the Project is expected to focus on delivery of the primary transport objectives that most cost-effectively deliver on the strategic priorities in the GPS.

3.2 Fast-track Approvals Act 2024

The Project is listed in Schedule 2 of the FTAA.

Schedule 5, clauses 5 and 12 set out the information to be submitted with consent applications and Proposed Designations respectively. This Part (Part 4) addresses information required by Clause 5(1)(g) and (h) and Clause 12(1)(b), (d), (g) and (h).

A summary of policy and planning documents relevant to the resource consent applications and the Proposed Designations sought is provided below. The assessment of the Project against the relevant documents is provided in Section 22.

3.2.1 Part 2 Resource Management Act 1991 matters

The FTAA requires an assessment against sections 5, 6 and 7 of the RMA, summarised as follows:

- **Section 5** – The purpose of the RMA is to promote the sustainable management of natural and physical resources, whilst:
  - sustaining the potential of natural and physical resources for future generations;
  - safeguarding the life supporting capacity of air, water, soil and ecosystems; and
  - and avoiding, remedying or mitigating any adverse effects on the environment.
- **Section 6** sets out the matters of national importance, including recognising and providing for:
  - protection of outstanding natural features from inappropriate use and development;
  - protection of areas of significant indigenous vegetation and habitats for indigenous fauna;

[4] https://www.transport.govt.nz/assets/Uploads/Government-Policy-Statement-on-land-transport-2024-FINAL.pdf

- the relationship of Māori and their culture and traditions with water, sites, waahi tapu and other taonga;
- protection of historic heritage from inappropriate use; and
- development and management of significant risks from natural hazards.

- **Section 7** requires particular regard is had to
  - Kaitiakitanga;
  - efficient use and development of natural and physical resources; and
  - the maintenance and enhancement of amenity values and the quality of the environment.

3.2.2 National policy statements

The relevant National Policy Statements (NPS) to this Application are:

- NPS for Urban Development (NPS-UD).
- NPS for Freshwater Management (NPS-FM); and
- NPS for Indigenous Biodiversity (NPS-IB).

3.2.3 New Zealand Coastal Policy Statement

Two bridges over the CMA are proposed for the Project. In order to construct the bridges, some disturbance of the CMA will be required for earthworks and vegetation clearance. The New Zealand Coastal Policy Statement (NZCPS) is therefore relevant to this Application, and I have provided an assessment against the relevant provisions of the NZCPS below in Section 22.

3.2.4 Regional Policy Statement

The relevant provisions of the Auckland Regional Policy Statement (RPS) are assessed in Section 22 below.

3.2.5 Plan or proposed plan

The relevant objectives and policies of the Auckland Unitary Plan (Operative in Part) (AUP) are assessed in Section 22 below.

3.2.6 Planning document recognised by a relevant iwi authority and lodged with a local authority

Two Iwi Management Plans recognised by Auckland Council may be relevant to the Project and Project Area. An assessment of these is provided in Part 2 of the Application.

3.3 Designations

This section provides an outline of the consideration of alternative sites, routes, or methods of undertaking the Project, and an assessment of whether the Project and Proposed Designations sought are reasonably necessary for achieving the objectives of the requiring authority.

3.3.1 Consideration of Alternatives (Schedule 5, cl12(1)(h))

3.3.1.1 Background

- Indicative Business Case and Detailed Business Case:
  - Auckland Transport (2018) Northwest Rapid Transit Corridor Indicative Business Case (IBC).
  - Auckland Transport (2021) IBC Appendix B6: Westgate Station Options Assessment Report (Westgate IBC); and

- Auckland Transport (2021) Northwest Bus Improvements – Brigham Creek Interchange Detailed Business Case (Brigham Creek DBC).

- Investment Case:
  - NZTA (2025) Northwest Rapid Transit Investment Case Options Assessment Report.

3.3.1.2 Process

The Indicative Design for the Project has been selected following a comprehensive, robust and consistent process of option development, evaluation and refinement. A variety of methods and tools have been used to evaluate alternatives including:

- Investment framework developed for the Project;
- Engagement with iwi as Project partners;
- Technical specialist evaluations;
- Multi criteria analysis (MCA) investment framework.

A MCA tool was developed at the beginning of the investment case process to evaluate and compare different options against multiple criteria (quantitative or qualitative). It assists decision makers to understand what options deliver benefits, meet objectives, and/or result in potentially significant adverse effects. A MCA framework was used to evaluate mode alternatives, broad corridor alternatives and alignment alternatives, to inform the decision on an Emerging Preferred Option (EPO). The EPO was then subject to further MCA and refinement as this application was prepared.

3.3.1.3 MCA assessment criteria

The MCA processes were led by the Project team. The assessment criteria included:

- Project objective and benefits;
- Alignment with the GPS including optimising existing assets, flexibility, stageability and early benefits realisation;
- Technical feasibility including utility challenges, constructability, structures and geotechnical considerations'
- Cost and value for money;
- Consentability; and
- Property.

Specialist environmental advice was provided by independent subject matter experts (SMEs) on the following topics:

- Noise and vibration;
- Landscape and visual;
- Ecology (terrestrial, freshwater, marine ecology and avifauna);
- Archaeology and built heritage;
- Stormwater and flooding; and
- Social and open space

All evaluations were undertaken using a consistent approach following the MCA framework in Table 3-1.

Table 3-1: Investment MCA framework

Category		Criterion	KPI	Description
	Sieve 1: Objective	Enable bus rapid transit between	Improved travel times	Overall travel time savings for people on public transport and for general traffic.

Category		Criterion	KPI	Description
	and benefits	Brigham Creek Road and Auckland City Centre[5]	Increased corridor capacity and throughput	Extent to which the option provides capacity to meet demand in 2051.
			Improved travel reliability	Proportion of segregated/uninterrupted running.
			Improved user experience	Extent to which the option attracts customers.
			Increased public transport mode share	Percentage mode share of public transport based on likely impact on boardings.
			Increased public transport ridership	
			Increased opportunity for residential and employment growth	Growth and uplift potential (developable land area, extent of NPS-UD upzoning, and likelihood of development within MSM[6] catchment).
	Sieve 2: Critical success factors	Deliver on strategic priorities quickly, efficiently and effectively	Optimise use of existing assets	Extent to which the option optimises use of existing transport network, infrastructure, connections and services
			Flexible, stageable and focused on early benefit realisation	Ability to implement sections of the corridor in a staged (and flexible) manner and realise benefits early.
			Technically feasible	Extent that physical constraints (e.g., geology and topography), technical complexity, risk and constructability significantly constrain an option.
			Value for money	Level of benefits the option achieves compared to the total estimated cost.
	Sieve 3: Effects categories	Property		Qualitative and quantitative assessments of impacts on property. Can the necessary property rights be obtained? Quantitative assessment of area of land impact, area of land affected by zoning, number of properties and types of acquisition required.
		Noise		Qualitative assessment of construction and operational noise effects on sensitive receptors.
		Vibration		Qualitative assessment of construction and operational vibration effects.
		Landscape and visual		Qualitative assessment of operational effects on landscape and visual values.
		Terrestrial ecology		Qualitative assessment of construction impacts on terrestrial ecology during construction.
		Freshwater ecology		Qualitative assessment of construction impacts on freshwater ecology during construction.
		Marine ecology and coastal avifauna		Qualitative assessment of construction impacts on marine ecology and coastal avifauna.
		Avifauna		Qualitative assessment of construction impacts on avifauna.
		Archaeology and built heritage		Qualitative assessment of potential impacts on pre-European Māori archaeology, pre-1900 European archaeology and 20th century historic heritage.
		Social and open space/community facilities		Qualitative assessment of potential impacts on identified open spaces/recreation areas and community facilities (including consideration of recreational value for the community).

MCA scoring system

[5] Note that Sieve 1 of the Investment Framework was updated to refer to enabling '***bus** rapid transit*' following the recommendations of the mode options assessment process which is summarised in Section 3 of this report.

[6] MSM is Macro Strategic Model

A three-point scale (Red, Amber, Green (RAG)) scoring system was used for the mode, corridor and station catchment MCA assessments. The three-point scale is summarised in Table 3-2.

Table 3-2: Three-point scoring system (red, amber, green)

Magnitude	Definition	Score
Aligns with criterion / least impact	Meets investment objective. Supports going forward to develop alignment options **OR** has least technical complexity, impacts, or cost compared to do-minimum.	Green
Neutral / moderate impact	May meet investment objective. Supports going forward to develop alignment options **OR** has moderate technical complexity, impacts or cost compared to do-minimum.	Amber
Does not align with criterion / most impact	Does not meet investment objective. Discounted and not taken forward to develop alignment options **OR** has highest technical complexity, impacts or cost compared to the do-minimum.	Red

As the option development and assessment became more granular, a seven-point scale was used for the assessment of form, city centre connection location, station position, alignment and alignment refinement options. The seven-point scale ranges from '-3' to show a large negative outcome/impact on a particular criterion, to '+3' to show a large positive outcome/impact. The 'do-minimum scenario' provided a baseline against which all options were assessed and was represented by a 'neutral/negligible' ('0') score against each of the criterion. Where typical mitigation is a routine part of any project (e.g., stormwater treatment for water quality, or noise walls), it was assumed as part of the evaluations for the effects categories. The more granular scoring system is summarised in Table 3-3.

Table 3-3: Seven-point scoring scale

Magnitude	Definition	Score
Large positive	Major positive impacts resulting in substantial and long-term improvements or enhancements of the existing environment.	3
Moderate positive	Moderate positive impact, possibly of short-, medium- or long-term duration. Positive impacts may be in terms of new opportunities and outcomes of enhancement or improvement.	2
Minor positive	Minimal positive impact, possibly only lasting over the short term. May be confined to a limited area.	1
Neutral/negligible	Neutral – no discernible or predicted positive or negative impact. Counterfactual could be the do-minimum.	0
Minor negative	Minimal negative impact, possibly only lasting over the short term, and able to be managed or mitigated. May be confined to a small area.	-1
Moderate negative	Moderate negative impact. Impacts may be short-, medium- or long-term and are highly likely to respond to management actions.	-2
Large negative	Impacts with serious, long-term and possibly irreversible effect leading to serious damage, degradation or deterioration of the physical, economic, cultural or social environment. Required major rescope of concept, design, location and justification, or requires major commitment to extensive management strategies to mitigate the effect.	-3

Sequential assessment

The alternatives evaluation process followed a deliberate sequence to ensure that the big picture decisions were made ahead of the more site-specific decisions. The following sequence in Figure 3-1 was followed.

Figure 3-1: Alternatives assessment sequence

The discussion below follows the sequence of decision making in relation to alternatives.

3.3.1.4 Mode options

Two key types of alternative modes were identified:

- triggers to manage land use, demand management and productivity type options (such as land use change to influence employment), demand management/public transport fare pricing and capacity management (e.g. T2/T3 lane allocation); and

- public transport infrastructure options.

The former grouping was discontinued after the long list process as the options did not pass Sieve 1. The public transport infrastructure options were then assessed against Sieve 2.

The public transport options considered were:

- enhanced bus lanes;
- fully separated busway;
- light rail;
- light metro;
- passenger rail SH16/new alignment; and
- a rope-based system (e.g. gondolas).

The bus-based solutions were assessed as providing value for money. The light rail, light metro, passenger rail and a rope-based system options delivered poor value for money especially as they could not be delivered in a staged manner.

Based on the mode assessment, a bus-based solution was identified as the preferred mode for the Project.

3.3.1.5 Corridor options

The corridor options considered were:

- Option 1: SH16; and
- Option 2: Arterial network.

The corridor options are shown in Figure 3-2.

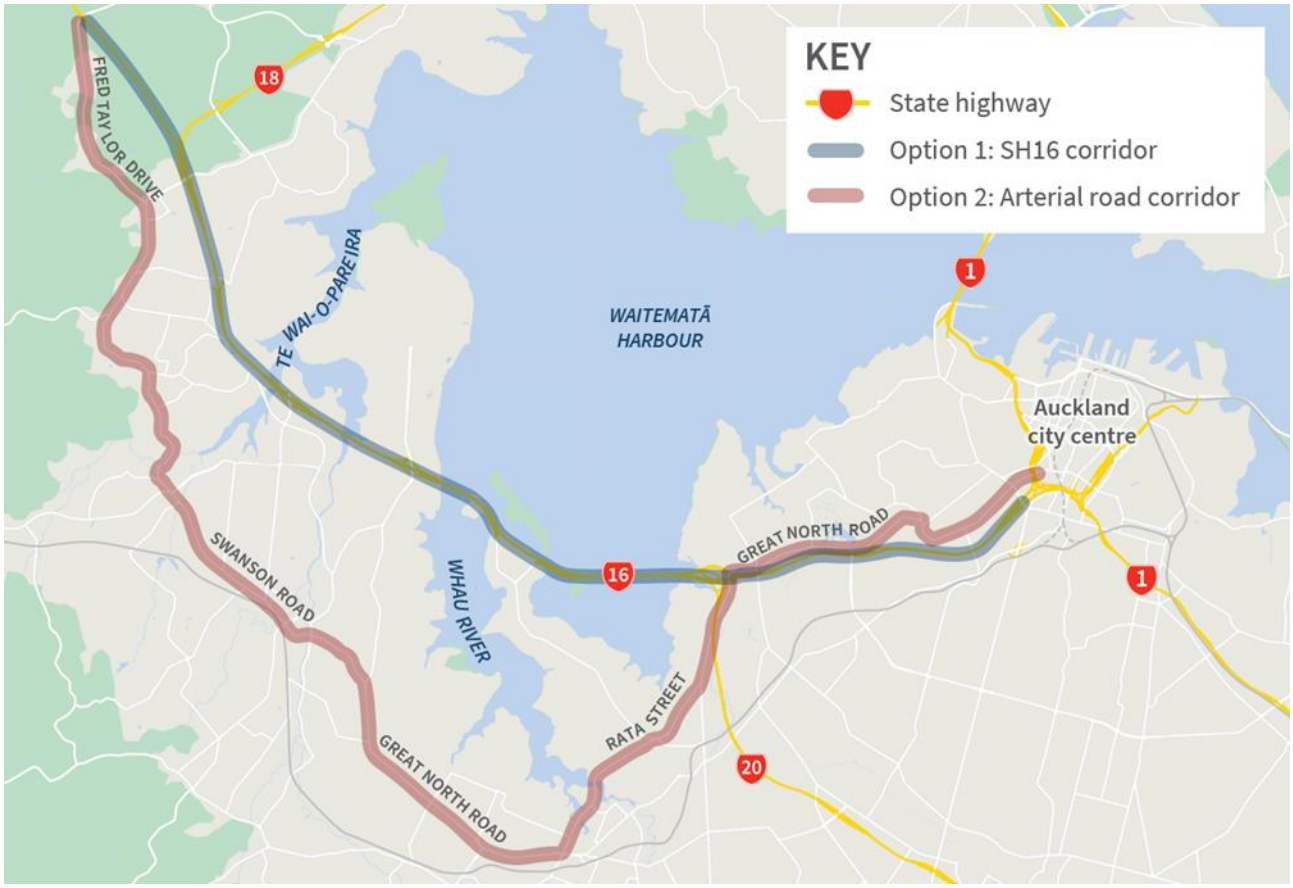


Figure 3-2: Corridor options developed for assessment

Option 1 (SH16 corridor) was progressed. Option 2 (arterial road corridor) was not preferred as it would not achieve any of the Sieve 1 KPIs.

3.3.1.6 Form (alignment within corridor) options

The form options assessed were:

- Form Option 1: Enhanced shoulder running along SH16 plus grade separated interchanges
- Form Option 2: Reallocation of a SH16 motorway lane in each direction to provide a bus lane plus largely grade separated interchanges
- Form Option 3: Widening of SH16 for bus lanes and separate shoulders in each direction
- Form Option 4: Dedicated two-way busway alongside SH16, including three sub-options:
  - Option 4A: North side busway
  - Option 4B: South side busway
  - Option 4C: Central busway

The form assessment was undertaken across four geographic areas of the alignment, as follows:

- City centre fringe to Waterview;
- Waterview to Te Atatū;
- Te Atatū to Westgate; and
- Westgate to Brigham Creek.

Form Options 1, 2 and 3 were not progressed as they did not deliver well against the benefit KPIs with the exception of the section between Te Atatū and Waterview discussed below. Option 4C was not progressed as it did not meet the Sieve 2 critical success factors and did not provide value for money.

A segregated north side busway (Option 4A) for the Waterview to city centre section and a segregated south side (option 4B) busway from Te Atatū to Brigham Creek were identified as the preferred form options as those options will deliver well against the Sieve 1 KPIs and will provide good value for money.

Enhanced shoulder running (Option 1) was identified as the preferred form option between Te Atatū and Waterview as there is a travel time saving when compared to the continued use of the existing motorway lanes, and it makes good use of existing assets and can be delivered early, delivers good value for money (with low benefits overall but for a low relative cost), particularly given the requirement to upgrade the causeway in the future to address settlement issues and sea-level rise and avoids reclamation into the CMA and the ecological impacts that would have.

3.3.1.7 City centre connection options

The city centre connection considered options for integrating the Project with city centre bus routes. These options do not involve works beyond existing road reserve, are not within the Proposed Designation, and are not discussed any further in this document.

3.3.1.8 Station catchment options

Stations are key to the success of any rapid transit service. Station catchment locations for the Project were determined though catchment analysis based on:

- Strategic and spatial planning intent and the capacity of the area to develop to medium/high density Recent population and employment growth forecasts;
- Market trends and development potential (including numbers of subdivisions and building consents);
- Importance of interchange function with other bus services;
- Proximity to established and developing centres (including neighbourhood, town, or metropolitan centres); and
- Walkable catchments.

The stations catchment options that were assessed but not preferred were:

- Westgate South;
- Lincoln Park;
- Flanshaw;
- Rosebank; and
- Bond Street.

The station catchment options included in the EPO are:

- Brigham Creek;
- Westgate;
- Royal Road;
- Lincoln Road;
- Te Atatū;
- Point Chevalier; and
- Western Springs.

3.3.1.9 Station position options

This part of the assessment focused on where within the preferred catchments each station could be located.

3.3.1.9.1 Brigham Creek Rarawaru Station

This station's location had been assessed in both the IBC and the Brigham Creek DBC. The Brigham Creek DBC addresses the park and ride location as well as the station location. The findings of the IBC and Brigham Creek DBC were reviewed by the Project Team and found to be robust. Notably no significant land use, project or policy changes have occurred that would necessitate reconsideration of any elements that informed the station location decision. These assessments were adopted for the Investment Case and were not assessed any further.

3.3.1.9.2 Westgate Te Waiarohia Station

The 2018 IBC recommended the Gunton Drive site for a local bus station. The Auckland Transport Board endorsed the recommendation. The development of the local station at Gunton Drive was progressed to the implementation phase (ahead of the NWRT Investment Case being concluded). The connectivity and ease of transfer between services is important to the success of the Project and accordingly the IBC recommendation (and subsequent implementation) was adopted for the Investment Case and was not assessed any further.

3.3.1.9.3 Royal Road Mānutewhau, Lincoln Road Wai o Pareira, Te Atatū Ōrangihina, Point Chevalier and Western Springs stations

The remaining station positions followed a process of identification of potentially suitable sites which were then evaluated in accordance with the MCA Framework set out in Table 3-1 above. This evaluation process was subject to continuous refinement as new information was gathered, such as in relation to connectivity to local bus services.

Overall, eight options were assessed for Royal Road, Te Atatū and Point Chevalier stations, seven options were assessed for Lincoln Road station and six for Western Springs station.

The evaluation process determined that the stations at Royal Road, Lincoln Road and Te Atatū should be located to the west of the SH16 alignment, and those at Point Chevalier and Western Springs should be located to the north of SH16.

3.3.1.10 Alignment options

Following the identification of preferred station positions, north-side and south-side busway alignment options (as a refinement of the form assessment above) were assessed.

An east-side alignment from the Waterview Interchange to Ian McKinnon Drive was identified as the preferred busway alignment.

Options such as enhanced shoulder running along SH16 and reallocation of SH16 lanes, both with grade separated interchanges and a separated busway were assessed. The central busway options were not progressed because although they would be largely accommodated within land already in the SH16 corridor, they delivered very poor value for money outcomes and required a significant level of capital expenditure. Notably they increased potential conflict with SH16 general traffic, interfered with emergency stopping lanes, and did not necessarily offer reliability benefits for PT users.

A south-side alignment was identified as the preferred option between Te Atatū and Brigham Creek. Both a north-side and a south-side option were assessed. The south-side option was assessed as performing best against Sieve 1 KPIs, provides efficient interchange opportunities with proposed local bus services and greater opportunities for potential development uplift and active modes integration. It achieves good value for money and requires relatively low-cost capital expenditure.

The preferred alignment along the Causeway was identified in the earlier form assessment as enhanced shoulder running along each side of SH16. Accordingly, an assessment of the alignment options in this section was not required.

A north-side alignment between the Waterview Interchange and Ian McKinnon Drive was identified as the preferred alignment option in this section. This outcome aligns with the preferred northern station positions at Point Chevalier and Western Springs, delivering well against the Sieve 1 KPIs.

3.3.1.11 Recommendation and decision

In April 2025, the NZTA Board endorsed the EPO for the Investment Case as follows:

- **Brigham Creek to Westgate:**
  - Stations at Brigham Creek Rarawaru and Westgate Te Waiarohia on the west-side of SH16.
  - West-side busway alignment between Westgate station and Brigham Creek station.
- **Westgate to Te Atatū:**
  - Stations located at Royal Road, Lincoln Road, Te Atatū on the west-side of SH16.
  - West-side busway alignment between Westgate station and Te Atatū station.
- **Te Atatū to Waterview:**
  - Enhanced shoulder-running along the existing SH16 causeway.
- **Waterview to city centre fringe:**
  - Stations at Point Chevalier and Western Springs on the north side of SH16. North side busway alignment from Point Chevalier which crosses over SH16 to the south-side near the existing Waima/Haslett Footbridge.
  - Connection to the city centre local road network via a new bridge structure to Ian McKinnon Drive.

The Project has been subject to site specific refinement through to the lodgement of the Substantive Application, in response to new information gathered through technical environmental assessments, engagement with stakeholders or constraints emerging (e.g. more information about utilities). All refinements have followed the process set out above.

In conclusion, I consider the Project has been selected following a comprehensive, robust, replicable and transparent process of option development, evaluation and refinement.

3.3.2 Reasonable necessity (Schedule 5, cl12(1)(g))

Sch 5, Section 12(g) of the FTAA requires that an assessment is provided on whether the project or work and the Proposed Designations sought are reasonably necessary for achieving the objectives of the requiring authority.

The Requiring Authority's objective for the Project is:

> *Provide bus rapid transit facilities alongside State Highway 16 between the SH16/Brigham Creek Road intersection and Ian McKinnon Drive, including stations that integrate with the surrounding transport network*

I consider that the **Project** is reasonably necessary for achieving this objective because:

- The Project will deliver enduring transport choices to the existing and future planned population of Auckland's northwest. In doing so, it will secure the benefits as outlined in Part 3 of this Application.
- The Project includes the development of stations and facilities that are integrated with the surrounding transport network (including local roads, local bus services and the Shared Use Path).

I consider that the **Proposed Designations** are necessary to achieve the Project objective as they will:

- Protect the land from development that might prevent or hinder the construction and operation of the Project.
- Provide for flexibility in procurement, construction staging and implementation that may assist with the delivery of the Project in a timely and cost-effective manner
- Enable the land uses required to construct the Project as well as maintain and operate the Project efficiently in future.
- Provide certainty to the community in relation to the nature of the work and the location of the Project.

3.4 Resource Consents

Section 104(1) of the RMA sets out the matters the consent authority must, subject to Part 2, have regard to. Section 104(2) sets out the matters that the consent authority may disregard. The relevant matters of Section 104(1) are set out below.

3.4.1 Section 104(1)

The actual and potential effects on the environment are assessed below in this AEE, and in the supporting technical assessments. I consider that a range of potential effects may result from the Project. The Project will deliver significantly positive transport and social effects. Some adverse effects are possible, particularly during construction of the Project. However, I am of the view that the conditions proposed will appropriately manage these potential adverse effects.

A thematic assessment against relevant planning instruments referred to in section 104(1)(b) is provided in Section 22. This thematic assessment includes an assessment against the relevant provisions of Proposed Plan Change 120 to the AUP. Overall, I consider that the Project demonstrates overall consistency with these planning documents. Importantly, I consider that the majority of the relevant planning instruments provide a clear pathway for the delivery of infrastructure, particularly where the infrastructure will deliver national or regional benefits.

Section 104(1)(c) provides that, when considering an application for resource consent, a consent authority must, subject to Part 2 of the RMA, have regard to any other matter it considers relevant and reasonably necessary to determine the application. Relevant matters such as non-RMA instruments or documents have been identified and assessed in Section 22.6 below and in Part 3 of this Application. These documents generally support and do not conflict with the objectives of the Project.

3.4.2 Section 104(1)(b)(i)

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

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES:CS) applies to land identified as having had an activity or industry described in the HAIL undertaken on it. The Project requires consent under Regulation 11 of the NES:CS as a Discretionary Activity, as no Detail Site Investigations (DSIs) have been carried out. The potential effects arising as a result of contaminated soils are addressed below in Section 9, and the Preliminary Site Investigation (PSI) attached in Part 6.

3.4.2.2 National Environmental Standards for Freshwater (NES:F)

The National Environmental Standards for Freshwater (NES:F) sets requirements and standards for activities that pose a risk to freshwater and freshwater ecosystems. The NES:F implements the objectives and policies of the National Policy Statement for Freshwater Management (NPS-FM) via regulations requiring resource consents, and associated provisions. Regulation 71 sets out the provisions for placing, using and/or extending culverts as a Discretionary Activity.

3.4.3 Section 105 Matters relevant to certain applications

Section 105 of the RMA requires that for discharge permits (and coastal permits in relation to s15) the consent authority must consider the following matters in addition to section 104 matters:

- The nature of the discharge and the sensitivity of the receiving environment;
- The applicant's reasons for the choice of discharge; and
- Possible alternative methods of discharge, including into another receiving environment.

The Project proposes upgrades to existing stormwater infrastructure, and new stormwater discharges to manage the runoff from the new impervious Project surfaces. The Project may also result in discharges of stormwater during construction.

The nature of the discharges to land and water include sediment, stormwater and the discharge of contaminants associated with disturbance of contaminated soils.

The receiving environment for the discharges is the Hauraki Gulf, and there is no alternative receiving environment for the discharges.

3.4.4 Section 107 Restriction on grant of certain discharge permits

Section 107 of the RMA restricts consent authorities from granting discharge or coastal permits that would otherwise contravene sections 15 or 15A of the Act, where the discharge is likely to cause any of the following effects in receiving waters after reasonable mixing:

- Conspicuous oil or grease films, scums or foams, or floatable/suspended materials
- Conspicuous change in colour or visual clarity
- Emission of objectionable odour
- Rendering of freshwater unsuitable for consumption by farm animals
- Significant adverse effects on aquatic life

Exceptions to this restriction may apply if the consent authority is satisfied that:

- Exceptional circumstances justify the discharge;
- The discharge is temporary in nature; or
- The discharge is associated with necessary maintenance work

The Project will not result in the above effects on receiving waters after reasonable mixing.

4. Archaeology

This Application includes applications for archaeological authorities under the Heritage New Zealand Pouhere Taonga Act (HNZPTA). The required details and assessments are provided in Part 5 of this Application and are not covered in this AEE. Potential effects on Built Heritage (including Historic Heritage overlays in the AUP) are discussed below in Section 5.

5. Built heritage

The Assessment of Built Heritage Effects by Ms O'Neil contains an assessment of the actual and potential effects of the construction and operation of the Project as it relates to built heritage. The Assessment of Built Heritage Effects is included in Part 6.

The built heritage assessment identifies all built heritage within the Proposed Designation, and immediately adjacent to the boundary. Ms O'Neil identified 12 heritage buildings or structures, one historic heritage area and one special character area within and directly adjacent to the Proposed Designation. The built heritage identified by Ms O'Neil is summarised below in Table 5 1.

Table 5-1: Identified built heritage within Proposed Designations and immediately adjacent to the Proposed Designations

Identified Built Heritage (Tūtangi Ora identifier)	Address	AUP Schedule	Within Proposed Designation
Oakley Hospital Main Building (HI-1441)	1 Carrington Road	AUP ID: 1618 – Category A - historical, social, physical attributes, aesthetic, and contextual value	No (directly adjacent)
Point Chevalier town centre	1210 – 1234 Great North Road	Not scheduled, but considered to have value (collectively) as a historic townscape	Yes (partially)
Commercial building (HI-16693)	1234 Great North Road	Not scheduled	Yes
Commercial building (HI-15666)	1230 Great North Road	Not scheduled	Yes
Commercial building (HI-15585)	1224 Great North Road	Not scheduled	Yes
Ambassador Theatre (HI-5197)	1218 – 1220 Great North Road	AUP ID: 1680 - Category B – Historical, physical and aesthetic values	Yes
Fisheries Building (HI-5074)	1212 – 1216 Great North Road	Not scheduled	Yes
Auckland Savings Bank (HI-5271)	1210 Great North Road	AUP ID: 2798 - Category B – historical, physical attributes, aesthetic, and contextual value	No (directly adjacent)
Gateway (HI-16323)	956 – 990 Great North Road	AUP ID: 2554- Category B - historical, aesthetic and contextual values. Primary feature of associated Extent of Place.	No (directly adjacent)
Chamberlain Park Clubhouse (former) (HI-6208)	956 – 990 Great North Road	Within AUP Historic Heritage Extent of Place of (2554, Gateway)	Yes
Pumphouse (HI1599)	805 Great North Road	AUP ID: 1678 - Category A	No
Engineers House (HI-5451)	805 Great North Road	AUP ID: 1679 - Category B: Historical and physical attributes	No
Tram shelter (HI-5190)	805 Great North Road	AUP ID: 1672 - Category B: Historical and physical attributes	No
Cooper Street Historic Heritage Area	Parts of Cooper and Seddon Street, Grey Lynn	Not scheduled	No (directly adjacent)
Special Character Area	Parts of Arch Hill and Eden Terrace	Not scheduled	Yes (4 dwellings total)

5.1 Assessment of construction effects on built heritage

5.1.1 Oakley Main Hospital Building

The Oakley Hospital Main Building is a scheduled built heritage place of significance to the locality and region. The Indicative Design proposes an additional bridge adjacent to the eastern side of the existing

Carrington Road bridge. The Proposed Designation and Indicative Design for this bridge do not encroach this site or the associated Extent of Place.

Ms. Wilkening predicts that any potential construction vibration generated will be well within acceptable limits and will not result in damage to this building given the distance between the building and proposed works.

Ms O'Neil therefore considers that the actual and potential effects on the Oakley Hospital Main Building are negligible. I agree with Ms O'Neil that no specific mitigation is required to manage works adjacent to the Oakley Main Hospital Building.

5.1.2 Point Chevalier Town Centre

Ms O'Neil sets out in her report that the historic core of Point Chevalier's town centre at 1210-1234 Great North Road reflects the suburb's interwar growth, architectural styles and contributes strongly to the local character and sense of place. The buildings have stood as a recognisable landmark for almost 100 years. The Proposed Designation encompasses several buildings within the historic core, including the Ambassador Theatre, Fisheries Building and additional commercial buildings as shown below in Figure 5-1.

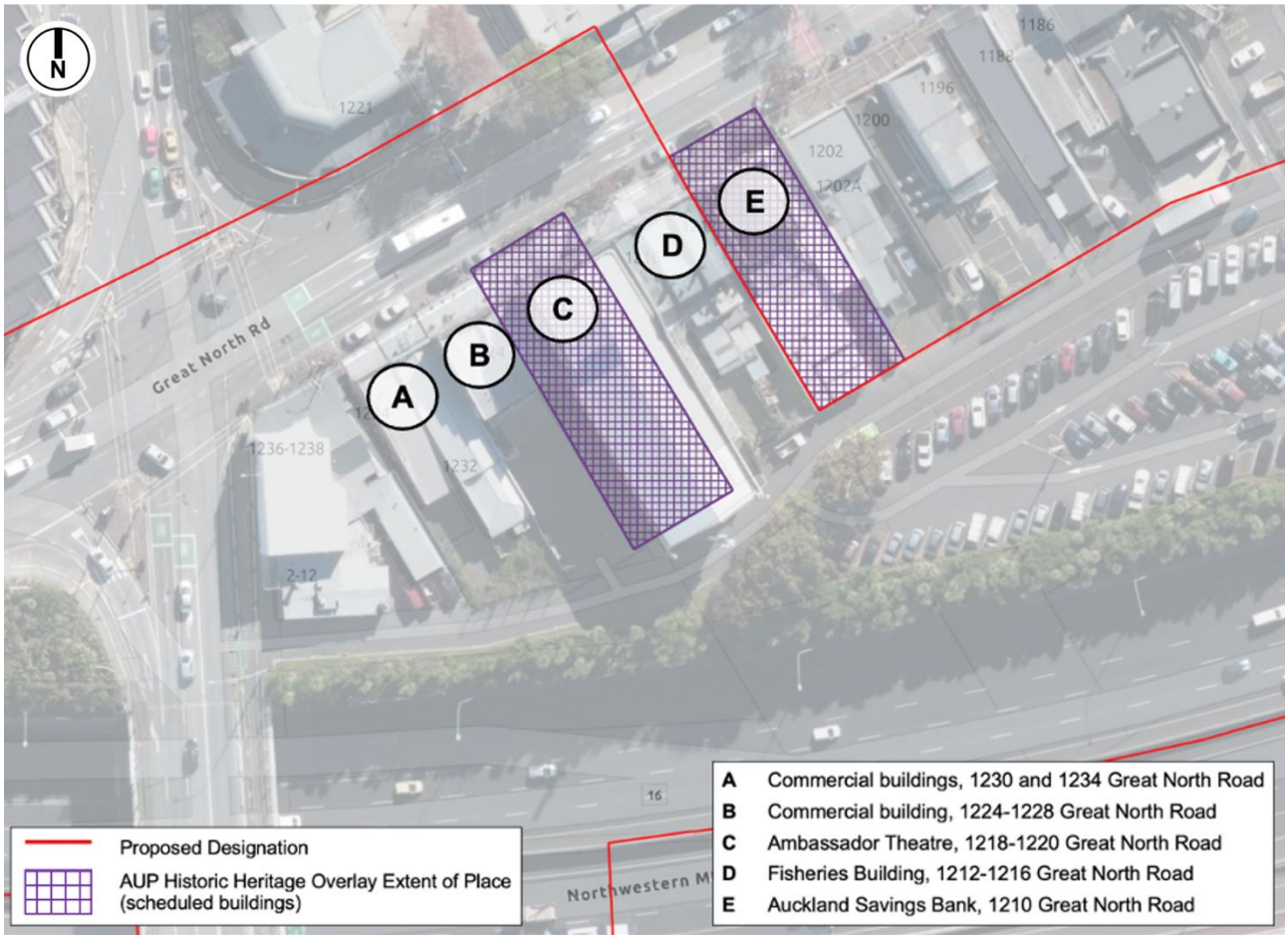


Figure 5-1: Point Chevalier Town Centre (Historic Core)

Ms O'Neil considers that the demolition of key heritage buildings, including the Ambassador Theatre would result in the loss of a unique interwar townscape. While the ASB Building will remain, its heritage values would be diminished due to the altered context and setting. Overall, Ms O'Neil sets out that the effects of the loss of this group of buildings would be significant in her opinion. Ms O'Neil notes that retaining the identified buildings within Point Chevalier's Historic townscape will minimise the extent of the adverse effects.

I note that the Fisheries building and Commercial building identified by Ms O'Neil to form part of the historic townscape, are not subject to a Historic Heritage or Extent of Place Overlay in the AUP and are not scheduled heritage sites. Their alteration, demolition or removal is therefore currently permitted by the AUP

and resource consent would not be required to undertake this activity[7]. I therefore consider it appropriate that NZTA does not commit to the full retention of these two unscheduled buildings. However, I acknowledge their value as identified by Ms O'Neil as a collective contribution to the historic townscape which should be considered through detailed design of the Project.

I recommended a condition that will put in place a hierarchy of mitigation measures that will require the consideration of methods to retain the original building footprints of the Commercial and Fisheries Buildings and the Ambassador Theatre, where this is practicable. This will be considered through the detailed design of the Project.

In the event that retention of the original building footprints is not possible, NZTA will appoint a suitably qualified person to survey the buildings and identify suitability for:

1. Retention of part of the buildings and their adaptive reuse as part of the Project; and

2. Retention of identified internal features of the Ambassador Theatre, such as original plaster mouldings.

The Indicative Design of the Project directly impacts the rear wall of the Ambassador Theatre. Future detailed design processes may be able to avoid the building itself (or parts of the building), with further structural and topographical data and design detail. The practicability of the retention of parts of the Ambassador Theatre may also be contingent on the structural soundness of the building structure should alterations be made to the rear. I therefore recommend that building surveys are undertaken to determine the practicability of retaining parts of the building or its internal features. These building surveys will inform the detailed design of the Project.

I have recommended that a suitably qualified person undertakes archival documentation and recording of the Ambassador Theatre in the event that all or parts of the building are removed. Interpretive material should also be installed within the Point Chevalier station documenting the heritage values of the town centre if the building is removed.

I have recommended that the mitigation option selected by NZTA is documented in the Outline Plan. This should also include the reasons why the options that have been discounted are impracticable.

Ms. O'Neil has also identified additional measures to be implemented during construction around the retained heritage buildings in Point Chevalier. I have recommended a Built Heritage Construction Management Plan (BHCMP) in the conditions on the Proposed Designations. This includes further developing measures before construction works commence to protect retained built heritage buildings from damage during construction. The BHCMP will also include methods for the demolition and deconstruction methods for built heritage buildings, in the event that retention of built heritage is not practicable.

5.1.3 Former ASB Building

The former Auckland Savings Bank building at 1210 Great North Road is a scheduled built heritage place of significance to the locality with a distinctive Neo-classical façade, with original plaster mouldings and arched steel windows.

The building is located outside of the Proposed Designation but construction works will occur very close to this building as part of demolition of neighbouring buildings and the construction of the proposed Point Chevalier station. The Construction Noise and Vibration assessment by Ms Wilkening notes that demolition works and any pavement and construction works immediately adjacent to the former ASB building will need to be conducted with care to ensure no damage from vibration occurs.

Ms Wilkening in her assessment has identified specific construction vibration threshold of 2.5mm/s PPV for those buildings that are particularly sensitive to construction vibration. The former ASB along with the Ambassador Theatre will be included in the Construction Noise and Vibration Management Plan (CNVMP) in accordance with the proposed conditions on the Proposed Designations. I discuss the CNVMP and site-specific schedules to the CNVMP further in Section 17.

[7] Demolition of buildings is a permitted activity in the Business – Town Centre zone (H10.4.1 – A36). The buildings are not within a Historic Heritage / Extent of Place Overlay and therefore Chapter D17 is not relevant.

5.1.4 Stone Gateway and Chamberlain Clubhouse, 959-900 Great North Road

The Proposed Designation includes the majority of the site at 956-990 Great North Road. While the Proposed Designation does not include the stone gateway itself (which is the main feature of the AUP Heritage Overlay), it includes other elements of the site within the Historic Heritage Extent of Place. Other elements included within the Proposed Designation include the former Chamberlain Park Clubhouse, remnant stone walls and structures.

In her assessment, Ms O'Neil notes that the former Chamberlain Golf Course club house contributes significantly to the understanding of the Stone Gateway's heritage, unlike the other heavily modified and compromised fairway ramp and grotto. The Indicative Design for the busway is approximately 2-3m away from the rear corner of the clubhouse building and has therefore been included within the Proposed Designation. Through detailed design, with further topographical and design detail, it may be possible to retain the building.

Ms O'Neil recommends the club house building is retained if possible, given the former club house's location within the Historic Heritage Extent of Place, and its proximity to the stone gateway. I have therefore recommended a condition on the Proposed Designation that will require the consideration of the retention of this building if practicable.

If it cannot be practically retained, I have recommended a condition that requires archival documentation and recording of the building. Ms O'Neil also recommends that interpretive material is installed at the Western Springs Station should it not be possible to retain it – which I have included that in a proposed condition on the Proposed Designation. I have recommended that NZTA demonstrates in the Outline Plan the approach to retaining the Chamberlain Golf Course and if it is not practicable to do so, the reasons why.

5.1.5 Museum of Transport and Technology

The Museum of Transport and Technology (MOTAT) is located on the northern side of Great North Road in Western Springs. Three scheduled heritage buildings (Pumphouse, Tram Shelter and Engineers House) are located on this site and they are within 100m of proposed construction works.

Ms Wilkening in her assessment of construction noise and vibration confirms that potential construction vibration experienced by these buildings will be negligible. This is discussed further below in Section 17.2.7.

I support the view of Ms O'Neil that no additional mitigation is required to protect the heritage values of the MOTAT buildings.

5.1.6 Cooper Street Historic Heritage Area

Cooper Street in Grey Lynn is subject to a Historic Heritage Area Overlay (HHA). Ms O'Neil advises that the area has importance as a largely intact example of early residential subdivision in this locality. The Proposed Designation does not include any dwellings within the Cooper Street HHA.

As shown in the Indicative Design, the busway will be constructed at-grade (with SH16) in this locality. Cooper Street slopes steeply toward SH16, and the busway is therefore unlikely to be visible from the HHA.

Ms Wilkening predicts that any potential construction vibration generated will be well within accepted limits given the approximately 20m distance of bored piling from the dwellings within the HHA.

Ms O'Neil concludes that the actual and potential construction effects on the Cooper Street HHA are negligible.

I agree with Ms O'Neil that no specific mitigation is required to manage works adjacent to dwellings within the Cooper Street HHA.

5.1.7 Special Character Areas – Eden Terrace and Arch Hill

Arch Hill and Eden Terrace are historic suburbs reflecting early European settlement in Auckland. Once connected, they were severed by the construction of SH16 in the in the 1970s and 1980s.

Arch Hill and Eden Terrace are subject to a Special Character Area (SCA) overlay in the AUP. The proposed busway alignment is located at the very southern portion of Arch Hill directly adjacent to SH16. Four dwellings within the SCA are within the Proposed Designation.

The dwellings at 36 and 39 King Street are examples of transitional villa and bungalow styles. These are considered slightly atypical compared to the Victorian cottages of Arch Hill. However, Ms O'Neil notes that they contribute to the areas Special Character values. The dwellings at 1 and 3 Partridge Street form part of a group of small-scale Victorian cottages, reflecting early building characteristics of Arch Hill. Ms O'Neil notes that the loss of these two buildings may have an impact on the cohesive qualities of the streetscape in the immediate location. However, Ms O'Neil considers that the overall cohesive qualities of the SCA will remain, given the location of the dwellings within the Proposed Designation (at the southern edge of the SCA) where the pattern of development has changed over time. Overall, Ms O'Neil considers that the potential effects of the Project on the Arch Hill SCA is moderate-low.

The Proposed Designation does not include any dwellings within the Eden Terrace SCA, and Ms O'Neil concludes the potential effects of the Project on the Eden Terrace SCA are negligible.

The predicted construction vibration levels by Ms Wilkening for dwellings within the SCAs (as well as others in proximity) fall well within the accepted construction vibration threshold and therefore will not cause any vibration damage to dwellings in the SCA.

I agree with Ms O'Neil that no specific mitigation is required for potential effects on the SCAs.

5.1.8 Summary of construction effects on built heritage

Ms O'Neil has identified a number of potential construction effects of the Project on built heritage within and directly adjacent to the Proposed Designation. I have summarised the findings of Ms O'Neil's report and provide my recommendations through the proposed conditions to avoid, remedy or mitigate the identified effects.

I note that in Ms O'Neil's view, the complete loss of the three buildings in the Point Chevalier historic townscape (Commercial Building at 1224-1228 Great North Road, the Ambassador Theatre and Fisheries Building) would result in a significant adverse effect on built heritage values. I have recommended a hierarchy of measures to be considered through detailed design of the Project which in my view appropriately avoid, remedy and/or mitigate the potential effects on the Point Chevalier historic townscape. I consider that following mitigation, the potential effects on the Point Chevalier historic townscape (should the Commercial Building, Fisheries Building and Ambassador Theatre be demolished in full) are moderate. This is because the Commercial Building and Fisheries Building are not scheduled and can be removed as a permitted activity under the AUP. In the event that the buildings can be retained in part, I consider that the measures I have included in the proposed conditions result in a low-moderate effect.

Ms O'Neil notes that the potential effects of the Project on the former Chamberlain Park Clubhouse are moderate if the building is not able to be retained. The former Clubhouse is not the primary feature of the Extent of Place in the location. As such, I agree with Ms O'Neil that with the proposed mitigation measures in place, the level of effect on the former Clubhouse is moderate should it not be retained. If the former Clubhouse can be retained, I agree with Ms O'Neil that the potential effects on the building are negligible.

5.2 Assessment of operational effects on built heritage

Operational effects on built heritage arising from the Project have been assessed by Ms O'Neil as negligible, as affected sites are already situated in urban environments or adjacent to arterial roads receiving bus traffic.

A bridge is proposed to be constructed near Western Springs, adjacent to Great North Road and opposite MOTAT, with the former tram shelter being the closest scheduled heritage place to the Proposed Designation. Despite the elevated structure's visibility, Ms O'Neil does not consider the operation of the Project will have adverse effects on the heritage values of the Pumphouse, Engineer's House, or tram shelter. These buildings remain legible within the streetscape, and the busway may enhance public appreciation and access to MOTAT.

I therefore agree with Ms O'Neil that no mitigation is necessary to manage potential operational effects of the Project on built heritage.

6. Trees

Mr Saxon was engaged to confirm whether it is practicable to retain the existing pōhutukawa trees (and other species) located adjacent to Great North Road at Western Springs, and two notable pōhutukawa trees scheduled in the AUP located at 30 Potatau Street and 2 Kirk Street, Grey Lynn. After engagement with St Francis School Point Chevalier, I requested that Mr Saxon consider whether it was practical to retain a group of pōhutukawa trees located at the School, that are located partly within or adjacent to the Proposed Designation.

The landscape and visual qualities of trees and vegetation are addressed by Mr Jones in the Landscape and Visual Assessment.

6.1 Construction effects on identified trees

6.1.1 Pōhutukawa Trees, Great North Road

The Project is proposed to be constructed in proximity to mature pōhutukawa trees and other species located adjacent to Great North Road in Western Springs and shown in Figure 6-1, Figure 6-2 and Figure 6-3 below.

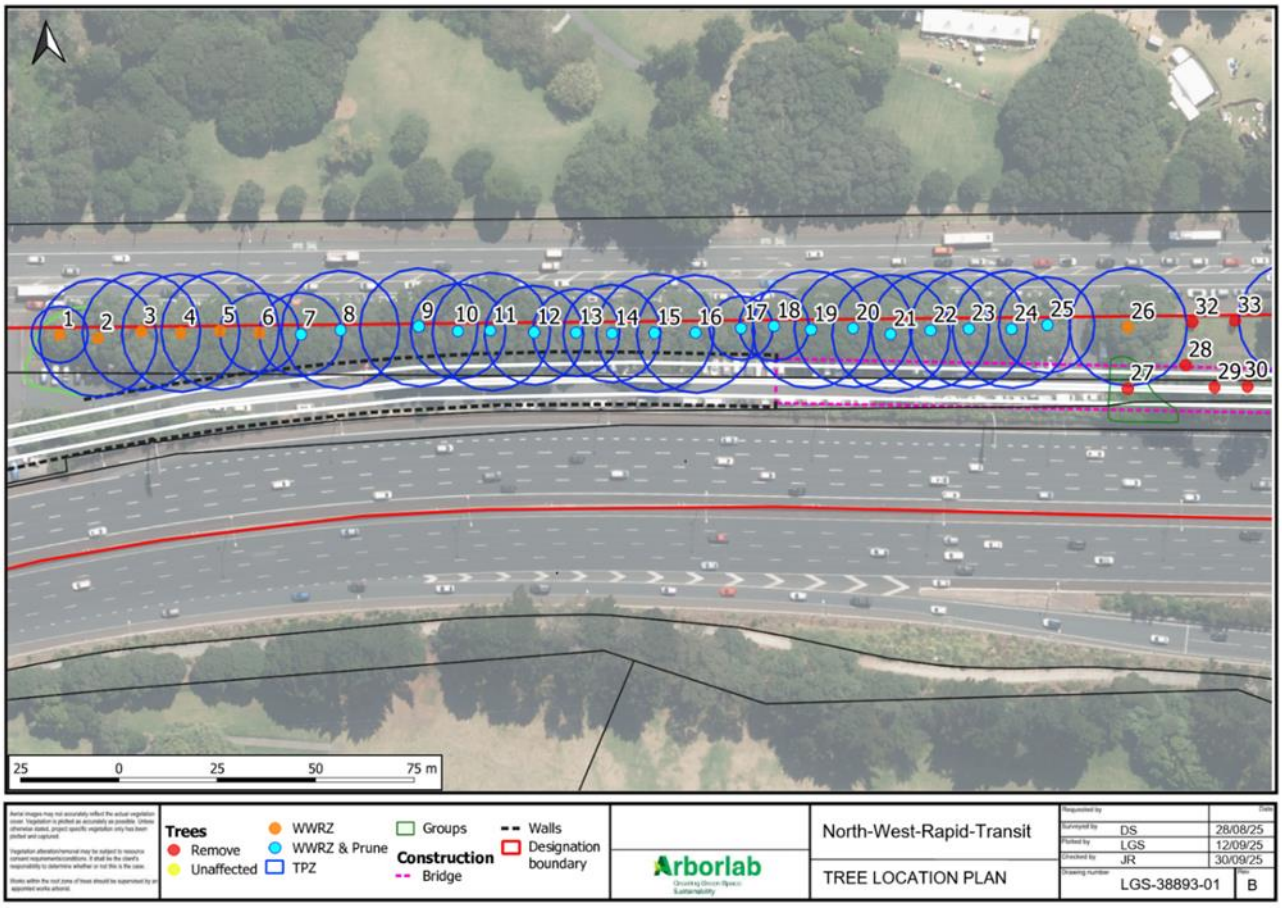


Figure 6-1: Pōhutukawa and other trees Great North Road, Western Springs

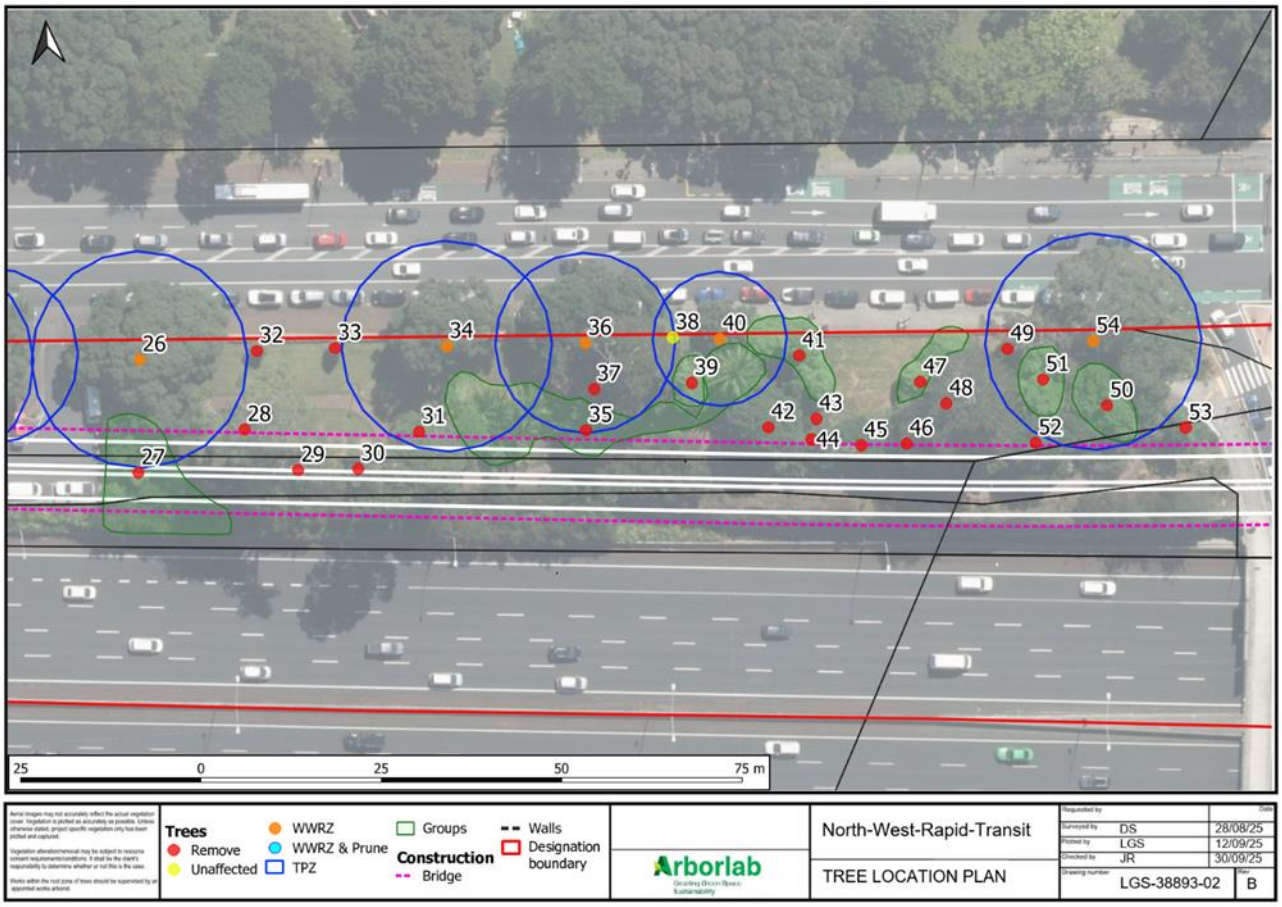


Figure 6-2: Pōhutukawa and other trees Great North Road, Western Springs

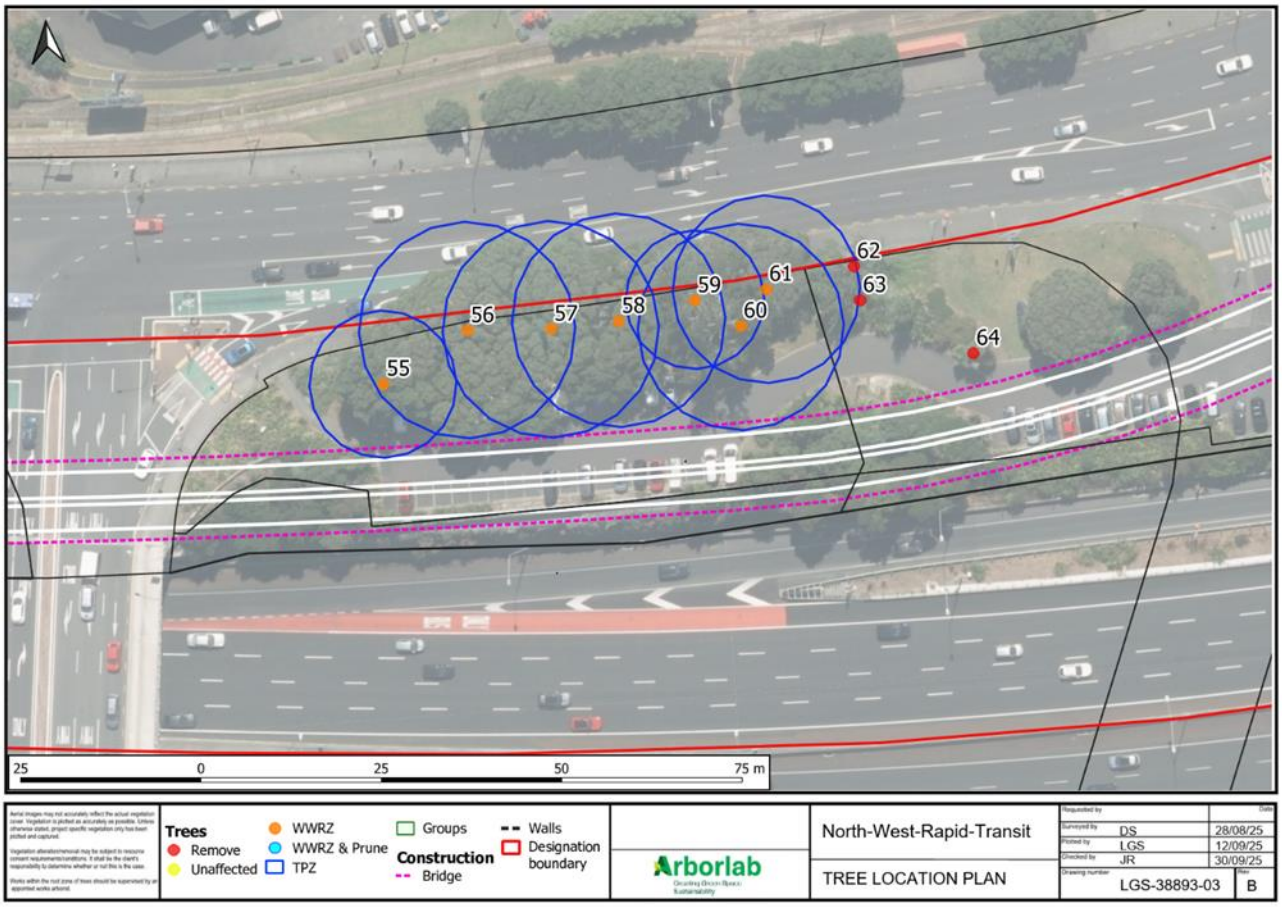


Figure 6-3: Pōhutukawa and other trees Great North Road, Western Springs

The mature pōhutukawa trees are not scheduled but are generally protected in the AUP as they are within an open space zone. They provide amenity values to the locality for their visual appeal and age and are of importance to the community. Mr Jones, in his landscape and visual assessment has recommended that these trees are retained as they will provide screening of the proposed bridge across St Lukes Road. In his view, retaining these trees will provide a separation between the transport infrastructure of SH16 and the Project, and the setting of Great North Road and Western Springs Park.

The busway is proposed to be set down lower than Trees 1 – 18 and works are likely to involve stripping of soil down to clay level. Between Tree 19 and 64, the busway is proposed to be elevated on a bridge over the St Lukes SH16 overbridge and Western Springs motorway on/off ramps.

Based on the Indicative Design and Proposed Designation for the Project within this area, Mr Saxon has determined approximately 26 trees will require removal, and 37 trees will require works within their protected root zone and/or trimming. One tree (Tree 38) is not considered to be affected by the Project.

I have therefore proposed a condition on the Proposed Designation that will avoid, remedy or mitigate adverse effects of construction works on the 38 trees Mr Saxon considers can be retained through the preparation of a tree protection methodology. I discuss the proposed condition below in Section 6.3.

6.1.2 Notable trees

Two notable pōhutukawa trees are within or partially within the Proposed Designation. These are shown on Figure 6 4 below (as Trees 66 and 67).

Mr Saxon found that the Notable Tree 129 (Tree 66 on Figure 6-4) at 30 Potatau Street will not be impacted by the Project as there is sufficient space within and set back from the Proposed Designation

Mr Saxon found that the notable tree 837 (Tree 67 on Figure 6-4) at 21 Kirk Street may require minor canopy pruning to enable the construction (namely the bridge structure) and operation of the Project. However, Mr Saxon determined that the pruning is minimal and not anticipated to impact on its health and stability.

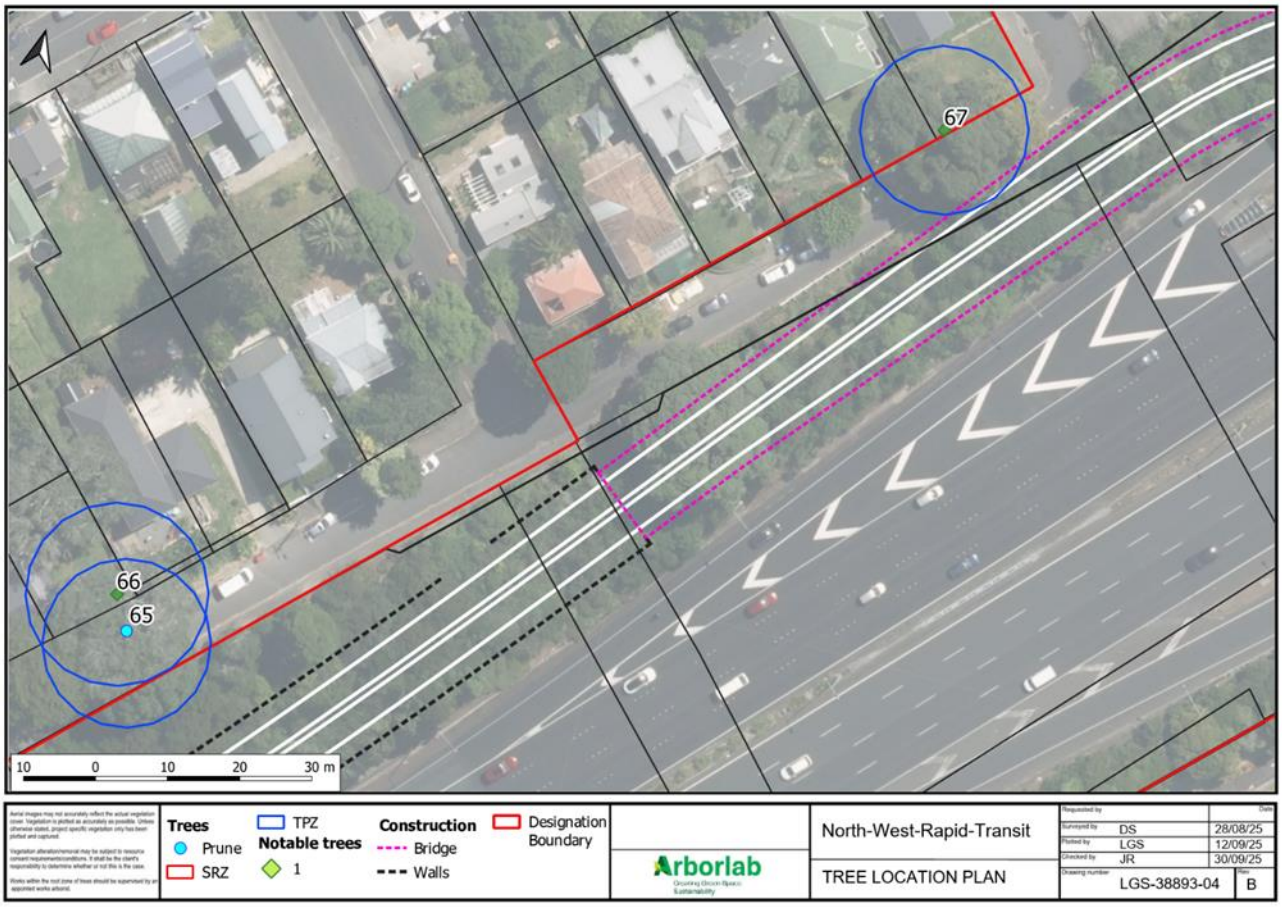


Figure 6-4: Notable trees

6.2 Trees at St Francis School

The row of pōhutukawa trees and other species were identified within or partially within the Proposed Designation, adjacent to St Francis School, Point Chevalier. These trees are located within land zoned Special Purpose-School in the AUP. Through engagement with St Francis School regarding the potential effects of the Project on their operations, they requested that trees and vegetation on their southern boundary are retained if possible. In particular, they noted the importance of the mature pōhutukawa closest to their classroom buildings, which provide screening from the nearby Waterview Interchange.

Based on the Indicative Design for the Project, Mr Saxon found that 10 trees (Trees 69-79) will likely require removal based on the extent of proposed works within their root zones (or structural root zones) associated with the placements of fill for a batter slope. Two trees (Trees 80 and 81) will require works within their root zones but can be retained. The remainder of trees (Trees 82-84) will be unaffected by the Project and can be retained. The trees are shown in Figure 6-5 below. Mr Saxon considers that Trees 80-84 are able to be retained.

I therefore recommend that Trees 80 – 84, which are closest to the classroom buildings on the site are subject to the tree protection methodology included as a proposed condition on the Proposed Designation.

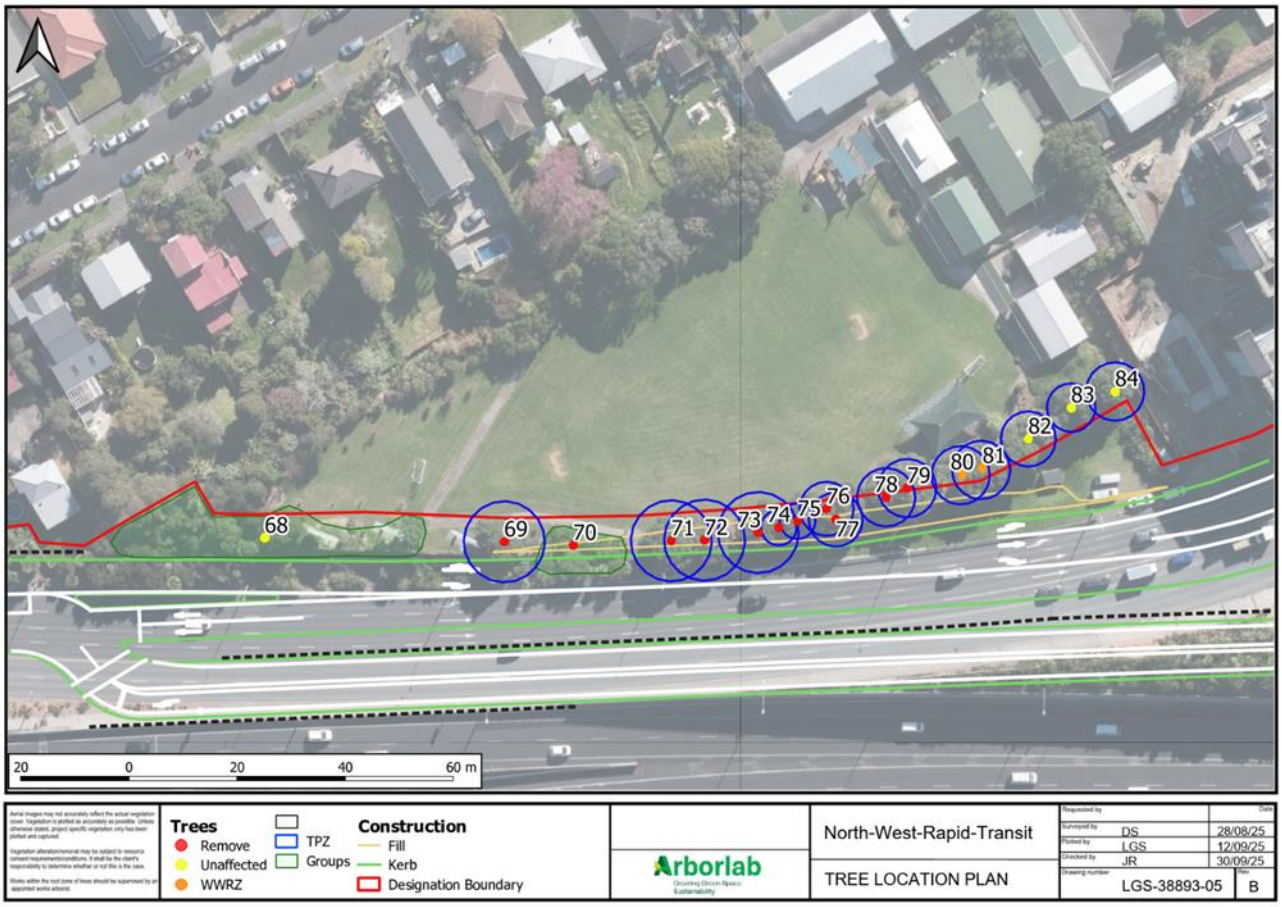


Figure 6-5: Identified trees at St Francis School

6.3 Recommended measures to avoid, remedy or mitigate construction effects

Mr Saxon concludes that, provided the recommended tree protection methodology is adhered to, the following trees can be retained during construction of the Project:

- Trees adjacent to Great North Road shown in orange, blue and yellow in Figure 6-1, Figure 6-2 and Figure 6-3 above;
- Both notable trees identified in Grey Lynn/Arch hill shown in Figure 6-4; and
- Trees 80-84 at St Francis School as shown in Figure 6-5.

Therefore, any potential adverse effects on the trees to be retained will be appropriately managed through the preparation of a tree protection methodology by an arborist. I have recommended a condition on the Proposed Designations to this effect.

The pōhutukawa trees in open space on Great North Road are assets of Auckland Council. The removal of any trees within public land will require tree asset owner approval. Any replacement specimen trees will be subject to agreement with the tree asset owner at the time approval is needed.

I consider that the potential effects on the trees subject to the proposed tree protection methodology are negligible – low.

7. Community effects

7.1 Positive community effects

The Project has significant positive effects for the wider population of Auckland's rapidly growing northwest. The Project benefits are set out in Part 3 of this Application. Many of these benefits transfer to positive social outcomes.

The northwest of Auckland is relatively poorly served by public transport, and more people travel to work by car than any other area of Auckland. There is significant peak time congestion on SH16 currently, and travel time for commuters is very unreliable, as discussed by Ms Bates in the Assessment of Transport Effects.

Northwest Auckland's residential population is expected to increase by over 100,000 people, with over 40,000 new households by 2051. This growth is anticipated in Huapai, Kumeū, Riverhead, Whenuapai, and Redhills. The Alternative State Highway (ASH) extension of the SH16 motorway north of Brigham Creek Road is a Road of National Significance (RoNS) and will unlock significant housing growth in the Northwest. Without adequate public transport, this will increase traffic on SH16. Additionally, the Project will provide connectivity with other rapid transit networks proposed around the west, including to the future urban zoned land to the north and to North Shore via SH18. A designation for a rapid transit corridor between Brigham Creek and Kumeū/Huapai is currently being sought by NZTA which the Project will tie into at Brigham Creek.

The Project will deliver a reliable, enduring transport choice for the public to access employment and education and for future generations. It will provide a choice that reduces reliance on private vehicles which will open up opportunities for those who are socially disadvantaged or unable to drive.

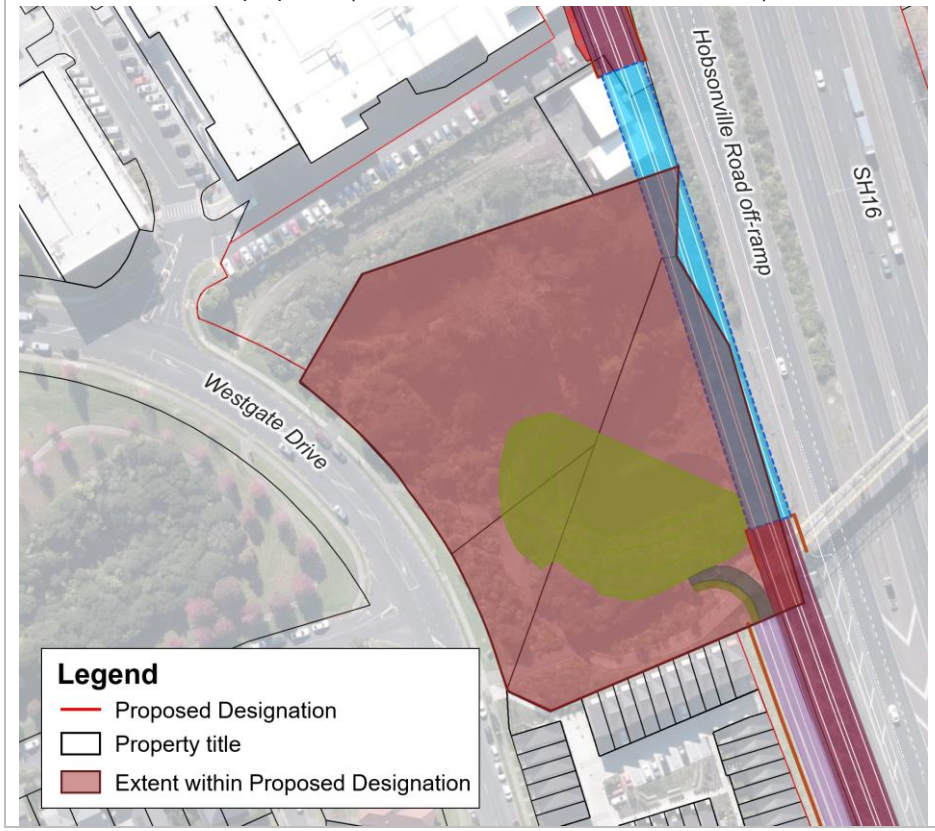
The Project will improve opportunities to access key regional destinations such as the Auckland Zoo, MOTAT, University of Auckland and AUT. The Project will create improved linkages to the wider rapid transit network through more reliable and direct transfers.

Further positive community effects are realised from an economic wellbeing perspective. Better and reliable rapid transit will reduce reliance on the private car, contributing positively to peoples' financial obligations, with lower costs associated with travel, ongoing car maintenance and eliminating fuel and/or parking costs.

7.2 Parks and open spaces

The Project and Proposed Designation may have effects on parks and open spaces. During construction, temporary occupation may be required to facilitate construction of the Project. Some park and open space zoned land may be reinstated following construction of the Project. Table 7 1 below summarises the potential effects on parks and open spaces.

Table 7-1: Potential effects on parks and open spaces[8]

Site and description	Use by the Project	Potential effects
Stormwater storage basin reserve (26 Westgate Drive) Used for stormwater purposes (detention and treatment of stormwater)[9] 	Indicative Design passes along eastern extent of reserve. Full designation of the reserve is proposed, to provide for potential reconstruction of SH16 Westgate pedestrian bridge and for stormwater attenuation purposes. 100% of approximately 10,000m^2 stormwater basin reserve within Proposed Designation.	**Construction effects** Pedestrian access may be closed temporarily for a short time for public safety reasons. I consider the potential effects are minor during construction. **Operational effects** None

[8] Note: This list does not cover land already designated by NZTA for SH16 purposes where the underlying zone is reserve. The land now occupied by New World at Point Chevalier is currently zoned Open Space Sport and Active Recreation. However, the site is fully occupied by the supermarket and that loss of open space is part of the existing environment

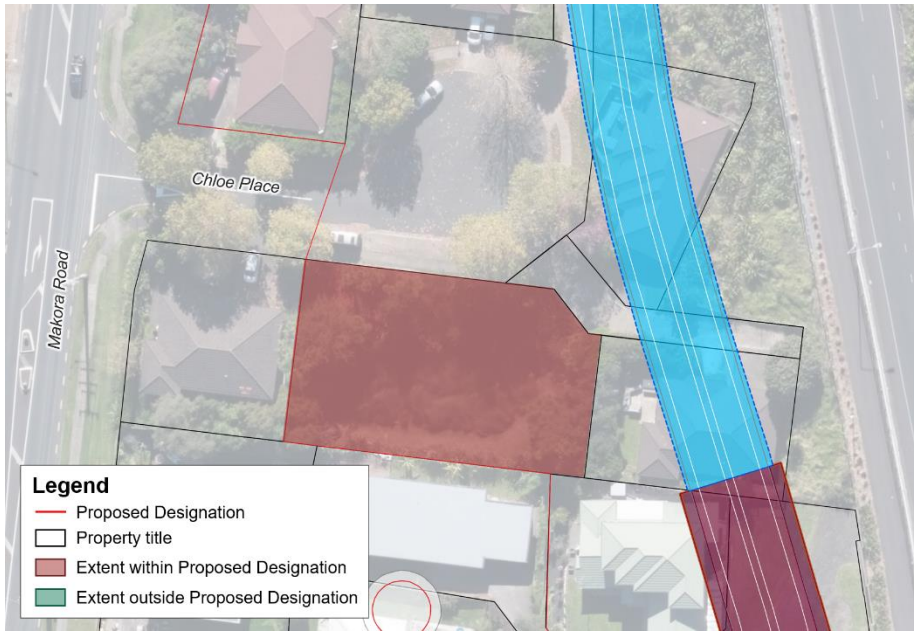
[9] Part Lot 1 DP 177892 Lot 84 DP 201496 (Recreation Reserve) SO 394064, Section 2 SO 394064 (Local Purpose (Stormwater Detention) Reserve)

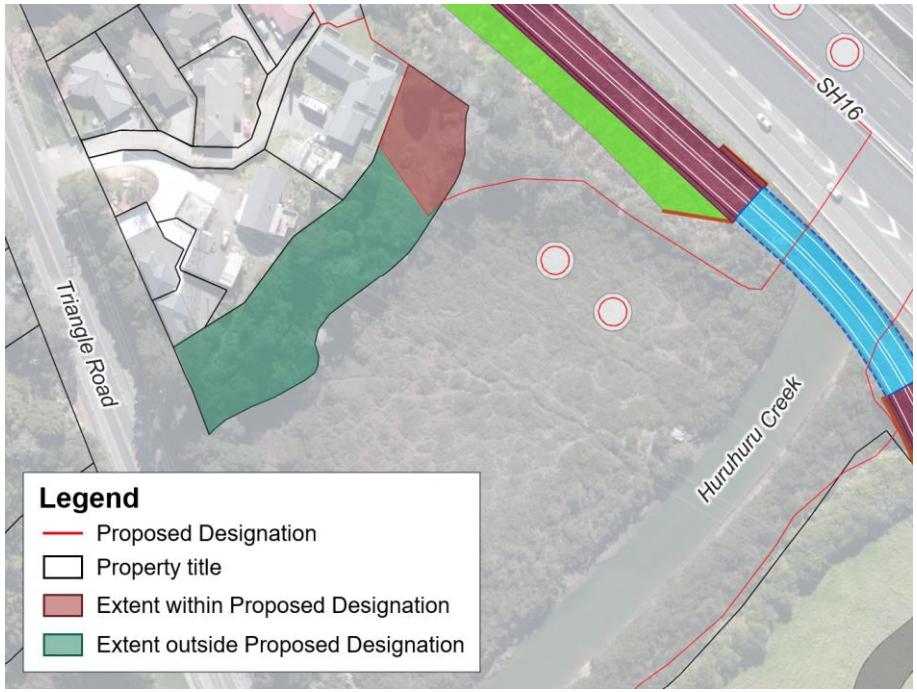
Site and description	Use by the Project	Potential effects
Mānutewhau walkway reserve[10] 	Required for potential realignment and reinstatement of existing pedestrian overbridge. Approximately 7745 m^2 or 57% of the total site within Proposed Designation.	**Construction effects** Short-term disruption to the pedestrian footpath is likely during construction, to enable the bridge to be reconstructed or shifted if necessary. The site and previous use (as a pedestrian link and local amenity reserve) will be reinstated following construction. I consider the potential effects to be minor during construction. **Operational effects** None.

[10] Lot 297 DP 78481 Recreation Reserve), Lot 42 DP 87398 (Recreation Reserve)

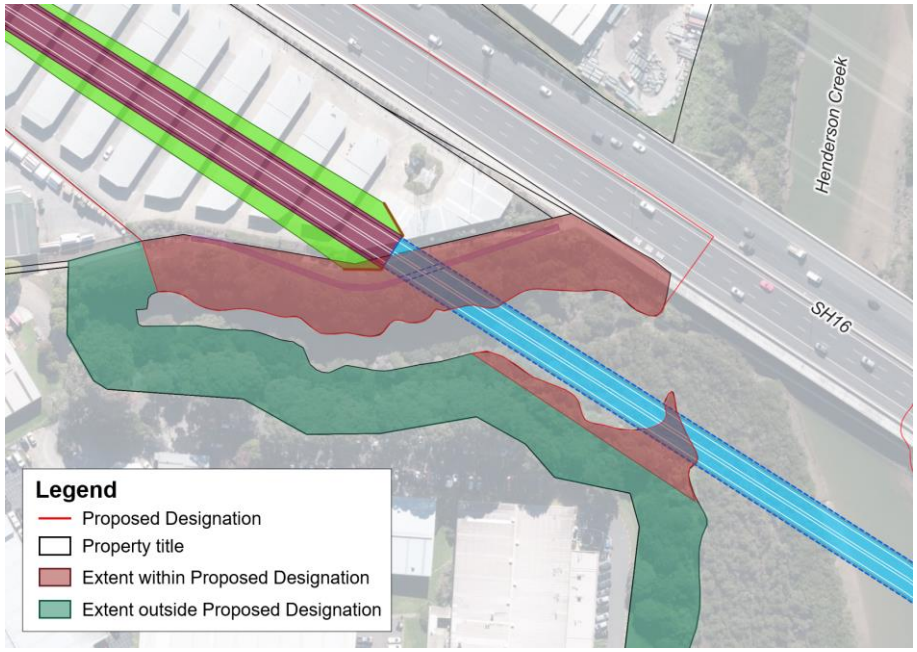
Site and description	Use by the Project	Potential effects
Tihema Stream reserve and stormwater storage basin reserve (48 Westgate Drive)[11] 	Indicative Design passes along eastern extent of reserve. Full designation of the reserve is proposed to provide construction space for the busway and for stormwater attenuation purposes. 100% of approximately 14,000m^2 stormwater basin reserve within Proposed Designation.	**Construction effects** The reserve functions as a stormwater storage basin and does not appear to be accessible to the public. I consider that the potential effects on the reserve during construction are negligible, given it is not accessible for public use. **Operational effects** None.

[11] Lot 8 DP 421151 (Recreation Reserve), Lot 10 DP 421151 (Local Purpose Reserve Drainage), Lot 9 DP 421151 (Recreation Reserve), Lot 7 DP 421151 (Local Purpose Reserve Drainage)

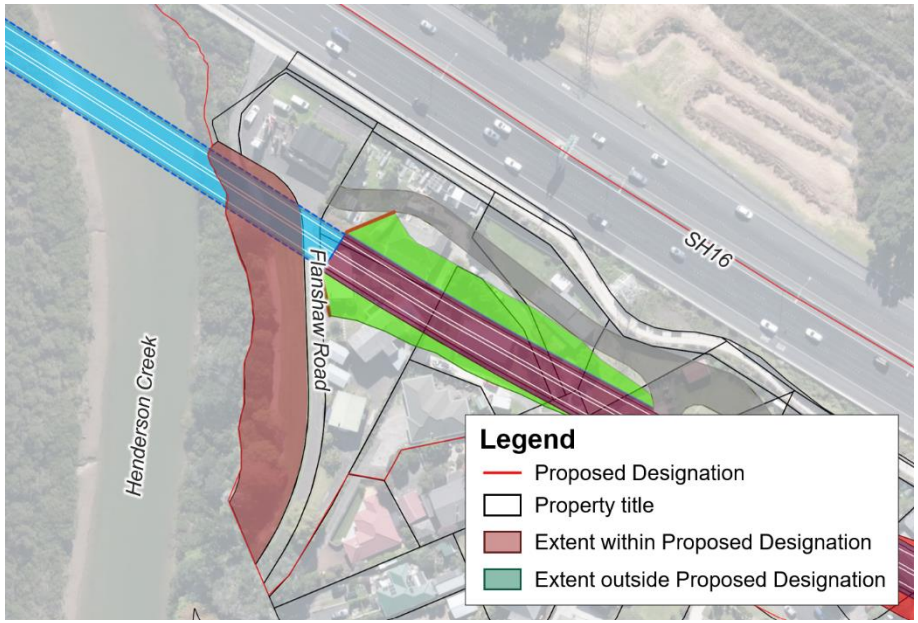
Site and description	Use by the Project	Potential effects
3 Chloe Place – Reserve and stormwater pond 	The area is included within the Proposed Designation to allow for construction space of the busway, which passes on a proposed viaduct/bridge structure to the east of the site. 100% of approximately 850m^2 stormwater basin reserve within Proposed Designation.	**Construction effects** The reserve functions as a stormwater storage basin and does not appear to be accessible to the public. I consider that the potential effects on the reserve during construction are negligible, given it is not accessible for public use. **Operational effects** None.

Site and description	Use by the Project	Potential effects
Esplanade reserve 340 Triangle Road[12] 	A bridge structure is proposed over Henderson Creek. To construct the bridge, an area of the esplanade reserve will be occupied by staging and construction equipment. Approximately 2,300 m^2 reserve. The Proposed Designation extends over approx. 540m^2	**Construction effects** Overall, I consider the potential effects on this esplanade reserve during construction to be minor. The area is relatively inaccessible and does not currently provide recreational value. **Operational effects** I do not consider the operation of the Project will adversely affect the function of the reserve.

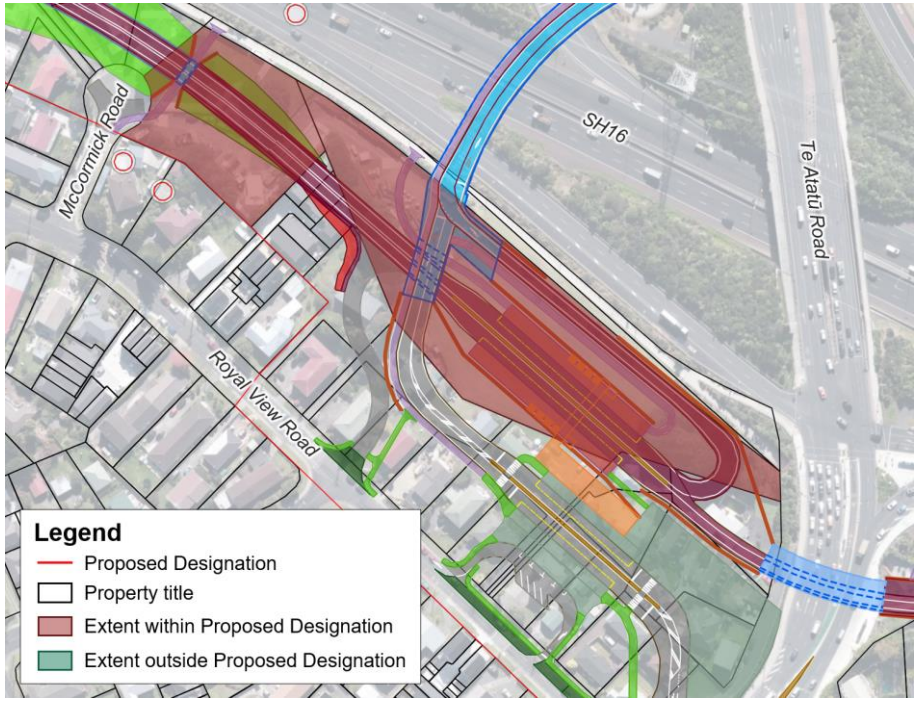
[12] Lot 3 DP 200174 (Local Purpose (Esplanade) Reserve)) and included in HGMP

Site and description	Use by the Project	Potential effects
Esplanade reserve Henderson Creek[13] 	Bridge structure over esplanade reserve, public access under maintained Approximately 11,000m^2 esplanade reserve with 4300m^2 within Proposed Designation. Proposed bridge to occupy a portion of this area following construction.	**Construction effects** Temporary disruption to access for pedestrians and cyclists using the SUP during construction particularly in relation to the proposed bridge structure. Access will be restored following construction of bridge. Overall, I consider the potential effects on this reserve during construction are minor. **Operational effects** I do not consider the operation of the Project will adversely affect the function of the reserve.

[13] Lot 4 DP 109243 (Local Purpose (Esplanade) Reserve)

Site and description	Use by the Project	Potential effects
Esplanade reserve 145 Flanshaw Road[14] 	Bridge structure over esplanade reserve. Provision for maintenance of SUP following bridge construction. 100% of approximately 2,000m^2 esplanade reserve within Proposed Designation.	**Construction effects** Temporary disruption to access for pedestrians and cyclists using the SUP during construction particularly in relation to the proposed bridge structure. Access will be restored following construction of bridge. Overall, I consider the potential effects on this reserve during construction are minor. **Operational effects** I do not consider the operation of the Project will adversely affect the function of the reserve.

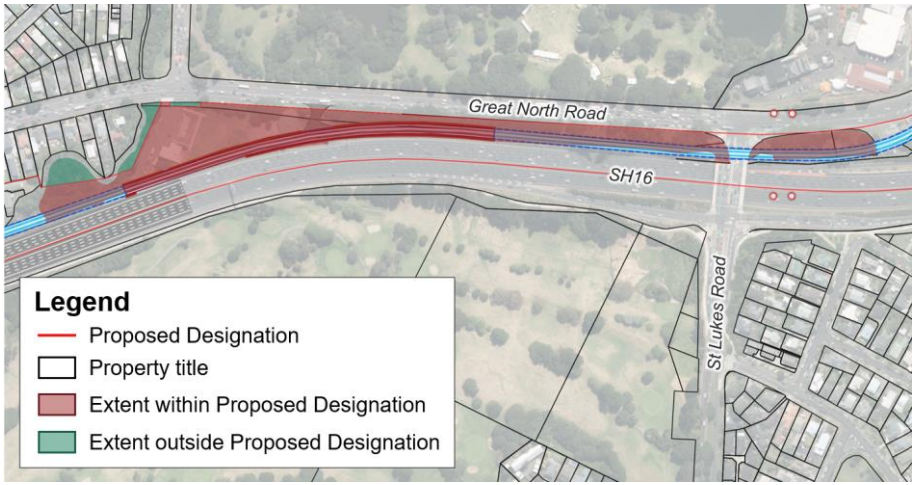
[14] Lot 9 DP 55828 (Local Purpose Reserve (Esplanade))

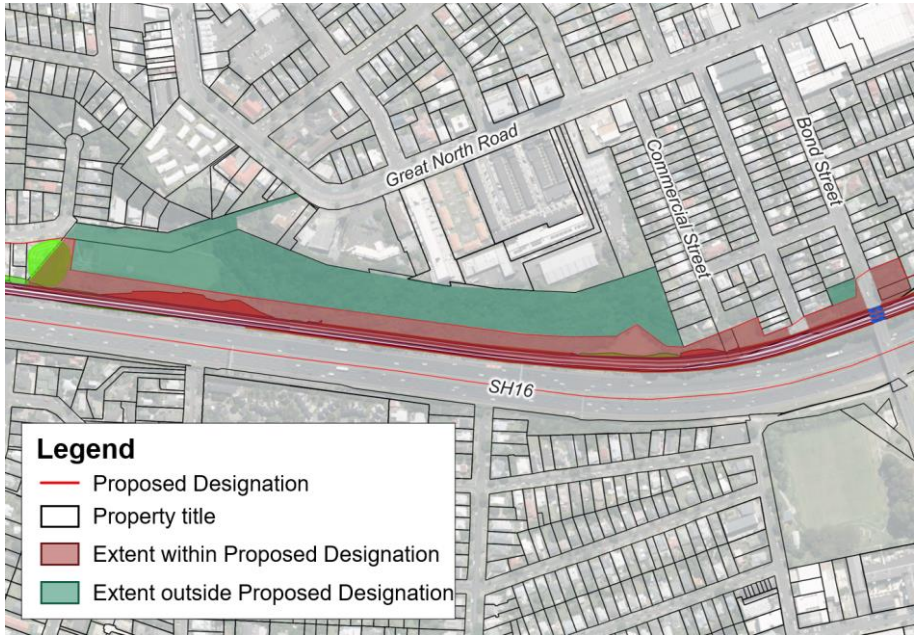
Site and description	Use by the Project	Potential effects
McCormick Green reserve[15] 	Site reappropriated for station and associated infrastructure and local bus access. 100% of approximately 13,000m^2 reserve within Proposed Designation. Site currently partly occupied by a construction yard associated with the Te Whau pathway.	**Construction effects** The proposed Te Atatū station will occupy the full extent of this reserve, resulting in a permanent loss of open space. Engagement feedback with the public and Auckland Council indicates it has limited values as passive recreational space. I also note that nearby Marlene Glade provides passive recreation space to the residents of Te Atatū south with similar function to McCormick Green. This reserve is located an approximately 4 minute walk away from McCormick Green (300m). Ōrangahina – Harbourview Reserve is located opposite McCormick Green on the northern side of SH16 approximately 350m from McCormick Green. NZTA will acquire the land at McCormick Green from Auckland Council prior to construction beginning. Auckland Council will be compensated for the land in accordance with the Public Works Act. Residual land remaining within the designation boundary may provide an opportunity to reinstate passive recreational space in future near the location of this reserve. Any use of residual land will be negotiated directly with Auckland Council as part of the land acquisition process. **Operational effects** The Project will result in the permanent loss of McCormick Green. Two alternative passive recreation spaces with similar or greater value and size are located within a 300m / 4-minute walk of McCormick Green.

[15] Section 4 SO 498829 (Recreation Reserve) Section 2 SO 498829 (Recreation Reserve)

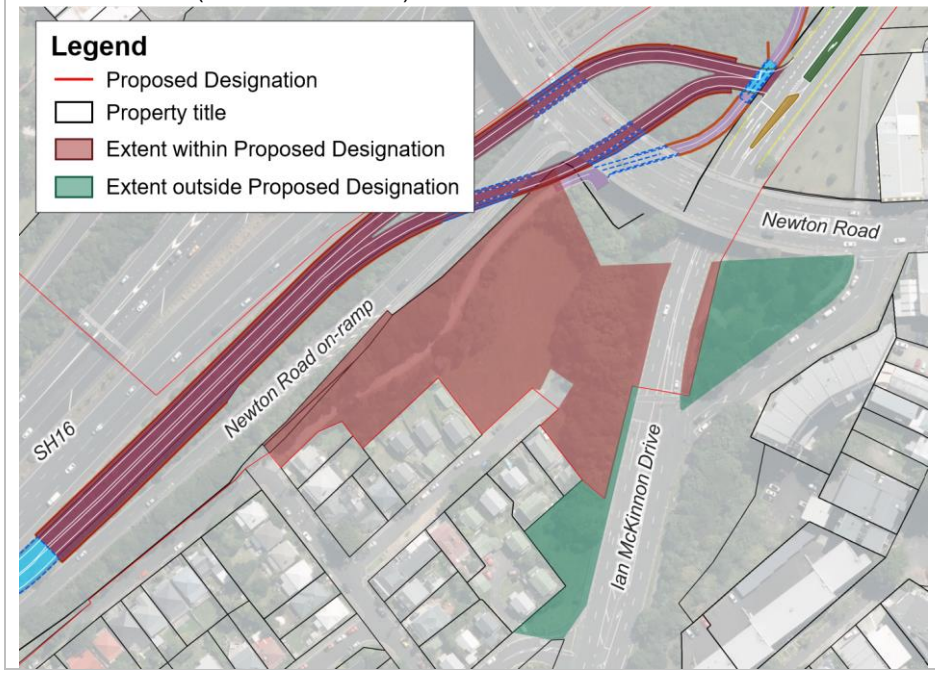
Site and description	Use by the Project	Potential effects
Ōrangihina Reserve[16] 	Minor incursion into the edge of the reserve, immediately adjacent to the Te Atatū / SH16 city bound on ramp. Approximately 24,000m^2 of total 850,000m^2 park within Proposed Designation. Walkway that passes through the area to be designated is consistent with the Masterplan for the reserve.	**Construction effects** The Project directly affects the existing pedestrian footpath that runs alongside Te Atatū Road and the SH16 on-ramp. The footpath can be relocated, and public access restored to the area following construction of the new bus carriageway and structures. The Te Atatū Pony Club currently operates on the land, and vehicle access is provided north near the intersection of Old Te Atatū Road and Te Atatū Road. The Project proposes to tie the new bus-only carriageway at this intersection. The Pony Club can be provided with a new formalised access to Te Atatū Road if necessary. Discussions with Auckland Council regarding aspirations for the reserve are ongoing. It is understood that a Marae is proposed to be built on the reserve. Works may require the relocation of the existing footpath on the southern extent of the reserve, and the relocation of the existing accessway into and out of the Pony Club from Te Atatū Road. Compensation for the permanent loss of reserve land will be discussed with Auckland Council through the PWA process. **Operational effects** None.

[16] Gazetted reserve, Harbourview-Ōrangihina Masterplan 2019 Part Lot 2 DP 370 SO 506986

Site and description	Use by the Project	Potential effects
Western Springs Gardens[17]  The gardens are located near the original entrance to Chamberlain Park Golf Course prior to construction of SH16. The building is now occupied by the Waiōrea Community Recycling Centre with 8 marked and sealed parking spaces and a circulation facility for short term drop off of items. To the west, the reserve is bordered by Waitītiko awa/Meola Creek. To the east of this facility is the gardens and the two distinctive Western Springs Garden Community hall buildings, joined by a common use area and main hall foyer. These halls are both popular for short term use, and the Auckland Horticultural Society has a lease over one of the buildings. Further to the east is a public car parking area that serves MOTAT and overflow parking for the zoo. There are a number of large Pōhutukawa on the edge of the carparking alongside Great North Road.	Busway alignment will occupy the SH16 edge of the reserve through entire reserve area, necessitating the removal of two community facilities Western Springs Community Halls and the recycling centre. Potential loss of approx. 145 parking spaces. 45,000m^2 (including parking to east of community halls). Approximately 42,000m^2 within the Proposed Designation. Approximately 3400m^2 of land zoned reserve and designated by Auckland Transport for public car park to east of St Lukes Road falls within the Proposed Designation.	**Construction effects** I consider the potential effects on the Western Springs Gardens are moderate, and over time will reduce to low with the provision of the busway providing a new method to access nearby community facilities by bus. On completion of the Project, public confidence in coming to key community facilities such as MOTAT and Western Springs Park by rapid bus services will become established. There are several uses of this area, including overflow parking and parking serving the two community hall facilities and the Waiōrea Community recycling centre. The Project will result in the removal of the two community halls at Western Springs which were upgraded and restored in the late 1980's. The Auckland Horticultural Council has a lease over one of the Halls and the other is a venue for hire space. The original club rooms for the Chamberlain Golf Course, severed by the introduction of SH16 was recently transformed into a community recycling centre. The vegetated riparian edge of Waitītiko/ Meola Creek to the western end of the site has been enhanced through community planting. Through engagement with Auckland Council, it is understood that the halls are amongst the busiest for community bookings in the local board area. Discussions with Auckland Council Parks and Community Facilities will continue, and the loss of the community halls will be compensated via the PWA. I discuss the heritage values of the area (in particular the former Chamberlain Park clubhouse building and stone gateway) in Section 5.1.4. The permanent loss of some car parking that serves the area will, in our view, be offset by the provision of rapid transit and the new Western Springs and Point Chevalier stations. **Operational effects** The area will be returned to its existing use as a public space following completion of construction. The operational effects of the busway in relation to visual and natural character and amenity are discussed below.

Site and description	Use by the Project	Potential effects
Arch Hill Scenic Reserve Land east of western side of Commercial St is designated for SH16 purposes. There are 3 kilometres of mountain bike trails through the vegetated part of the reserve and a beginner trail called "training wheels". These trails are maintained by Auckland Mountain Bike Club (see figure below).  	The Project will occupy a portion of the reserve alongside SH16. Approximately 20,000m^2 of total 50,000m^2 site within the Proposed Designation.	**Construction effects** The construction of the Project in this location will require removal of some of the existing vegetation that screens SH16 from the reserve. The Project may impact the informal mountain bike trails within the vegetated area on the southern fringe of the reserve. Overall, I consider that potential effects on the Arch Hill Scenic Reserve during construction are moderate. Following completion of construction, the balance of the designated land can be returned to park like state and a walking path reinstated from Ivanhoe Road to Commercial Road. The informal mountain bike trails may be relocated within the reserve, at the discretion of Auckland Council. **Operational effects** I anticipate that the effects arising on the reserve during operation of the Project are minor. The reserve can maintain its existing function.

[17] Section 26 SO 509896, Lot 1 DP 204715, Section 29 SO 509896, Section 4 SO 519753, Section 5 SO 519753

Site and description	Use by the Project	Potential effects
Suffolk Reserve (Crown owned land) 	100% of approximately 80,000m^2 reserve within the Proposed Designation. The Indicative Design of the Project at this location has the busway travelling beneath the Newton Road overbridge, and a minor realignment of the SUP to accommodate this.	**Construction effects** I consider the effects on Suffolk Reserve are moderate during construction, as it may not be available for public use. SUP users may be directed elsewhere during construction if the existing alignment of the SUP cannot be maintained. **Operational effects** None.

7.2.1 Recommended measures to avoid, remedy or mitigate adverse effects on Parks, Open Spaces and Council facilities

Potential effects identified in Table 7-1 above relating to pedestrian and cyclists disruption and the Northwest Shared Path (SUP) will be addressed through the preparation of a Construction Traffic Management Plan (CTMP) for a Stage of Work. I discuss the CTMP further below in Section 19.

The landowner approval process with Auckland Council will apply for all temporary construction works within Council land. Auckland Council generally propose a number of conditions on that approval covering matters such as ongoing access requirements for the public, fencing, timing of works, and reinstatement of land after works.

The permanent loss of parks, open space land and community facilities such as the Western Springs Memorial Halls will be addressed through the PWA process. NZTA will continue to engage with Auckland Council in relation to likely delivery timeframes for the Project to enable the efficient relocation and/or temporary closure of facilities.

I consider that the potential loss of car parking that serves the Western Springs area is appropriately mitigated by the provision of the proposed Western Springs station, enabling people to visit these amenities using high-quality public transport that is not readily available now. Furthermore, the potential reduction of traffic through a reduction of car-based visits especially during peak holiday periods (school holidays and long weekends) would enhance the recreational and amenity values of the area generally.

Overall, I consider that the potential adverse effects on parks and open spaces is low to moderate and can be adequately managed through proposed CTMP condition where relevant to construction effects, and the PWA. I also consider that the Project will provide public infrastructure that will greatly benefit the communities it is located within.

7.3 Schools

There are a number of schools in the wider Project Area, but only two directly impacted by the Project. During construction, careful planning to maintain safe and clearly marked access to schools will be crucial. Clear and timely messaging relating to traffic management, appropriate means of navigating construction areas safely, and ensuring access is available and maintained, especially during term time. I consider that this will be effectively managed by the preparation of CTMPs which I have proposed as a condition on the designations.

7.3.1 Royal Road School

The Proposed Designation extends over an area of approximately 5,200m^2 at Royal Road School located at 112 Royal Road, Massey, with approximately 2,500m^2 of that within the wooded area to the north of the site. The Proposed Designation does not include any buildings on the site, but extends over an area of playing field and a wooded area to the north. The wooded area is identified as being a restoration project for the school, with a recently completed first stage of a bush track. The school has planted over 600 native plants in the school grounds. The balance is located along the eastern side of the school. There is an early education centre (ECE) located on the school site.

A noise wall is proposed alongside the western site boundary between the school buildings and the proposed Royal Road Mānutewhau station. This wall will be accommodated for within the Proposed Designation. The noise wall could be constructed prior to construction of the busway and/or station, aiding noise mitigation during that period and minimising disruption to the school activities. These measures will be covered in the Construction Noise and Vibration Management Plan (CNVMP) and the operational noise conditions proposed on the designations. I discuss potential noise and vibration effects of the Project and how these will be mitigated in Section 17 and 18 below.

Access to the school may be disrupted during construction. However, there is no intention to close the existing vehicle access, and suitable pedestrian access will be provided at all times required for the operation of the school and preschool facilities. This will be worked through during the preparation of CTMP(s) for this stage of work.

NZTA has engaged directly with Royal Road School and the Ministry of Education regarding the Project and potential impacts on the site. Prior to the start of works, NZTA will seek approval from the Minister of Education to conduct the proposed works within the Ministry of Education designation for Royal Road School under s177 of the RMA.

Overall, I consider the potential effects on Royal Road Primary school to be appropriately mitigated through the proposed conditions of designation.

7.3.2 St Francis Catholic Primary School

The Proposed Designation occupies approximately 850m^2 of grounds within St Francis Catholic Primary School, located at 2 Montrose Street, Point Chevalier. This is the area of the school immediately adjacent to Great North Road, and in part occupied by large advertising signage boards. There is a small quantum of cut and fill required in this area, to support the realignment of Great North Road. On completion of that work the site can be largely restored.

Through engagement with St Francis School, NZTA has committed to retaining the mature pōhutukawa at southeast border of school grounds to provide screening of the nearby SH16 to the school's classrooms and facilities. I discussed the retention of these trees in Section 6. Any potential loss of income from the removal or relocation of advertising signs will be discussed with the school (as the landowner) during the acquisition process in accordance with the PWA.

Overall, I consider that the potential effects on St Francis School are minor, with the PWA process to acquisition of land.

7.3.3 Newton Central School

Newton Central School located at 15-17 Monmouth Street, Grey Lynn immediately abuts the existing SH16 designation adjacent to the Newton Road east bound off-ramp but is not directly impacted by the Project or Proposed Designation. It is unlikely that there will be any construction or operation impacts that would adversely affect the school.

Through engagement with the community, I understand that the existing Waima-Haslett Street footbridge is a popular walkway for school students. The Indicative Design for the Project does not directly impact this pedestrian bridge. To safely construct the proposed overbridge, the pedestrian footbridge may be subject to short term closures if public safety cannot be maintained during construction. Any closures would be advised to all potential users well in advance through the preparation of CTMPs.

7.4 Early childcare centres

Two ECEs are within the Proposed Designation. I consider that the owners of the ECEs will be compensated appropriately through the PWA. The PWA process will provide sufficient time for operators to relocate to new facilities within the area as required.

7.5 Other public facilities

7.5.1 Northwest Shared Path

The Project may require the relocation of pedestrian and/or cycle facilities. There are significant Project interfaces with the Northwest Shared Path, which is a popular commuter and recreational cycle route alongside SH16.

The Eric Armishaw Park to Alberta and Montrose Streets walkway adjacent to the city bound off-ramp at Waterview that accesses Point Chevalier is wholly within NZTA land, the existing NZTA Waterview Designation 6723, and the Proposed Designation. The works proposed alongside this walkway on SH16 offramp to Great North Road include lane modifications and the walkway can be retained.

Temporary diversions may be required during construction to ensure public safety. Measures to manage this are included in the CTMP I propose as a condition on the designations.

7.5.2 Westgate Medical Centre

The Westgate Medical Centre located on Maki Street, Westgate, is a large medical centre with urgent care facilities. The medical centre will no longer be able to operate from the premises from the time of construction. The PWA requires negotiation with the business owner and these negotiations may result in a relocation to new premises, or a business buyout.

7.6 Navigation of Huruhuru and Henderson Creeks

During construction, some restrictions on the access and navigability of Henderson Creek and Huruhuru Creek are likely to be implemented for the health and safety of the public. I understand that the reaches of the Henderson Creek potentially impacted by the Project are frequently used by the local kayaking club, and by other members of the public for recreational purposes.

I have recommended a clause within the proposed Coastal Works Management Plan that requires methods to be included in the plan to maintain safe navigation passage past the works site, and details of how any potential restrictions to navigation (e.g. when bridge beams are being installed) will be communicated to users of the waterway.

I have recommended a condition on the resource consents that the bridges crossing the Huruhuru and Henderson Creeks in the CMA are designed to be, at a minimum, the same clearance above mean high water springs as the existing downstream SH16 bridges.

8. Property and land use

Potential adverse effects on existing private properties have been reduced where practicable through the development of the Indicative Design and Proposed Designation. Option development and analysis included specific consideration of the potential property and business impacts of the Project through a MCA framework.

Approximately 372 properties will be directly affected by the Project (either partially or fully within the Proposed Designation), and 233 of these properties are currently in private ownership.

The Proposed Designation includes space for the construction, operation and maintenance of the Project. The land required for the Project is shown on the Indicative Design drawings and designation plans in Part 6.

While the PWA processes cover the replacement of driveways and compensation for loss or temporary use of parking or loading areas (as discussed below), I have included a condition on the Proposed Designation for two supermarkets. One located at 1136 Great North Road in Pt. Chevalier and one in Westgate that are impacted by the Project. For both supermarkets, there is a concern around the ongoing loading of goods from their existing access - both in the design of the Project and during the construction phases.

The proposed conditions define how access and loading will be managed in the design and construction of the Project. Ongoing conversations are being held with both parties. In particular, with Woolworths in Westgate to define the type of delivery vehicles and the hours they receive deliveries. Ongoing conversations will continue to further develop the proposed conditions.

8.1 Section 176 approvals

The Proposed Designation will not preclude the continued (unchanged) use of any directly affected properties prior to construction. However, in accordance with section 176(1)(b) of the RMA, anyone (other than a requiring authority with an earlier designation) is restricted from carrying out work on the designated land which would prevent or hinder the designated work without first obtaining the requiring authority's written consent. For properties that are partially designated, only works within the area of the designation are required to obtain written consent.

The NZTA website includes information on the types of activities that do not require s176(1)(b) approval. These activities include painting and decorating, domestic garden improvement and repair of existing utility services. NZTA will work with those subject to Proposed Designation where they propose new work or activities in the designated area to discuss whether written consent is needed and can be provided.

8.2 Public Works Act process

Property acquisition and reinstatement will be done in coordination with directly affected landowners and occupiers and will follow the provisions of the Public Works Act 1981, which is a separate process from the requirements under the RMA. Land may continue to be sold or leased whilst designated.

Land required for the ongoing operation and maintenance of the Project (including project mitigation, ongoing maintenance, and operation) will be identified and acquired typically in a period of 2 – 3 years leading up to main construction. The PWA is the legislative framework under which entitled landowners will receive compensation. Therefore, land required permanently will be purchased by the Crown and owners relocated prior to construction occurring.

If temporary occupation of the land is required at the time of construction (such as construction area and access arrangements), it may be leased in agreement with the property owner. PWA processes also include the replacement of removed elements such as trees, landscaping, driveways, parking and fences on private property.

Landowners with property within the Proposed Designation will be contacted by NZTA well before the start of construction of a stage of work for the Project to discuss acquisition and compensation under the PWA.

In some circumstances, NZTA may consider advance acquisition of properties on grounds of hardship.

9. Contaminated land

This section provides a summary of actual and potential effects associated with the construction and operation of the Project in relation to contaminated land and recommends ways of mitigating these effects. A PSI for the Project is included in Part 6.

9.1 Identified HAIL sites

The PSI by Mr Widdowson identifies sites on the Hazardous Activities and Industries List (HAIL) within the Proposed Designation. He also identifies sites on land adjacent to the Proposed Designation where there is potential for activities to have adversely impacted soil and water quality that could migrate to the proposed earthworks areas within the Proposed Designation.

A total of 156 HAIL sites were identified within and adjacent (within 50m of) the Project Area as part of the PSI. The majority of the sites were identified for their historical or current persistent pesticide storage or use. Figure 9-1 and Figure 9-2 below provide an overview of the distribution of HAIL sites and their uses across the Project Area.

Legend

- Project Area Outline
- Area Boundary

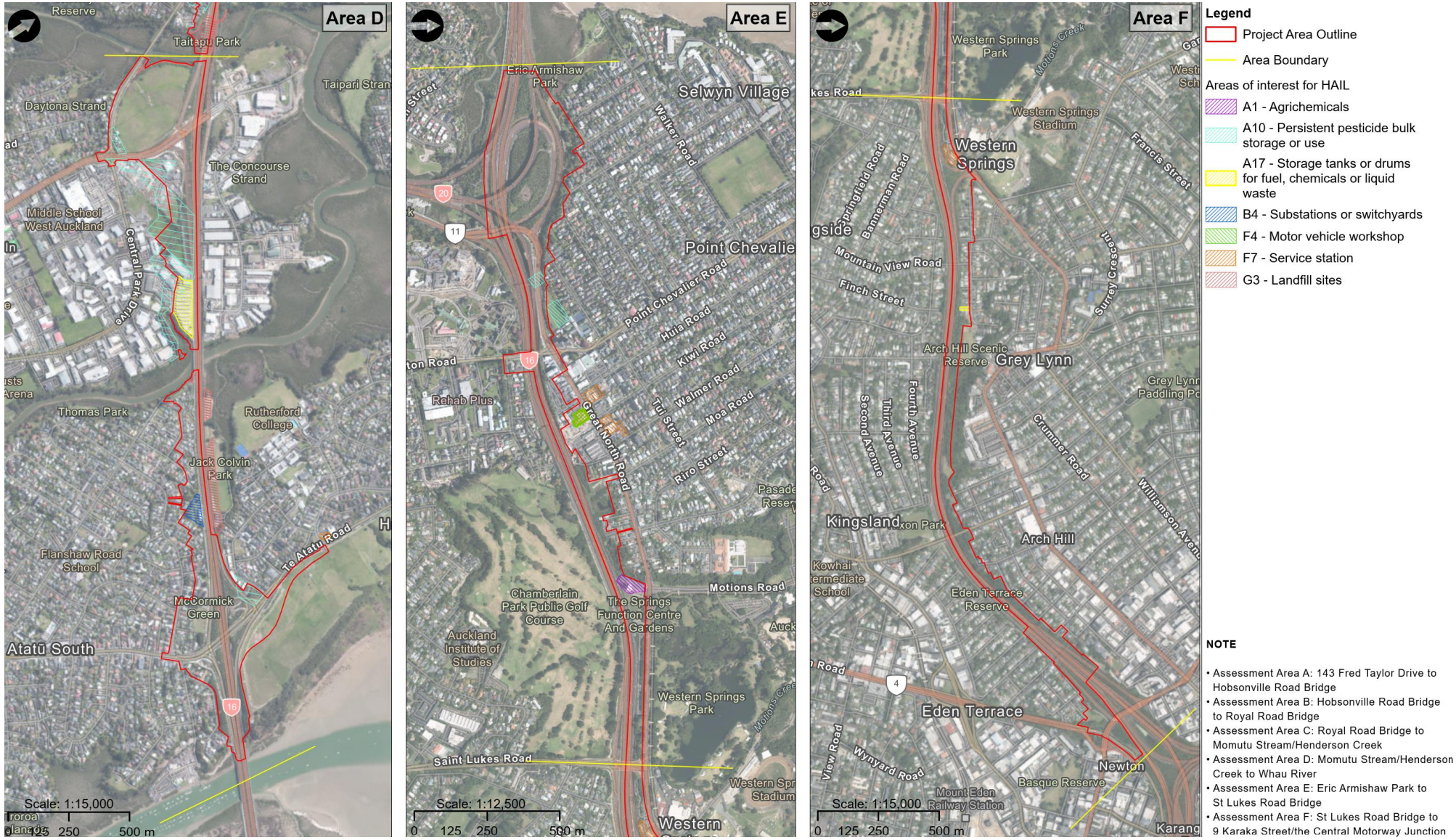
Areas of interest for HAIL

- A1 - Agrichemicals
- A10 - Persistent pesticide bulk storage or use
- A17 - Storage tanks or drums for fuel, chemicals or liquid waste
- B4 - Substations or switchyards
- F4 - Motor vehicle workshop
- F7 - Service station
- G3 - Landfill sites

NOTE

- Assessment Area A: 143 Fred Taylor Drive to Hobsonville Road Bridge
- Assessment Area B: Hobsonville Road Bridge to Royal Road Bridge
- Assessment Area C: Royal Road Bridge to Momutu Stream/Henderson Creek
- Assessment Area D: Momutu Stream/Henderson Creek to Whau River
- Assessment Area E: Eric Armishaw Park to St Lukes Road Bridge
- Assessment Area F: St Lukes Road Bridge to 9 Karaka Street/the Central Motorway Junction

Figure 9-1: Identified HAIL sites



NOTE

- Assessment Area A: 143 Fred Taylor Drive to Hobsonville Road Bridge
- Assessment Area B: Hobsonville Road Bridge to Royal Road Bridge
- Assessment Area C: Royal Road Bridge to Momutu Stream/Henderson Creek
- Assessment Area D: Momutu Stream/Henderson Creek to Whau River
- Assessment Area E: Eric Armishaw Park to St Lukes Road Bridge
- Assessment Area F: St Lukes Road Bridge to 9 Karaka Street/the Central Motorway Junction

Figure 9-2: Identified HAIL sites

9.2 Positive effects

The Project and resource consents sought enables removal of identified contaminated soils within the Proposed Designation, which will improve the quality of the receiving environment.

Should contaminated soil be identified as part of the Project that is not removed, it will be managed in a way that minimises potential effects which may not be occurring at present.

9.3 Construction effects

Mr Widdowson identifies that earthworks may disturb a number of common contaminants in soils such as:

- Metals and metalloids (arsenic, boron, cadmium, chromium, copper, lead, mercury, nickel and zinc);
- Pesticides;
- Petroleum and hydrocarbon compounds;
- Organic compounds (including volatile and semi-volatile compounds); and
- Asbestos.

Disturbance of soils with these identified contaminants without implementing appropriate management measures can lead to:

- Direct effects on human health through inhalation, ingestion or contact with hazardous substances;
- Mobilisation of contaminants into air, surface water bodies, and groundwater;
- Effects on ecosystems, terrestrial and aquatic environments; and
- Cross-contamination of adjacent (uncontaminated) land or clean fill.

9.4 Operational effects

Mr Widdowson does not identify any operational effects given the low likelihood of the public coming into contact with contaminated land and/or groundwater during operation of the Project.

9.5 Measures to avoid, remedy, or mitigate effects

Mr Widdowson through his PSI confirms that although the disturbance of contaminated soils may occur, these can be proactively managed with appropriate protocols in place to protect the environment, workers' health, and prevent cross-contamination. Further investigations will be required to determine the best management technique at the time of construction.

Mr Widdowson recommends the following mitigation and management measures are adopted for the Project that I have included as proposed conditions of consent:

- A Detailed Site Investigation (DSI) is undertaken prior to earthworks in areas where hazardous activities and industries have been identified as historically or currently being undertaken within the Proposed Designation. DSIs will inform the potential remediation and management techniques and the preparation of a Contaminated Soil Management Plan (CSMP).
- A CSMP is prepared for each stage of work, incorporating findings of any DSI relevant to that stage. The CSMP should be prepared by a suitably qualified and experienced practitioner as defined in the NES:CS and should include the following information:
  - Confirmed construction methodology.
  - Summary of findings DSI relevant to the stage of work.
  - Description of soil hazards.
  - Description of procedures to manage and mitigate risks from contaminated soils during soil disturbance, including:
    - Soil management practices.

- Off-site disposal of soil.
- Erosion and sediment control.
- Management of dust.
- Worker health and safety measures.

- Contingency measures in the event of accidental or unexpected discovery of contaminated material.

If the CSMP identifies contaminated soils requiring remediation within the Site, a Remedial Action Plan should be prepared. I have included this as a condition on the resource consents. The purpose of the Remedial Action Plan is to identify a remedial strategy and controls to mitigate the risk posed by any contaminants identified in the CSMP.

Mr Widdowson confirms that where he has found no evidence of HAIL activity, it is unlikely that the proposed works will pose a risk to human health or the environment.

By implementing the recommendations made by Mr Widdowson regarding the preparation of DSIs, CSMPs and Remedial Action Plan where required, I consider that the potential effects on human health and the environment arising from disturbance of contaminated soils are low.

10. Ecology

10.1 Construction effects

An Assessment of Ecological Effects prepared by Mr Bredin is included in Part 6 that assesses the potential effects on the terrestrial, aquatic, wetland, and marine ecosystems within the Project Area.

10.1.1 Terrestrial indigenous vegetation

A total of approximately 0.68 hectares (ha) of terrestrial Significant Ecological Area (SEA) vegetation is included within the Proposed Designation and some of this vegetation may be removed to construct the Project (approximately 0.4ha for the Indicative Design). The four SEAs are shown in Figure 10-1 below.

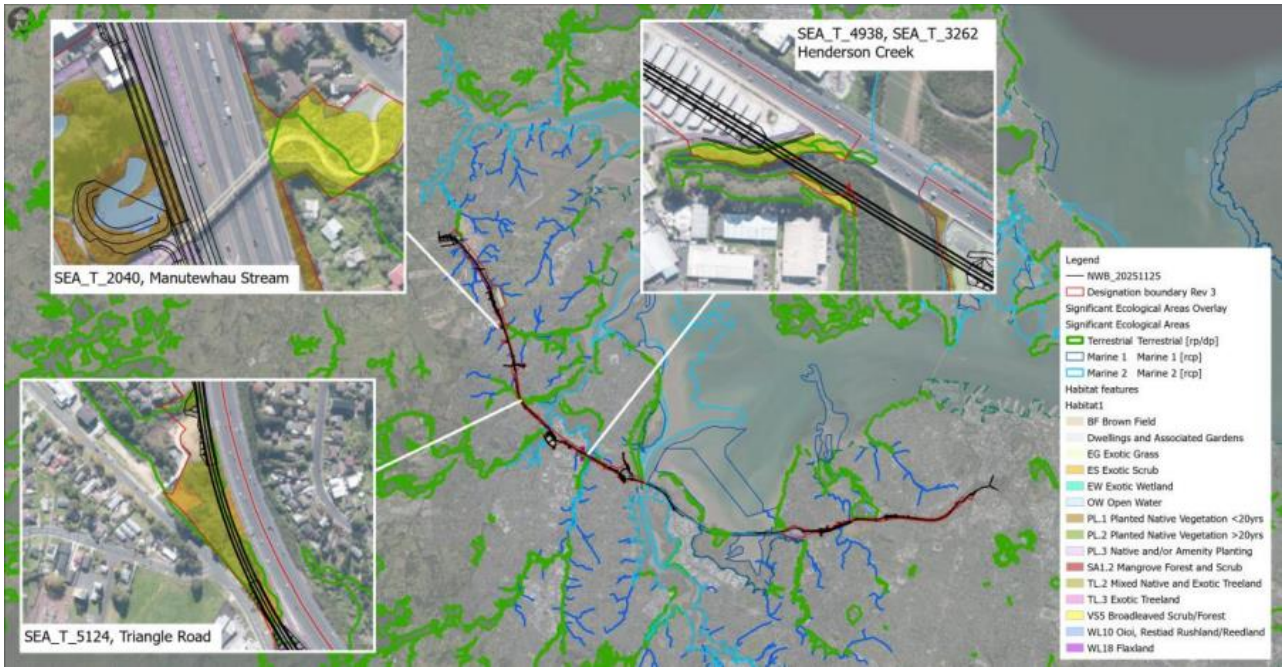


Figure 10-1: Terrestrial SEA potentially impacted by the Project

Terrestrial vegetation outside of SEAs is also proposed to be removed as part of the Project. However, the other vegetation (indigenous and exotic) has low biodiversity value (or less). Only the vegetation in the SEAs has been identified as having greater value due to habitat and species diversity, ecological networks (important breeding and feeding links), and alignment to reserves or stream corridors creating connectivity in the landscape. Mr Bredin considers the vegetation within the SEAs is of moderate ecological value, and consists of broadleaved scrub/forest, and mixed native and exotic treelands. The SEAs also contain other vegetation types of low ecological value, as well as pest plant species.

The Project will require temporary and permanent removal of terrestrial indigenous vegetation, which will result in loss of habitat for native fauna, habitat fragmentation and edge effects. Mr Bredin considers the pre-mitigation impacts of vegetation removal within SEAs are low – moderate. Mr Bredin considers the impacts of vegetation removal outside SEAs are very low – low.

10.1.1.1 Bat habitat

No bats were detected during surveys within and adjacent to the Proposed Designation. However, existing bat records for the Spedding Block development indicate long-tail bats have been present near Tōtara Creek and the proposed Brigham Creek station site in the past. Further historic bat records showed bats have been present in the vicinity of Brigham Creek Road.

Site investigations identified that existing riparian vegetation and mature vegetation associated with Tōtara Creek was identified within the Proposed Designation which could provide suitable roosting habitat for bats.

Due to the relatively limited number of mature trees proposed for removal in the suitable bat habitat, the killing or injury of bats, and/or removal of bat roosts is highly unlikely to occur. Mr Bredin considers that the pre-mitigation impacts of injury or killing of bats and loss of suitable bat roosting habitat is considered moderate.

Due to the relatively limited extent of vegetation removal proposed in the vicinity of Tōtara Creek, proposed Brigham Creek station site and associated busway, Mr Bredin considers the potential impact of loss of bat foraging habitat to be low.

10.1.1.2 Avifauna (birds)

Desktop investigations identified 67 bird species within approximately 5km of the Project Area. Forty-five (45) of these bird species are considered native/migrant species, with 24 of these species having a Threatened or At-Risk (TAR) conservation status. Site investigations for the Project confirmed the presence of several TAR bird species. All TAR species observed were coastal birds, with movement patterns influenced by tidal shifts resulting in daily foraging patterns.

The clearance of vegetation during bird nesting season may result in the loss of nests of native bird species. Mr Bredin considers that the potential pre-mitigation impact of loss of nests is moderate.

10.1.1.3 Herpetofauna (lizards)

Lizard surveys were conducted at numerous locations throughout the Project Area, with a total of two copper skinks found, each at a different location. An abundance of plague skinks was observed throughout the various vegetation types within the Proposed Designation.

Direct impacts on protected lizards are managed under the Wildlife Act. NZTA is not seeking permits for the salvage of protected lizards under the Wildlife Act at this stage. Permits for the handling and salvage of native lizards will be applied for closer to the time of construction if necessary.

10.1.2 Aquatic ecology

10.1.2.1 Streams

Construction of the Project will involve works within or directly adjacent to 10 permanent or intermittent streams within the Project Area as shown in Figure 10-2. The Project traverses four sections of Tōtara Creek (Stream 1, 2, 3 and 9), Mānutewhau Stream (Stream 4), Tihema Stream (Stream 5), Rarawaru Stream (Stream 7), a tributary of Mānutewhau Stream (Stream 6), one unnamed stream at Westgate Drive Park (Stream 10) and Waitītiko / Meola Creek (Stream 8).

Nine of the streams have a moderate ecological value. One stream (Stream 10) is considered to have low ecological value.

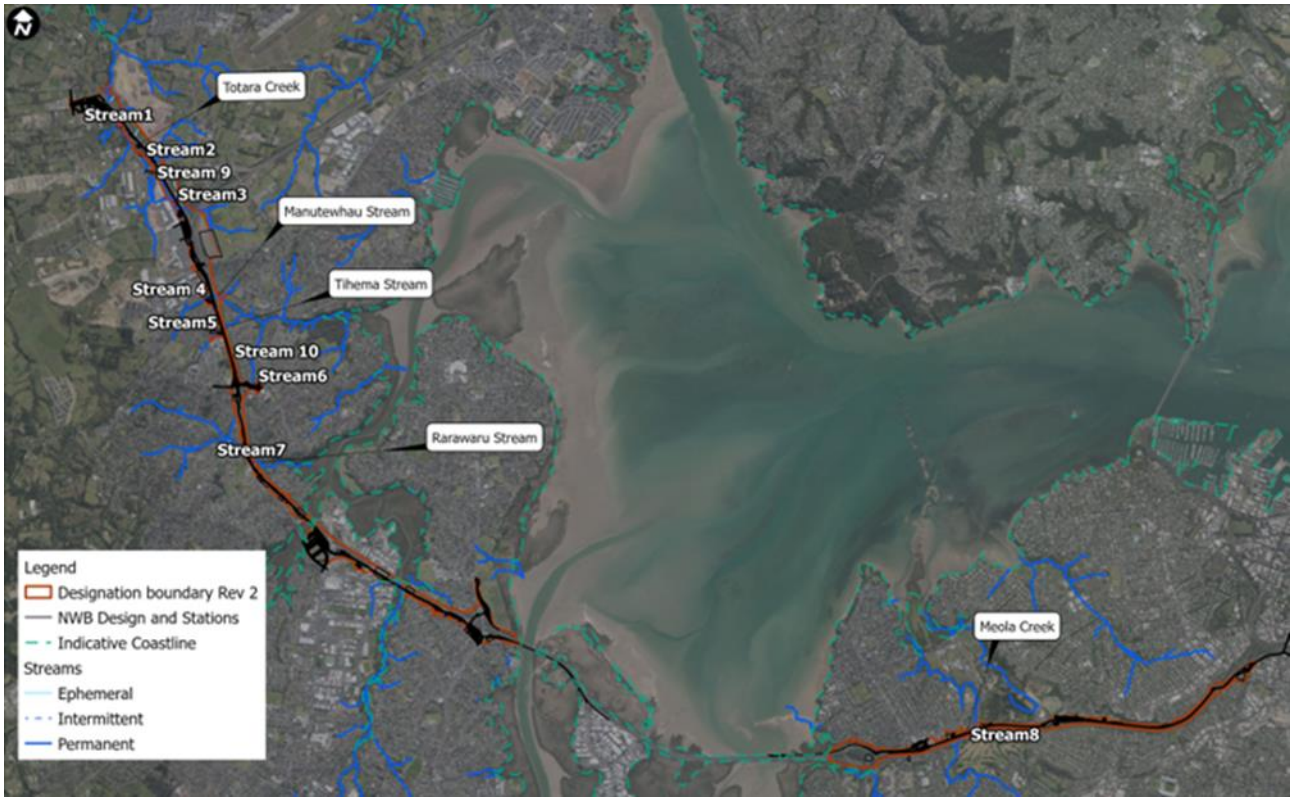


Figure 10-2: Streams within the Project Area

The potential effects of construction of the Project on streams include:

- Loss or values from modification of habitat, due to culvert extension, pipe extension with new outfall or installation of bridges. For the Indicative Design, the length of stream impacted by the Project is 78m. Mr Bredin considers the potential impact is moderate.
- Discharge of sediment laden water as a result of earthworks, accidental spills or leaks from construction equipment causing water quality degradation.

10.1.2.2 Native fish

Surveys and desktop records show that a range of native freshwater fish species are present in streams within the Project Area. These include longfin eel (tuna/kūwharuwharu), shortfin eel (tuna/hao), banded kōkopu, giant kōkopu, koaro, inanga, torrentfish (panoko), and several bully species (giant, Cran's, common, and redfin). Common smelt (ngaore) and grey mullet (kanae) were also detected. Most of these species are native and some are considered "At Risk" or "Threatened" nationally or regionally, such as longfin eel, torrentfish, koaro, inanga, and giant kōkopu.

In addition to fish, eDNA testing confirmed presence of freshwater mussels, which are "At Risk – Declining," in several streams (1, 2, and 6). Freshwater shrimp were also present in Streams 1, 2, 6, and 8.

Several pest fish species were identified in a number of streams (primarily Streams 1, 2, and 8) including rudd, gambusia, brown bullhead catfish, goldfish, and koi carp.

Construction works, including the installation and extension of culverts and other structures in or on stream beds have the potential to kill or injure native fish. Mr Bredin considers this may result in moderate effects prior to mitigation, due to the direct impacts at a local catchment scale.

10.1.3 Wetlands

Two natural wetlands are located within the Project Area, one at 74 Trig Road and another at Eric Armishaw Park. Both wetlands are exotic induced wetlands and are considered to have low to moderate ecological value. The wetland at 74 Trig Road is associated with Tōtara Creek, which has been significantly modified and the stream has been realigned.

Both wetlands, while in the vicinity of the Project, are not directly impacted by the Indicative Design. NZTA is not seeking consents under the NES-F (in particular, regulation 45) for works that may directly impact these two identified wetlands.

10.1.4 Marine (estuaries)

The Project proposes two new bridges over the Coastal Marine Area (CMA) – one at Henderson Creek and one at Huruhuru Creek. Both Henderson Creek and Huruhuru Creek are subject to a Marine SEA (M2) overlay in the AUP. Henderson Creek is known to have been impacted by significant quantities of sediment, historical pesticide runoff, landfilling and urbanisation, as well as chemical spills.

Vegetation at both creeks is dominated by mangroves. The areas surrounding the two proposed bridges are not considered major bird feeding grounds, given there is significant habitat of higher quality for bird feeding at sandflats downstream of the proposed bridges.

The mangrove habitat and sub-tidal areas at Henderson and Huruhuru Creeks are considered by Mr Bredin to have low ecological value.

The potential construction effects on the marine environment include:

- Temporary clearance of mangrove habitat (to accommodate construction staging and temporary piles).
- Remobilisation of contaminants in sediment due to earthworks.
- Noise and vibration disturbances to marine fauna from construction activity (in particular, bridge piling works). These works will take place over a period of a few days, and it is expected that fish and birds will avoid the area at this time.
- Shading of mangrove habitat and sub-tidal areas (temporary and permanent).
- Permanent loss of mangrove and avifauna foraging habitat (limited to the extent of bridge piers which is less than 1% of the total surrounding mangrove habitat).
- Permanent habitat loss in the sub-tidal area of Henderson Creek (limited to the extent of the bridge pier, which is less than 1% of the total subtidal area in this habitat).

Mangrove habitat temporarily removed to construct the bridge structure will be able to regenerate.

Overall, Mr Bredin considers that the potential ecological effects on Henderson Creek and Huruhuru Creek as a result of the Project are very low without mitigation.

10.2 Operational effects

Much of the Project is located within an urbanised environment, with the exception of the section north of Westgate. The Project is also adjacent to SH16 and major arterial roads.

All stormwater from new impervious areas will be treated before discharging to the environment – as proposed on the resource consent conditions. The use of electric buses also reduces the contaminants in stormwater runoff and the potential impacts on habitats. Also as proposed on the resource consent conditions, is that new or upgraded culverts will be designed to provide fish passage, unless there is no upstream fish habitat or existing barriers to fish passage or providing fish passage is impracticable.

Mr Bredin considers the potential ecological effects as a result of the operation of the Project are considered to be very low.

10.3 Measures to avoid, remedy or mitigate effects

10.3.1 Construction effects

Terrestrial SEAs

I recommend the conditions of consent require replacement planting to manage the effects of vegetation removal in SEAs. The amount of planting I have recommended as part of the conditions differs from that in Mr Bredin's report. Mr Bredin uses Biodiversity Compensation Model calculations and EIANZ Guidelines to

inform his recommended mitigation. This results in an offsetting and an enhancement approach. As Mr Bredin has assessed the pre-mitigation impacts of vegetation removal within SEAs as low – moderate, I have recommended a more bespoke approach to replanting in the SEAs. This is based on the limited extent of the Project's potential impacts and the significant benefits of the Project.

SEA_T_2040 (Mānutewhau Stream) will only be impacted in the event the Westgate pedestrian bridge needs to be rebuilt for the Project. Any loss of vegetation will be temporary for construction, or if the pedestrian bridge moves position. The bridge is connected by footpaths either end of the bridge and there is insufficient space available to move its position substantially. I therefore recommend replanting with native vegetation all areas of the SEA where vegetation was removed.

For SEA_T_5124 at Triangle Road, the Project will have some permanent impacts as the busway is located within the SEA. The Proposed Designation follows the property boundary at 178-220 Triangle Road and includes an area of the SEA that may not be required for construction activity. As set out in Mr. Bredin's report, the SEA contains a number of exotic, pest plant species. Therefore, there is an opportunity to improve the quality of the remaining portion of this SEA. I have recommended that no more than half of the SEA within the Proposed Designation is removed permanently, and that pest plants are removed from all remaining areas of SEA within the Proposed Designation. I recommend that native species are planted in the remaining portion of SEA_T_5124 within the Proposed Designation that is not impacted by the permanent works. This aligns with the recommendation in Mr Bredin's report that the SEA within the Proposed Designation is used for restoration.

Within SEA_T_3262 and SEA_T_4938 (Henderson Creek), loss of vegetation will be predominantly temporary during construction. I recommend that native vegetation is planted in all areas where vegetation is removed. Where there is vegetation removed permanently for bridging (i.e. cannot be planted back in the same place), I recommend that the equivalent area is planted elsewhere within the SEA or elsewhere in the Proposed Designation as advised by a Suitably Qualified Person (SQP). Mr Bredin's recommends SEA_T_4938 as a suitable site for additional planting in his report.

I have included in the proposed conditions of consent the following additional requirements in relation to planting:

- Planting is undertaken within the first planting season following completion of construction;
- A SQP is engaged to determine plant species and sourcing, density and sizing for planting;
- Pest plant control for a five year period; and
- Monitor planted areas and undertake replacement planting as necessary for a five year period or until 80% canopy cover is achieved (whichever is less).

I consider that, following implementation of the proposed replanting, and along with pest plant control:

- The effects on SEA_T_2040, SEA_T_3262 and SEA_T_4938 are low; and
- The effects on SEA_T_5124 are low-moderate.

Works in watercourses

Mr Bredin recommends that mitigation for stream impacts focuses on riparian restoration.

Temporary construction areas, within riparian areas, will be required to construct bridge crossings and culvert extensions (i.e. areas adjacent to the Indicative Design). Once construction is complete, Mr Bredin recommends that the construction areas within the riparian areas are replanted. This will rectify the direct impacts to riparian vegetation at the affected sites. I have included this as a proposed condition of consent.

Mr Bredin sets out in his report that while the loss of riparian vegetation in temporary construction areas can be remedied at the affected sites, the loss of instream and riparian areas within the footprint of the bridges and culvert extensions cannot. He recommends offsetting and an environmental compensation ratio. In the calculation to determine the compensation ratio, long term benefits are considered and a multiplier is used to compensate for loss of potential value. It is not based on the existing environment. Instead of this calculation, I have recommended that riparian planting is undertaken for an area no less than that occupied by the permanent structure in the watercourse and riparian margin. This is based on a moderate value and moderate level of effect without any mitigation and the significant benefits of the Project. This riparian

planting should be located within the same stream or could be located elsewhere within the Proposed Designation as advised by a SQP.

I have included in the proposed conditions of consent the following additional requirements in relation to mitigation planting:

- Planting is undertaken within the first planting season following completion of construction;
- A SQP is engaged to determine plant species and sourcing, density and sizing for planting;
- Monitor replacement planting for at least five (5) years, or to achieve an 80% canopy cover.

I consider that, following implementation of the proposed replanting measures, the effects on streams and freshwater ecosystems is low-moderate.

Kauri Die-Back Management

Mr Bredin identified one Kauri tree during surveys within the Proposed Designation near Henderson Creek. Mr Bredin identified that the Kauri appears to be suffering from Kauri dieback disease. Mr Bredin recommends that the Kauri tree is avoided if practicable. I note that avoiding the Kauri tree is unlikely to be practicable, as it is directly impacted by the Indicative Design.

In the event that the identified Kauri tree is present at the time of construction and requires removal, Mr Bredin recommends that kauri dieback management measures are implemented in accordance with the Biosecurity Order 2022 and the Auckland Regional Pest Management Plan. I have included this recommendation in a proposed condition of consent.

Native Birds

To manage potential effects on native birdlife during vegetation clearance in the bird nesting period (September to February), Mr Bredin recommends pre-clearance native bird checks. I therefore recommend a condition of consent, that requires a suitably qualified ecologist to:

- Survey proposed vegetation clearance areas (excluding residentially zoned land) for native nesting birdlife; and
- If nesting native birdlife is found within proposed areas for vegetation clearance (excluding pasture and residentially zoned land), appropriate setback distances are to be identified for construction works until such time as birds have fledged their nests, or it is naturally abandoned.

Overall, with the implementation of the above measures, Mr Bredin considers that the effects on native birds arising from the Project are very low.

Native fish

To manage potential effects on native fish during stream works, Mr Bredin recommends fish salvage and relocation procedures. I recommend a condition on the relevant consents that require salvage and relocation of indigenous freshwater fish prior to any dewatering or diversion in a section of stream that supports a population of native fish. As recommended by Mr Bredin, I have recommended conditions of consent that salvaged native fish are relocated to the same stream with similar hydrological conditions where possible, or other suitable habitat as determined by a SQP.

Overall, with the implementation of the native fish salvage and relocation protocols, Mr Bredin considers the effects on native fish arising from the Project are very low.

Bats

Based on Mr Bredin's recommendations, I recommend a condition of consent stating that if the mature trees identified as potential bat habitat adjacent to the Tōtara Creek are proposed to be removed, and if a suitably qualified person considers they may be used as bat roosts at that time, the Department of Conservation's Bat protocol shall be implemented.

Overall, with the implementation of bat protocols for the identified potential bat habitat, Mr Bredin considers the effects on bats arising the Project are low.

Works in the CMA

Mr Bredin recommends erosion and sediment control measures, and good practice for removing mangroves during construction in the CMA. I have included these measures in a proposed condition of consent for a Coastal Construction Management Plan (CCMP). The objective of the CCMP is to manage construction effects of works in the CMA.

This condition will manage potential construction-related effects on marine ecology arising from the Project, primarily:

- Land and bed disturbance causing sediment mobilisation; and
- Clearance of mangroves

I have recommended the CCMP include (of relevance to potential effects on marine ecology) the following:

- The route to be used for accessing the site for construction purposes
- Methods to ensure that, where practical, when removing mangroves, mangroves are cut as close to the sediment as possible and leave root masses intact where possible;
- The construction footprint, demarcating those areas in the CMA and coastal edges which need to be physically marked onsite, with access (for vehicles and staff) restricted to the footprint;
- Contingency plans in case of discharges to the coastal marine area during works;
- General site management, including details of:
  - the bunding or containment of fuels and lubricants to prevent the discharge of contaminants.
  - methods to ensure that any equipment or machinery to be stored on the temporary staging is appropriately secured above mean high water springs, and methods to ensure that no spills into the coastal marine area will occur.
- A removal methodology for temporary platform and piles extraction, for mangrove removal and disposal for cleared mangroves and spoil from drilling for piles; and
- Details of reinstatement upon completion of the activities in the CMA.

Overall, Mr Bredin considers the effects on the marine environment as a result of the Project are very low. ESC measures and general construction management as required by the proposed conditions will be undertaken.

10.3.2 Operational effects

Mr Bredin does not recommend any mitigation for potential operational effects of the Project on ecology.

10.4 Sensitivity testing

In his report, Mr Bredin has assessed the effects of the Indicative Design moving within the Proposed Designation (or Site). He has identified that additional mitigation may be required in some areas where there is additional loss of in stream or wetland habitat, vegetation loss (riparian and SEAs) or bat and lizard habitat. However, I have proposed conditions on the resource consents to appropriately manage effects within the Site – that considers movement of the Indicative Design. This includes the following as set out below.

Watercourses

Part of the Tōtara Creek is within the Proposed Designation and it is proposed to be bridged in the Indicative Design, existing culverts extended and a stormwater outfall upgraded. Irrespective of the final design of the Project in this area, my proposed condition prevents the permanent diversion or reclamation of the bed of Totara Creek.

I have also proposed conditions on the consents that provide for scalable riparian planting to manage effects of structures in watercourses. This provides for mitigation for culverts and stormwater outfalls no matter where they are located within the proposed designation.

Wetlands

There are two induced wetlands located within the Proposed Designation. However, NZTA is not seeking consents for works in proximity to these wetlands under the NES:FW. Therefore, if the final design impacts these wetlands, NZTA may need to seek additional consents.

SEAs

I have proposed conditions on the consents to provide scalable replacement planting and ongoing maintenance of the planting within SEAs. Accordingly, even if the final design changes, this condition will appropriately manage vegetation removal in the SEAs. I have also proposed a condition that limits the extent of the SEA vegetation that can be removed permanently for SEA_T_5124 at Triangle Road (not more than half of the SEA).

Avifauna and Bat protocols

I have proposed protocols on the consent conditions and these will appropriately manage the effects regardless of the final design of the Project.

11. Hydrogeology

Mr Sheppard in his Assessment of Groundwater and Settlement effects includes desktop studies of existing data, site investigations including monitoring bores at 11 locations along the Indicative Design, and drawdown and settlement modelling and analysis.

The assessment adopted a conservative approach, assuming no mitigation of groundwater or settlement effects from specialised retaining structures, even though these are expected to be part of the final design of the Project.

11.1 Construction effects

Construction activities involving deep excavations have the potential to interact with groundwater. These interactions with groundwater may result seepage of groundwater into excavations and/or localised drawdown of groundwater levels which may induce ground settlement. This may result in effects on surrounding property, structures and infrastructure.

Earthworks cuts below the water table are expected at Huruhuru Road underpass, Lincoln Road station, Te Atatū station and Point Chevalier station. Most earthworks cuts are anticipated to be within the Takaanini Formation or residual East Coast Bays Formation (ECBF), or a combination of both.

No recorded groundwater users or surface water bodies are present within the zones of predicted groundwater drawdown for the Project. Therefore, Mr Sheppard concludes that no effects are expected on groundwater users or users of surface water bodies.

The modelling undertaken for the Project found that potential effects of drawdown are highly localised, due to low permeability soils across the Project area. Mr Sheppard therefore considers that the potential effects of the Project in relation to groundwater and settlement are low to negligible.

11.2 Operational effects

Mr Sheppard does not identify any effects in relation to groundwater settlement and drawdown that will endure following completion of construction of the Project.

11.3 Measures to avoid, remedy or mitigate effects

Mr Sheppard adopted a conservative approach to his assessment, assuming that likely groundwater drawdown and seepage techniques are not embedded in the construction methodology. The findings of his assessment confirm that potential effects of the Project in relation to groundwater drawdown and settlement are considered negligible to low. On this basis, Mr Sheppard does not recommend any mitigation.

12. Construction stormwater

The total earthworks area for the Project covers approximately 35 hectares of land, with 25 hectares of earthworks required west of the causeway, and 10 hectares to the east. Estimated earthworks consist of 500,000m3 of cut, and 450,000m3 of fill. The cut volume will typically be cut to waste, and fill material being stabilised product (granular hardfill).

Mr Stewart sets out in his Construction Stormwater Assessment (included in Part 6), that due to the linear nature of the proposed infrastructure adjacent to an existing state highway, construction will be staged and areas of earthworks will be progressively stabilised, reducing the risk of erosion.

12.1 Assessment of construction effects

The potential effects of sediment-laden discharges incidental to construction activity primarily relate to water quality. Poor water quality caused by sediment-laden discharge can impact:

- Freshwater and marine ecology;
- Natural character values; and
- Cultural values, including those held by iwi/hapū.

Mr Stewart considers the risk of elevated sediment yield for the Project to be low, due to the following factors:

- The Project traverses terrain with low to moderate gradients, which reduces total earthwork volumes.
- Delivery of the Project will be staged and will incorporate progressive stabilisation.
- The materials likely to be exposed and placed are of lower erosion risk (e.g. compacted aggregate).

Mr Stewart considers that the Project can be constructed in accordance with Auckland Council's Guidance Document 005 (GD05) which is considered best practice from an erosion and sediment control perspective. One exception to this is in relation to winter works. Mr Stewart considers that a winter works restriction is not necessary as the Project will be staged and utilise aggregate hardfill and will therefore not result in an unacceptably high risk of elevated sediment discharge.

12.1.1 Works in and adjacent to freshwater or coastal environments

The Project includes two dedicated bus bridges over the CMA at Wai-o-Pareira / Henderson Creek, specifically at Huruhuru Creek and Henderson Creek, both of which are tidal. Bridge construction will require the installation of temporary staging from both ends to provide access for piling, piers, and crosshead construction.

One bridge pier may be located within the Henderson Creek channel due to the length of the bridge. The new bridge will be adjacent to the existing SH16 bridge that also has piers located in the CMA.

Along the busway, several existing freshwater creeks will be crossed, with all waterways maintained through either extended culverts or new bridges. Waitītiko / Meola Creek will be bridged with no piers proposed within the watercourse. Additionally, several streams crossing under SH16 via culverts, including three in the section between Royal Road and Lincoln Road.

Mr Stewart considers that works in or near the CMA or streams and watercourses have a potentially higher risk of elevated sediment yields. However, he also notes that works in these areas can be managed effectively and are not, in his opinion, unusual or high-risk.

12.2 Measures to avoid, remedy or mitigate effects

I agree with the recommendations made in Mr Stewart's report that an Erosion and Sediment Control Plan (ESCP) is the best way to avoid, remedy or mitigate potential construction stormwater and erosion effects. ESCPs are well understood by construction contractors and are an effective tool for large linear infrastructure projects and can be delivered in stages.

An ESCP should be prepared for any stage of work in accordance with GD05, and should include the following details:

- Erosion and sediment control (ESC) measures for the works being undertaken within a particular construction area;
- Catchment boundaries of works and devices installed;
- Design criteria, typical and site-specific details of ESC;
- The identification of staff who will monitor compliance with conditions;
- Design details for managing treatment, disposal and/or discharge of contaminants (e.g. concrete wash water);
- Chemical (or organic) treatment design and details including batch dosing;
- Pumping procedures where dewatering is required;
- Earthworks programme and measures for the period between 1 May and 30 September; and
- Methodology, timing, staging and sequencing of stream works including culvert extensions and replacements, and any erosion sediment control measures to be employed to mitigate the effects on waterbodies.

Mr Stewart has recommended that areas of exposed earth prone to erosion are to be stabilised if works are not proposed in that area for a period of greater than 14 days. I have included this as a proposed condition of consent.

I agree with Mr Stewart that construction works near and over the CMA require careful management. I therefore recommend a condition on the consents that a CCMP is prepared. The purpose of the CCMP is to manage construction effects on the CMA. In relation to construction stormwater and erosion and sediment control, this plan shall detail:

- Timing, staging and sequencing of coastal works;
- The route to be used for accessing the site for construction purposes;
- Contingency plans in case of discharges to the coastal marine area during works; and
- A removal methodology for temporary platform and piles extraction, for mangrove removal and disposal for cleared mangroves and spoil from drilling for piles.

With the implementation of the above mitigation and management measures, I consider that the potential effects of the Project with respect to construction stormwater are low.

13. Flooding and stormwater effects

The Assessment of Stormwater and Flooding Effects by Mr May assesses the actual and potential effects of the future construction and operation of the Project as it relates to flooding and stormwater. Mr May's assessment is included in Part 6.

Stormwater effects can be broadly divided into stormwater quantity effects and stormwater quality effects. The Project has the potential to cause changes to flood depths, which can have effects on people and properties during heavy rainfall events.

The Project proposes new impervious surfaces. Impervious surfaces will generate stormwater run-off. This stormwater run-off may contain pollutants from the operation of vehicles which can have effects on waterbodies and ecosystems that receive this run-off.

New and upgraded stormwater outfalls and discharges are proposed to manage stormwater generated from new impervious surfaces. The operation of these outfalls and discharges can have effects on the quality of receiving waters and can also result in scouring and erosion of stream beds.

13.1 Flooding and overland flow paths

The potential effects of the Project crossing streams and flood plains have been assessed by Mr May comparing change to existing flooding extent and depths and changes to the Flood Danger Rating[18] on surrounding properties as shown in Figure 13 1. The stormwater and flooding scenarios are based on the Indicative Design within the Proposed Designation.

The Flood Danger Rating is a measure of flood hazard and potential risk to people and property at the property level. The Flood Danger Rating assigned to properties is based on two key factors; how much flood water is predicted to enter a habitable building, and how hard it would be for people to safely evacuate. These two key measures rely on potential flood depth levels, the level of habitable floor and the potential velocity of flood waters (in relation to flooding outside). The matrix determines a danger rating for properties in low, moderate or high danger categories. For example, where flood levels are not predicted to enter a habitable floor, and the predicted depth and velocity of flood water outside (along an escape route) is low, then the property will be assigned a low danger rating. Where flooding is predicted to inundate habitable floors by more than 0.5m, the property is assigned a high danger rating, regardless of the ease of evacuation.

Mr May determined the current Flood Danger Rating for properties outside of the Proposed Designation, and then determined the Flood Danger Rating following the construction of the Indicative Design for the Project (with adjustments for climate change scenarios). Mr May determined that the Indicative Design does not result in a change in Flood Danger Rating for properties outside of the designation.

[18] Auckland Council Flood Danger Rating – Assessment Framework for Flood Risk at Property-level

Danger Rating Matrix

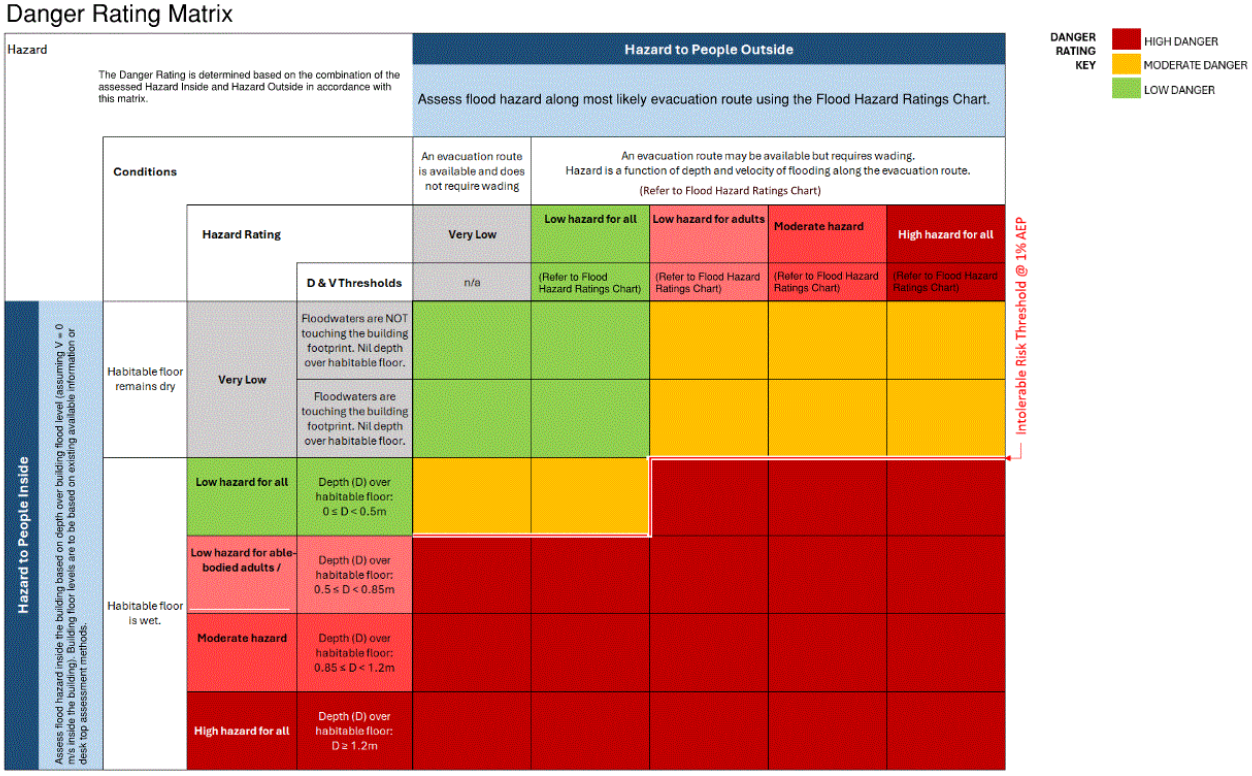


Figure 13-1: Danger Rating Matrix

Mr May's assessment demonstrated the implementation of the Indicative Design and associated stormwater management will:

- Not create any new inundation of floor levels due to the Project; and
- Minimise damage to properties that are already inundated by flooding at present (without the Project).

Mr May's assessment concludes that at most locations, the Project is likely to reduce flood levels and therefore have a positive impact. Some localised areas may experience small increases in flood depth, but these increases are considered minor or negligible.

13.2 Water quality and stormwater discharge

New stormwater discharge locations and upgrades to existing outfalls are proposed as part of the Project. Table 13-1 sets out the discharge and outfall locations proposed to be used to manage stormwater runoff from new impervious areas as part of the Project. New or upgraded outfalls are proposed at Tōtara, Huruhuru and Henderson Creeks.

Table 13-1: Proposed stormwater discharge locations

Outfall / Discharge Location	Treatment Area	Approximate Impervious area (m^2)	Discharge to
Tōtara Creek	TA 1	73000	Tōtara Creek via existing NZTA culvert
	TA2	1200	Tōtara Creek via new outfall
	TA3	3050	Tōtara Creek via new outfall
	TA4	12900	Tōtara Creek via existing wetland outfall
	TA5	7500	Tōtara Creek via existing wetland outfall
Mānutewhau Stream	TA 6	7550	Mānutewhau Stream via existing NZTA motorway culvert
	TA7	3600	Mānutewhau Stream via existing NZTA motorway culvert
	TA 8	2200	Mānutewhau Stream via existing NZTA motorway culvert

Outfall / Discharge Location	Treatment Area	Approximate Impervious area (m^2)	Discharge to
Rarawaru Stream	TA 9	24500	Rarawaru Stream via NZTA motorway culvert
Huruhuru Creek	TA 10	8150	Huruhuru Creek/CMA via NZTA existing outfall
	TA 11	21000	Huruhuru Creek/CMA
Te Wai-o-Pareira / Henderson Creek	TA 12	7550	Henderson catchment flood solution via existing NZTA motorway culvert
	TA 13	9900	Henderson catchment flood solution via existing AC network
	TA 14	22700	Henderson catchment flood solution via existing NZTA culvert then a tributary stream
Whau River	TA 15	8000	Whau River via existing NZTA outfall
	TA 16	2450	Whau River via existing NZTA outfall
Te Auaunga / Oakley Creek	TA 17	2200	CMA via existing AC network
Waititiko / Meola Creek	TA 18	17750	Waitītiko / Meola Creek via existing AC network
Waiateao / Motions Creek	TA 19	4050	Waiateao / Motions Creek via existing AC network
	TA 20	4050	Waiateao / Motions Creek via existing AC network
	TA 21	10650	Waiateao / Motions Creek via existing AC network
	TA 22	4200	Waiateao / Motions Creek via existing AC network
	TA 23	8200	Waiateao / Motions Creek via existing AC network
	TA 24	7950	Waiateao / Motions Creek via existing AC network
	TA 25	6100	Waiateao / Motions Creek via existing AC network

13.2.1 Water quality

A contaminant load model was developed to assess potential water quality effects from stormwater discharges proposed as part of the Project. The model used conservative assumptions. In particular, the model accounted for a change in land use as a result of the busway and impervious surface shown on the Indicative Design, but did not apply this change to the wider Proposed Designation. In practice, changes in land use will occur throughout much of the Proposed Designation (rather than just beneath the Indicative Design). These changes in land use are likely to remove commercial and industrial activity, replacing it with the Project. The Project will not generate the volume of contaminants of these existing land uses.

The following treatment options were used in the model:

- Wetlands;
- Swales;
- Gross Pollutant Traps (GPTs) designed to remove 50% of total suspended solids; and
- GPTs with a Stormfilter™.

The assessment found that regardless of the treatment type proposed for stormwater runoff, most receiving catchments received reductions in Total Suspended Solids (TSS). Zinc and copper loads are predicted to reduce in some receiving catchments where the Project will remove commercial or industrial activity. In other cases, minor increases in zinc and copper were observed, but Mr May considers that these increases are negligible. In one area (Huruhuru Creek), the use of a GPT may result in a low level of effect, as this device is not as effective as others in removing the expected copper contaminant load.

13.3 Stream channel erosion

The Project will increase the total area of impervious surface within the Project Area. This will lead to higher flows and velocities in water treatment areas, and potentially impact stream stability. Mr May identified all but one treatment area will result in negligible effects on stream channel erosion. TA1 (Brigham Creek) may receive a moderate increase in stream channel erosion without mitigation.

13.4 Measures to avoid, remedy or mitigate effects

13.4.1 Flooding and overland flows

Mr May recommends the Project is designed so that it does not cause an increase in Danger Rating. Mr May also recommends that the Project is designed to not result in:

- A more than 50mm increase in flood level on land parcels with Building(s) and a Low Danger Rating; or
- A more than 100mm increase in flood level on:
  - land parcels with no Building(s) present, or
  - land parcels with Building(s) and a Moderate or High Danger Rating.

The Project shall demonstrate how the above outcomes have been achieved by appointing a SQP to undertake flood modelling showing the difference in 1% Annual Exceedance Probability (AEP) differences in flood levels for Pre-Project Development and Project Development with allowances for increases in rainfall caused by climate change.

I have therefore included his recommendations relating to flooding outcomes to be met through the future design phases as conditions on the Proposed Designations. I have also recommended that the outcomes of flood modelling undertaken are included in the Outline Plan.

I agree with Mr May, that the potential effects of flooding as a result of the Project (if designed to achieve the outcomes specified above) are low to negligible. In some cases, the Project may result in positive effects by reducing flood depths.

13.4.2 Water quality

As noted by Mr May in his report, stormwater runoff from the Project will in most cases cause a reduction in Total Suspended Solids (TSS) zinc and copper regardless of treatment device (or, whether treatment is provided at all) because the Project will generate less contaminants than the existing land uses in the Project Area. Mr May considers that with or without treatment, the resulting effects are considered to be positive to low.

However, NZTA would like to commit to treating all stormwater runoff from the Project and therefore I have recommended an Augier condition requiring that all runoff from new impervious surfaces of the Project is treated before discharging to the receiving environment. Mr May does not consider that the type of stormwater treatment needs to be specified, as the modelling undertaken shows that regardless of treatment type, discharges will have low to negligible effects on the receiving environment. A variety of treatment measures are available for each catchment and can be provided for within the Proposed Designation. The stormwater and runoff treatment devices can be selected at a future design stage. However, I have recommended removal of a minimum of 75% of TSS.

Overall, with treatment in place for stormwater and runoff, Mr May considers the potential effects of the Project in relation to water quality are negligible – positive.

13.4.3 Stream channel erosion

Based on Mr May's assessment of potential stream channel erosion, I recommend that where the Project is predicted to increase stream flow velocities by more than 5% in a 95 percentile storm event, hydrological mitigation in the form of attenuation devices is to be installed prior to operation of the discharge. With attenuation devices in place, the effects on stream channel erosion as a result of the Project will be low to negligible.

13.4.4 Energy dissipation and scour protection

Mr May recommends that all new and upgraded stormwater outfalls and culverts proposed for the Project have energy dissipation and scour protection installed. He recommends that the protection measures be designed in accordance with Technical Report 2013/018 (Auckland Council, 2013) for the following:

- Stormwater outfalls using 176mm for the 10% AEP 24 hour rainfall depth that includes a 2.1 degree Celsius increase in temperature for climate change.
- Culvert inlets and outlets using 332mm for the 1% AEP 24 hour rainfall depth that includes a 3.8 degree Celsius increase in temperature for climate change.

I have included these recommendations as proposed conditions of consent. With the erosion and scour protection measures in place at outfalls and culverts, the potential effects of the Project on stream channel erosion with respect to erosion and scouring of watercourses are low – negligible.

14. Landscape and visual

14.1 Positive effects

The Landscape and Visual Assessment (LVA) prepared by Mr Jones identifies a number of positive landscape and visual effects of the Project. Most notably:

- The Project will become a feature of interest in the localised urban landscape, not dissimilar to the northern busway on the north shore alongside SH1; and
- The busway (being alongside SH16) will integrate with the existing pattern of transport infrastructure in this part of the city and will be viewed as a complementary element in this context.

14.2 Construction effects

Mr Jones notes that construction works will temporarily transform the landscape character, and visual amenity across the Project Area. These effects will arise as a result of the introduction of construction machinery, clearance of vegetation, demolition of structures and earthworks. Mr Jones notes that such changes are expected for transport infrastructure projects in urban environments.

While views of construction sites, machinery and exposed earthworks are likely, they are moderated by the urban context of the Project, the transitory nature of the Project construction, and standard construction health and safety practices such as temporary fencing and hoardings.

Overall, the potential effects of construction on landscape, natural character, and visual amenity are considered by Mr Jones to be low-moderate.

14.3 Operational effects

14.3.1 Landscape character

Mr Jones notes that the Project is well aligned with the existing and evolving urban character of the areas it traverses adjacent to SH16. The Project reinforces the established transport infrastructure pattern and supports intensification anticipated in the AUP. The Project is expected to result in minor permanent modifications to existing landforms. Modifications are primarily required where new structures are required for the busway or local connections, or to establish level surfaces for the busway with earthwork batters. The busway is largely at-grade with the existing SH16. Stations are located at key junctions and integrate with arterial roads and existing overbridges. The Project has sought to co-locate new infrastructure with existing transport features. Overall, Mr Jones considers the potential effects of the Project on landscape character are low.

14.3.2 Visual amenity

Mr Jones notes that from most locations, the busway will be viewed in the context of SH16 and associated transport infrastructure. Residents directly adjacent the proposed elevated busway structures and new interchange overpasses will experience a greater level of permanent change However, most proposed bridges and stations are within locations that transport infrastructure already exists. Where underpasses are proposed, they will reduce the potential visual prominence of these sections of busway. Overall, Mr Jones considers that the potential adverse effects of the Project on visual amenity are considered low.

14.3.3 Natural character

The Project will traverse a number of streams and waterbodies. Works will likely require the removal of riparian planting to accommodate new structures. Mr Jones notes that the natural character of the Project Area is of moderate or lower value, given the highly modified urban environment the Project traverses. In his view, the introduction of new structures will have minimal impacts on the CMA and streams in the long term, and his view the operational effects on natural character are low.

14.4 Site-specific operational effects

Mr Jones notes in his report that while the overall operational effects with respect to natural and landscape character and visual amenity are low, the level of effect of the Project differs at site-specific scales. Where Mr Jones considers the potential effects to be moderate, I have summarised these in the sections below. I note that in all other cases, Mr Jones considers the potential effects of the Project are low.

14.4.1 Te Atatū bus bridge

A new bridge structure is proposed in Te Atatū, connecting the proposed station with Te Atatū Road north of the interchange with SH16. The bridge is required to allow buses to join the motorway (eastbound) before crossing the causeway, and to provide access for pedestrians and buses to the Te Atatū Peninsula.

Mr Jones notes that this bridge will result in 'stacking' of bridges and busway elements. It will be seen in context of the existing interchange and high-voltage overhead transmission lines. It will also result in a new landform within Ōrangihina Harbourview Park. The form of this connection can be integrated back into the surrounding environment to assist with visual integration and softening. Overall, the potential adverse effects on landscape character and visual amenity in the location were assessed as low-moderate to moderate.

14.4.2 St Lukes Interchange, Western Springs

An elevated viaduct structure is proposed at this location, with the busway bridging over the St Lukes Road bridge over SH16, and the Western Springs motorway on and off ramps. The new bridge and viaduct will introduce a new transport element into this urban environment. In Mr Jones' view, the structure is likely to be viewed from Great North Road as being inconsistent with the street-based character of this area. The scale and form of the proposed structures are less consistent with the existing pattern of transport infrastructure in the vicinity (with SH16 constructed below the natural ground level).

The retention of the row of mature pōhutukawa trees alongside Great North Road are assessed by Mr Jones to provide visual softening and separation for viewers of the new infrastructure from Great North Road. I discuss the retention of these trees in Section 6.

Overall, with the retention of the mature pōhutukawa, Mr Jones considers that the potential effects of the Project in this location from a landscape character and visual amenity perspective are moderate.

14.4.3 Ian McKinnon Drive connection

The Indicative Design includes a new bridge over SH16 to connect the Project to Ian McKinnon Drive. The proposed bridge structure passes over an existing footbridge over SH16 between Waima and Haslett Street. Mr Jones considers that the proposed bridge will be highly visible to a number of viewers within and adjacent to the Proposed Designation. However, the structure will be viewed in the context of the nearby motorway interchanges, overbridges and other transport infrastructure that dominates the environment. In Mr Jones' view, the potential effects on landscape character and visual amenity are assessed to be low-moderate.

14.4.4 Sensitivity testing

Mr Jones assessed the effects on the Indicative Design and also if the alignment were to shift vertically or horizontally. Mr Jones notes that the proposed designation does not provide for large horizontal shifts, so has focused his sensitivity testing based on vertical changes. In his opinion, there will be greater aesthetic coherence if the busway is consistent with the SH16 alignment where it passes under local roads (instead of bridging over) with, generally, a greater potential for adverse effects on visual amenity values. Mr Jones identified the following areas with greater sensitivity to vertical movement as follows:

Westgate bridge or underpass

A bridge over Fred Taylor Drive instead of an underpass (in the indicative design), viaduct would be 'working against' the rising topography as Fred Taylor Drive is at a localised high point in the area. This would result in the viaduct requiring increased length to gain the clearance required. In his view, this could result in moderate or moderate-high adverse effects on landscape character and visual amenity. However, the zone of the adjacent Westgate area is Business: Metropolitan zone. I agree with Mr Jones, that this is likely to be

intensified over time. The zoning allows for 72.5m building height as a permitted activity and this is approximately a 20 story building. A would not be out of context in this urban environment.

Bridges vs. underpasses

Mr Jones opinion, bridges instead of underpasses for example at Royal Road, Lincoln Road and Te Atatū Road, Point Chevalier would result in moderate or moderate-high adverse effects on landscape character and visual amenity. This is due to the greater level of their visibility and the potential scale, length and form. Mr Jones acknowledges that the bridge at Western Springs avoids the ONF (ID132 North-west Motorway lava flow. However, being as grade would reduce the potential adverse effects in this area on both landscape character and visual amenity to low.

Conclusion

Mr Jones concludes through his sensitivity testing that although the assessment of effects ratings for a design change may vary (increase or decrease potential effects), that this does not alter his recommendations or materially affect my overall conclusions.

14.5 Measures to avoid, remedy or mitigate effects

14.5.1 Construction effects

Construction activity may cause temporary effects in relation to landscape character and visual amenity. However, I agree with Mr Jones that these effects will be temporary, and do not require any particular mitigation. Mr Jones recognizes that fencing and screening are often implemented by contractors for health and safety reasons and that this will assist in providing visual mitigation. However, in my opinion, and that of Mr Jones, is that this does not need to be a specific recommendation through conditions on the Proposed Designation.

14.5.2 Operational effects

Mr Jones recommends that landscaping, including landscape planting and earthwork contouring, is undertaken following the completion of construction of the Project. I propose a condition on the Proposed Designations that specifies landscaping to be undertaken as follows (where practicable):

- Retain existing mature, native vegetation;
- Plant at stations and batter slopes;
- Use eco-sourced native vegetation;
- Integrate planting with any planting required by conditions of resource consents for the Project; and
- Manage pest plants for five years or until 80% canopy cover is achieved.

The details of landscape planting will be included in an Outline Plan for the relevant stage of work.

Mr Jones recommends that the retention of mature trees (in particular, the mature pōhutukawa) alongside Great North Road in Western Springs to provide visual softening and separation of the works and bridge that crosses St Lukes Road. I note that it is not practicable to retain all mature trees in this area, as space is required to accommodate the construction of the Project and the permanent work. I discuss the trees that can be practicably retained in Section 6 propose a condition on the Proposed Designations that requires the retention of these trees where this is practicable to manage this potential effect on visual amenity. Mr Saxon in his report recommends a tree protection methodology when working in the rootzone of these trees and where pruning is required. I have discussed this in more detail above in Section 6.

Overall, Mr Jones notes that with his recommended mitigation, the potential effects of the Project are considered acceptable. As outlined above, Mr Jones considers that some discrete locations may receive a moderate or low-moderate level of effect. However, he also notes that for these specific areas he has identified, no specific mitigation measures are warranted.

15. Outstanding Natural Features

15.1 Overview

The Project is proposed to be constructed within or in the vicinity of three Outstanding Natural Feature (ONF) overlays in the AUP. The AUP attributes and descriptions are provided in Table 15-1 below.

Table 15-1: Outstanding Natural Features overlay

ONF Name and ID	AUP Site Type	AUP Description	AUP criteria
ID: 40 – Harbour View Pleistocence terraces	A	One of the last remaining undeveloped Pleistocene terrace surfaces around the Waitematā Harbour, with two distinctive terrace surfaces (15-20m above sea level, and 2-4m ASL) separated by a former coastal cliff. The terraces are cut into Waitematā Sandstone and Pleistocene deposits.	a, c, e, f, g, h, i, l
ID: 95 – Waitītiko / Meola Creek and estuary	C	The lower end of Waitītiko/Meola Creek is the best example in Auckland of a stream that was displaced by a lava flow and now meanders around its irregular edge. This is also one of the least modified sections of a natural stream remaining on the Auckland isthmus	a, c, g, i, l
ID: 132 – North-west Motorway lava flow, Western Springs	D	This 500m section of motorway cuttings is one of best and most commonly seen cuttings through a basalt lava flow in Auckland. It provides good visual evidence of the route of Auckland's longest lava flow, from Mt St John to Meola Reef via Western Springs. It also contains excellent examples of columnar jointing.	a, c, d, g

15.2 Construction and operational effects

15.2.1 Harbour View Pleistocene terraces

Figure 15-1 below shows the ONF in relation to the Indicative Design and Proposed Designation and extent of the ONF within the Proposed Designation.

The Pleistocene Terraces (the reason for the inclusion of this area as an ONF in the AUP) are covered with grass, and it is therefore not possible to view geological strata associated with the terraces. The terraces have undergone some modification through the construction of drainage swales and a footpath alongside Te Atatū Road. The Proposed Designation extends slightly beyond the area of existing modification and includes approximately 8900m^2 of this ONF. The total area of the ONF is approximately 770,000m^2.

A busway bridge is proposed over SH16 from the Te Atatū Ōrangihina Station to Ōrangihina Reserve as shown in Figure 15-1 below. Part of the busway is located within the extent of the ONF. A fill embankment is proposed within the ONF to accommodate the busway. An existing drainage swale and pedestrian footpath will also require relocation within the Proposed Designation.

While stormwater runoff from the Project in proximity to the terraces has the potential to erode the terraces, all stormwater will be conveyed to the stormwater network therefore having a negligible impact on the feature itself.

I consider that the potential effects of the construction and operation of the Project within the scheduled extent of this ONF are minor as they are confined to a very limited area on the outskirts of the feature.

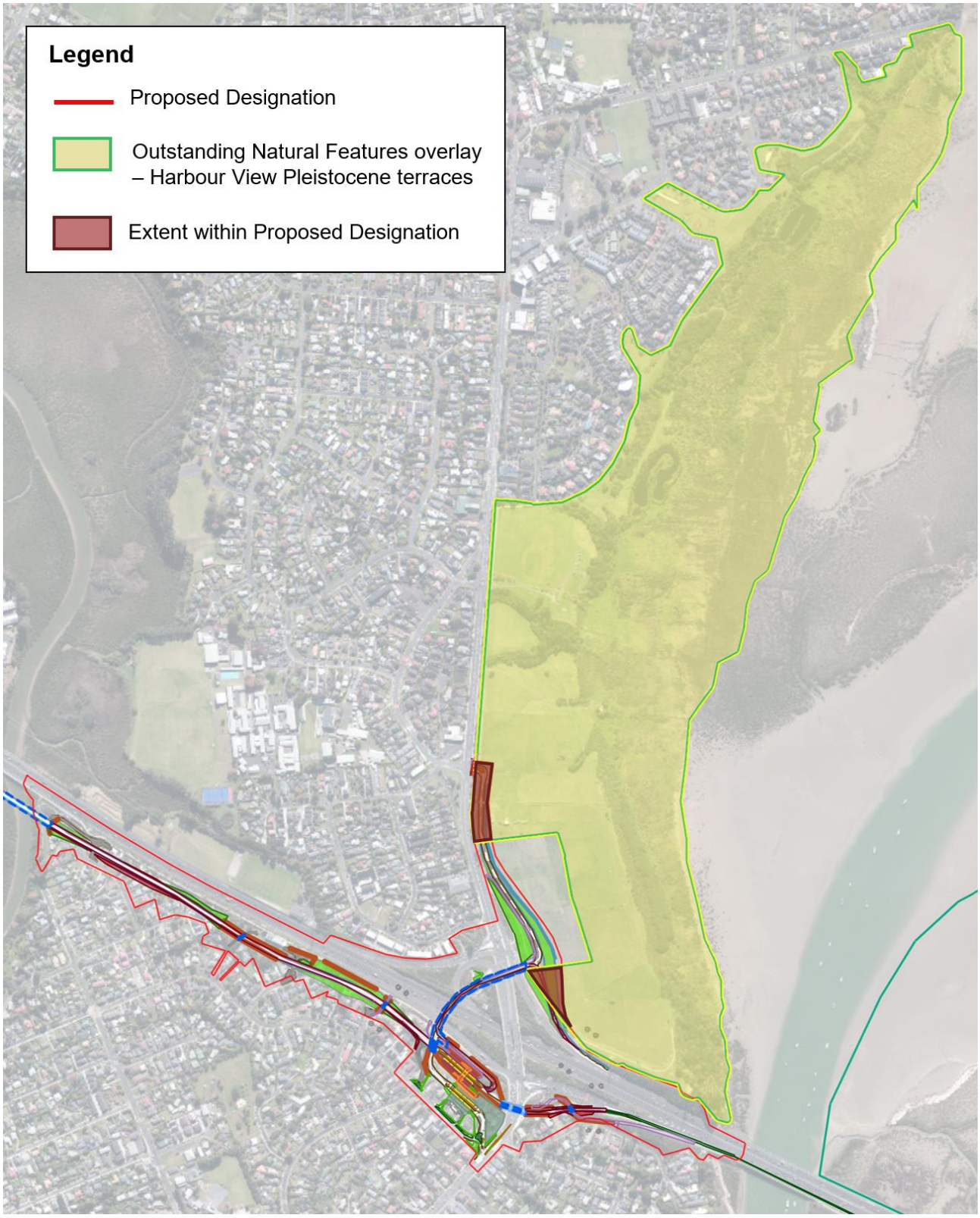


Figure 15-1: Harbour View Pleistocene terraces ONF overview

15.2.2 Waitītiko / Meola Creek

Waitītiko/Meola Creek is a stream that was displaced by a lava flow. The creek now meanders around outcrops formed by the lava flow, and these outcrops are a visible example of a rare geological formation. The section of Meola Creek subject to the ONF is one of the least modified sections of natural stream on the

Auckland Isthmus (according to the AUP). The creek is culverted beneath the SH16 corridor and emerges on the northern side of SH16. The Indicative Design for the Project bridges over Meola Creek.

The ONF extends from SH16 at its southern end to Meola Road in the north some distance away. An area of approximately 1,300m^2 of the ONF is included within the Proposed Designation for the construction of the busway across Waitītiko / Meola Creek. The full extent of the ONF is approximately 92,180 m^2. As the Waitītiko/ Meola Creek will be bridged, the geological features will be retained. The proposed bridge and Proposed Designation spans a 31m wide section of the ONF. A typical bridge span is 34m, which means that there will only be one set of piles/piers located within the feature. I consider that the Project will have a low effect on this ONF.

Figure 15-2 below shows the ONF in relation to the Indicative Design and Proposed Designation.

Figure 15-2: Waitītiko / Meola Creek and estuary ONF overview

15.2.3 North-west motorway lava flow, Western Springs

The ONF lava flow features are within a 500m section of motorway cutting. The ONF is within the existing SH16 designation. A bridge is proposed in the Indicative Design to cross St Lukes Road The construction of this bridge will not impact the visible cuttings of the basalt features within the ONF. There are engineering constraints for works within basalt and the Proposed Designation is constrained in this location between Great North Road and SH16. Figure 15-3 below shows the ONF in relation to the Indicative Design and Proposed Designation.

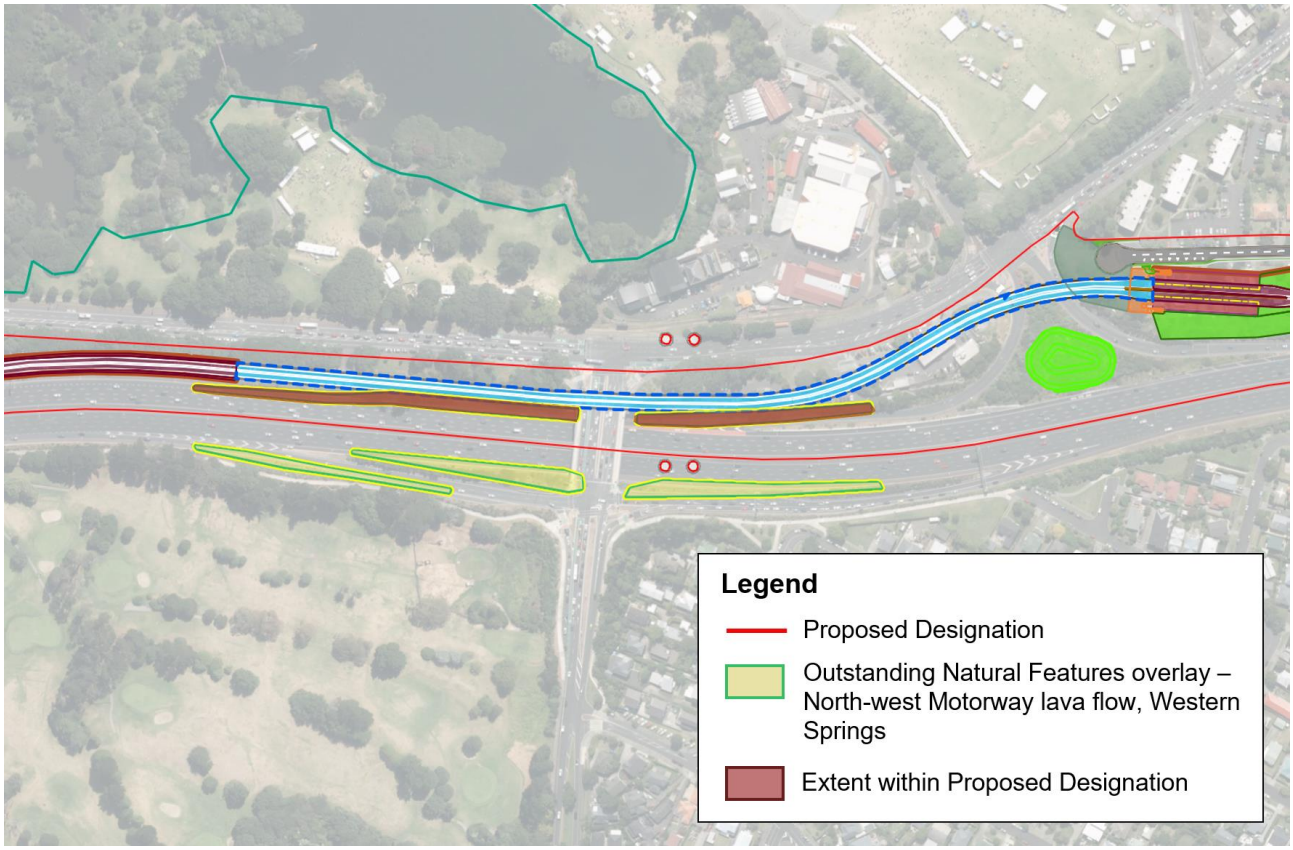


Figure 15-3: North-west Motorway lava flow, Western Springs ONF overview

15.3 Recommended measures to avoid, remedy or mitigate effects

15.3.1 Harbour view Pleistocene terraces

I consider that the potential effects of the Project on the harbour view Pleistocene from the construction and operation of the Project are low, and I have therefore not recommended any mitigation.

15.3.2 Waitītiko / Meola Creek

I have recommended (by way of a condition on the Proposed Designation) that Waitītiko / Meola Creek is bridged so that it is not an extension of the existing culvert. This will limit the impact of the Project on the ONF. I consider that the potential effects of the Project on this ONF following mitigation are low.

15.3.3 North-west motorway lava flow

I consider that the potential effects of the construction and operation of the Project on the north-west lava flow cuttings are negligible as the works do not impact the feature. However, as the ONF is located within the Proposed Designation, I have proposed a condition on the Proposed Designation that requires impacts on the exposed face of the ONF to be minimised as far as practicable.

16. Cultural values

Only iwi/hapū can speak to the impact that the Project may have on their cultural values, heritage and aspirations. This section draws on engagement with iwi representatives during the development of the Indicative Design to explain the influence they have had within the Project as it has progressed. Inputs regarding cultural values have been drawn from information provided directly from Iwi, from different sources.

16.1 Introduction

Te Kawerau ā Maki, Ngāti Whātua Ōrākei and Te Ākitai Waiohua are Project partners and have been involved throughout the development of the Project. Their involvement is detailed in Part 2 of this application. Representatives from these iwi formed the Project's Iwi Working Group (IWG), who have been involved in the details of the Project including the Investment Case Phase through to lodgement of the Substantive Application. In September, Ngāti Whātua o Kaipara joined the IWG hui and have participated in discussions prior to lodgement.

The IWG hui have been held regularly (weekly or fortnightly) and used as an opportunity to discuss Project development and potential effects on cultural values. NZTA also meets with the wider Central Iwi Integration Group (CIIG) to keep other Iwi informed as detailed in Part 2. Engagement with iwi through these forums will continue through to the Project's implementation.

As set out in Part 2 of the Application, a letter of support has been received from Te Kawerau ā Maki in relation to the Project.

16.2 IWG cultural associations with the Project Area

16.2.1 Te Kawerau ā Maki

Cultural associations in the Project area were identified by Te Kawerau a Maki in their letter of support.

Te Kawerau ā Maki are the tangata whenua iwi of West Auckland with shared interests over the northern half of the Auckland region. We consider West Auckland (Hikurangi) to be our heartland. We whakapapa to the earliest peoples of the area and became a distinctive iwi when our eponymous ancestor Maki conquered and settled the district around 1620. It is after Maki that the traditional name for the Waitākere Ranges comes – Ngā Rau Pou ā Maki. When the Crown investigated the 1853 Hikurangi block transaction they acknowledged Te Kawerau ā Maki as the 'original territorial owners' of the land. In 2014 we entered into a Treaty Settlement with the Crown that acknowledged West Auckland as our heartland and provided statutory acknowledgement areas over the western and northern Waitematā Harbour, the entire Wai ō Pareira (Henderson Creek) catchment, and provided a range of cultural redress including land in Henderson and geographic name changes to sites along the project corridor. In October 2025 Te Kawerau ā Maki entered into a Deed of Recognition with the Crown and Council over the nearby Waitākere Ranges Heritage Area.

Our lead interests along the project corridor are within the takiwa (district) of Hikurangi (West Auckland) from the Whau River to Brigham Creek. Te Kawerau ā Maki gifted the name 'Te Ara Hauāuru' to the project. This name references the wind that blows from the west, a powerful force and story for the iwi. The west wind carries the voice and vision of the community of the west, and the path of connection between these communities and Tāmaki Makaurau. We have also gifted names for the stations in the western end of the corridor:

- *Brigham Creek Rarawaru;*
- *Westgate Te Waiarohia;*
- *Royal Road Mānutewhau.*
- *Lincoln Road Wai o Pareira; and*
- *Te Atatū Ōrangihina.*

16.2.2 Ngāti Whātua Ōrākei

The following is a summary Ngāti Whātua Ōrākei have provided to the Project:

"*Te Kahu Tōpuni o Tuperiri is the name that Ngāti Whātua Ōrākei hold for their contemporary rohe. The tribe's mana moana incorporates the eastern Manukau and Waitematā Kupenga Rau, and their mana whenua stands on the lands surrounding and between these two harbours – Tāmaki. This includes the areas of land that were granted by their tūpuna in 1840 upon which the settlement of Auckland was enabled, to become the city of today.*

Ngāti Whātua Ōrākei hold and extend their mana over this whenua and moana is assured through five traditional causes:

- *Take tupuna: enabled through enduring whakapapa connection relative to place.*
- *Take raupatu: enabled through the processes of conquest and subsequent occupation of territory.*
- *Take Ahi-kā: the ongoing extension of our mana and tikanga within one's rohe through demonstrated behaviours and action.*
- *Take Tuku Whenua: the granting of whenua between authorities within a framework of mana, with the expectation of return when no longer required for the purposes agreed at the time of the grant.*
- *Take Tiriti: The acknowledgment of mana by the Crown through the signing of Te Tiriti o Waitangi.*

Ngāti Whātua Ōrākei maintain their ahi-kā within all areas to the east of Te Whau in the Project Area. Of particular interest are the Wai systems associated with Waitematā Kupenga Rau, Motu Manawa, Te Auaunga, Waititiko, Waiōrea and Wai a Te Ao, including the puna and wainuku located on the Tāmaki isthmus. The tribe recognise the kara that has flowed from their tribal maunga Puketāpapa, Ōwairaka, Te Tātua-a Riukiuta and Maungawhau to Waitematā Kupenga Rau which the kaupapa traverses, importantly including voids present in those flows. Te Rae o Kawharu is a tribal site of considerable importance.

"Te Kahu Tōpuni o Tuperiri is the area within which the ahi-kā of Ngāti Whātua Ōrākei burns bright, clear and hot, maintained in that state of active potency by the living descendants of Tuperiri. It is within this area that Ngāti Whātua Ōrākei actively undertake our traditional and contemporary practices and protocols, with a particular focus on tiaki o te taiao me te manaaki o ngā tāngata katoa. Our tribal practices are unique to this place and are therefore entirely native and natural to Tāmaki." "

16.2.3 Te Ākitai Waiohua

The following is a summary of information Te Ākitai Waiohua have provided to the Project:

The Project area is within the rohe of Te Ākitai Waiohua, traversing a culturally significant landscape from Te Waiōrea (Western Springs) and Rangimatarau (Point Chevalier) in the east to Pitoitoi (Brigham Creek) in the west. In the east the waterways of Waiateao (Motions Creek), Waitītiko (Meola Creek), and Te Auaunga (Oakley Creek) connect to the Waitematā Harbour.

In recognition of its traditional interests, Te Ākitai Waiohua has received several statutory acknowledgements as Treaty of Waitangi settlement redress, including Arch Hill Scenic Reserve and the Coastal Statutory Acknowledgement Area (including the Waitematā Harbour).

16.2.4 Ngāti Whātua o Kaipara

Ngāti Whātua o Kaipara have told NZTA that they have a long and enduring relationship with the western side of the project alignment with a particular interest in the Brigham Creek to Westgate area.

16.3 Cultural Values Assessments

Iwi with an interest in the project were invited to prepare a Cultural Values Assessment (CVA) or Cultural Impact Assessments (CIAs) for the Project.

16.3.1 Shared Project values

Te Kawerau ā Maki, Ngāti Whātua Ōrākei and Te Ākitai Waiohua as Project Partners, have provided a cultural lens to the Project and contributed valuable input throughout the Project's development. The Project values have been developed in collaboration with iwi partners, an important sign of partnership. Their guidance and feedback have informed the Indicative Design and shaped Project team values. Their

involvement has been integral to the project and will continue through to the next phases of the Project. The values, originally developed by the IWG are outlined below:

- **Mana Motuhake:** Leadership and self determination; leading with integrity and autonomy as Maori. Recognising and respecting others mana (individual autonomy) and also the authority of iwi.
- **Mana Taurite:** Equity and balance. The principle of the Treaty of Waitangi and refers to the partnership, participation of iwi, and protection of all people.
- **Manaakitanga:** Hospitality and generosity; showing kindness, respect, and support to guests and visitors. Manaakitanga is an important aspect of social and community relationships and emphasises a deep sense of community and collective responsibility.
- **Kaitiakitanga:** Guardianship and protection, refers to the responsibility to care for and protect the land, water and other natural resources for future generations. It involves a holistic approach to resource management that takes into account both the economic and practical aspects, as well as the spiritual and cultural values associated with the environment.
- **Kotahitanga:** Unity, togetherness, and solidarity. It recognises the diversity of people and supports collective action and achieving unity when coming together.

In this application the values have been illustrated through the Project with the following examples, as summarised in Table 16-1.

Table 16-1: Examples of implementation of shared Project values

Project Value	Implementation by Project Team
Mana Motuhake	Mana Motuhake is demonstrated through the IWG – iwi having a voice, speaking for their people, their whenua and rohe. An example of Mana Motuhake is recognising that each person comes with mana, they represent themselves, their work, their whānau. When we have discussions/hui, we acknowledge each person, and or feedback is respectful and mana enhancing / constructive. Iwi partners are invited to contribute to Project development. The Project team offers opportunities for iwi partners to participate in project activities such as team workshops, site visits, options assessments, etc., plus one-to-one engagement. Iwi partners are provided the opportunity to name stations and infrastructure delivered by the Project - with Te Kawerau ā Maki gifting the name of the Project and stations in the western of the project. Engagement with iwi partners will continue through the next phases of the Project.
Mana Taurite	Mana Taurite is about equity and balance. On the Project this looks like: ▪ Providing stations and a busway that provides equitable opportunities and accessibility for all. ▪ Partnering with mana whenua. ▪ Identifying design opportunities – providing opportunities for narratives or names to be restored within the Project. All iwi partners have been invited to join the Project Steering Committee to ensure balance of voices around the table.
Manaakitanga	Manaakitanga is about hospitality and generosity – it refers to the practice of showing kindness, respect and support to guests and visitors. On the Project, this is demonstrated through consideration of customer experience, needs, aspirations, and accessibility needs. Iwi partners have made valuable contributions to project development within the realm of manaakitanga, including: ▪ Inputs into alignment considerations – including support of options which use Arch Hill Reserve (noting the impacts to the culturally significant area), because of the opportunity to avoid impacts to homes and people on the southern side of SH16. ▪ Busway alignment at Westgate/ Fred Taylor Drive, supportive of underpass options because they represent a better long-term outcome for people. ▪ Inputs into station design – including consideration for pedestrian cycle access on bus bridge in response a need to connect two communities in Te Atatū, and orientating Te Atatū Ōrangihina station to capture views of Ōrangihina. ▪ Royal Road Mānutewhau station – supporting station options which provide for best long term access outcomes for people and are able to reduce severance for Massey communities. ▪ Point Chevalier/Carrington Road – supportive of underpass options which provides for best long term access outcomes for communities. Supportive of options which future proof the transport network to better connect new communities in Carrington (south of SH16) with the proposed station at Point Chevalier, and the town centre itself. ▪ City centre alignment – supportive of options which enable long term flexibility, increased capacity, and new access options for the north-west busway.

Project Value	Implementation by Project Team
	▪ Constructability design principles – project design will enable flexibility to ensure WX1 and motorway users experience minimal disruption during construction. ▪ Utilities – supportive of design principles which enable construction of the busway to avoid critical utilities which people rely on. ▪ Northwest Shared Path and connections – support for design options and construction methods which maintain the shared path and connections, and improving connectivity where there are opportunities.
Kaitiakitanga	Kaitiakitanga is about guardianship and protection and refers to the responsibility to care for and protect the land, water and other natural resources for future generations. On this project, this has been demonstrated through: ▪ Ecological surveys. ▪ Careful consideration of different routes and their impacts on waterways and the environment. ▪ Cultural Impact Assessments to understand waahi tapu, wai tapu and cultural landscapes. The Project acknowledges the roles of kaitiaki, seeking protection and enhancement of the taiao, including SEAs, Tōtara Creek, tributaries of Te Wai-o-Pareira/ Henderson Creek, Waitītiko / Meola Creek and Waiateao / Motions Creek. As a result, careful consideration has been given by the Project team of different routes and their impacts on waterways and the environment. The designation boundary has been reduced to avoid parts of Tōtara Creek, and commitment is also made to keeps works necessary within Tōtara Creek to a minimum (via consent condition to no permanent diversion or reclamation of the bed of the Tōtara Creek). Other specific examples of the project living our values includes: ▪ Upholding the concept and principles of Te Mana o te Wai. Stormwater has been designed to accommodate a range of options including natural wetlands where feasible. A commitment to iwi has been made to treat stormwater from new impervious surfaces even though the regulatory assessment does not require it (via consent condition). ▪ Ecological surveys in the Project area undertaken with the ability for iwi to participate. All information was shared. For vegetation removal in SEAs and riparian margins, replanting of native vegetation will be required for areas disturbed by construction and the busway. This includes maintenance for five (5) years to ensure the area establishes and pest plants are removed. ▪ Tikanga and acknowledgement of iwi protocols prior to the start of geotechnical bore hole investigations. Commitment for iwi to provide a cultural narrative through the Corridor Integration Design Framework (NZTA internally led process). ▪ Station design and orientation to be sympathetic and complementary of the whenua, wai and other natural features or cultural narratives. ▪ Brigham Creek Station – staged and soft landscaping approach to the Park and Ride site development ensuring the whenua is not paved over extensively by default. ▪ Recognition of the geological feature at Waitītiko / Meola Creek and Arch Hill as being of significant cultural value to Te Ākitai Waiohua. Design work undertaken to minimise impact on geological feature, resulting in a decision to bridge over Waitītiko / Meola Creek (via designation condition). A designation condition has also been included to reduce impacts on the ONF geological feature at Western Springs. Impacts on Arch Hill Scenic Reserve were reduced through the project development at the request of Te Ākitai Waiohua. Stormwater design developed for Arch Hill to demonstrate collection of run-off into a piped system in an environmentally sensitive way. ▪ Westgate to Brigham Creek busway alignment – supportive of options that avoid, protect and enhance the natural waterway Tōtara Creek which is of great natural and cultural significance/ waahi tapu. ▪ Design Principles for stormwater and flood management engineering – design principles for stormwater and flood management are directly related to project values. ▪ Support inclusion of space for wetlands where there are residual land opportunities (not requiring additional homes for stormwater treatment).
Kotahitanga	Kotahitanga is unity, togetherness, and solidarity. On the Project this is demonstrated through the decision led approach and the way each workstream collaborates together. It is seen through the Iwi Working Group and the opportunities provided for iwi to contribute to Project development. Te Kawerau ā Maki and Ngāti Whātua iwi partners participated in the Principals Technical Advisor (PTA) procurement interview workshops demonstrating unity.

16.3.2 Te Kawerau ā Maki

Te Kawerau ā Maki provided a Cultural Associations document in 2023 (confidential) that discusses iwi narratives, whakapapa, pepeha, values, Treaty settlement, and maps of cultural sites of significance. Te

Kawerau ā Maki also provided a letter of support in 2025. The following summarises what has been understood from Te Kawerau ā Maki.

Te Kawerau ā Maki are the tangata whenua iwi of West Auckland, with shared interests across the northern half of the wider Tāmaki rohe. They consider Hikurangi (West Auckland) to be their heartland. Their interests along the project corridor fall within this takiwā, from the Whau River through to Brigham Creek.

The Project passes through a number of ancestral places within their rohe, including Ngongetepara, Pukewhakataratara, Wai ō Pareira, Ōrangihina, Wahapū and Te Kou, before the alignment moves eastward into the broader Tāmaki area.

A significant portion of the project footprint sits within Te Kawerau ā Maki's statutory acknowledgement area, which extends from Te Atatū to Westgate. Their 2014 Treaty settlement with the Crown confirmed West Auckland as their heartland and established statutory acknowledgements across the western and northern Waitematā Harbour and the full Wai ō Pareira catchment. The settlement also provided cultural redress, including land in Henderson and several geographic name changes along the project area. In October 2025, Te Kawerau ā Maki entered into a Deed of Recognition with the Crown and Auckland Council over the nearby Waitākere Ranges Heritage Area.

Te Kawerau ā Maki have been involved in the Project since early 2023, including representation on the Project Steering Committee and regular engagement through the IWG at a kaitiaki level sharing valuable contributions to understand iwi cultural values.

As stated in the letter of support, Te Kawerau ā Maki have supported the Project from the start and expect the same level of meaningful engagement to continue as the Project moves into its next phase.

16.3.3 Ngāti Whātua Ōrākei

Ngāti Whātua Ōrākei identified that their tribal practices focus on the establishment and management of relationships to develop common understanding within kaupapa. As such, Ngāti Whātua Ōrākei do not see that a CVA or CIA is required for the Project. Ngāti Whātua Ōrākei request that a common understanding and focus is achieved and developed through dialogue and actions by all within the partnership, which are based in, on and of mana. The Ngāti Whātua Ōrākei Iwi Management Plan, Te Pou o Kāhu Pōkere (2018) provides an insight into the cultural values of iwi and expectations for managing land, water and to elevate the mana and mauri of the Tāmaki landscape.

Ngāti Whātua Ōrākei have participated in the Project since 2023 briefly in the Project Steering Committee and at the kaitiaki level though the IWG to ensure that the Project understands iwi cultural values, expectations and aspirations.

Ngāti Whātua Ōrākei expect that active engagement through the agreed partnership approach will continue into the next stages with the potential to have Ngāti Whātua Ōrākei representation on the PSC. Ngāti Whātua Ōrākei expects to be leading any naming processes that are to occur on features developed through the kaupapa to the east of Te Whau.

16.3.4 Te Ākitai Waiohua

Te Ākitai Waiohua prepared a CVA for the Project. The following summarises what has been understood from Te Ākitai Waiohua.

Arch Hill is considered a tapu (sacred) place and urupā (burial ground) in commemoration of the deaths of many Waiohua. The historical, cultural and spiritual association of Te Ākitai Waiohua with Arch Hill Scenic Reserve is essential to the preservation and affirmation of its tribal identity.

Te Ākitai Waiohua also maintain enduring connections to coastal areas, including the Waitematā Harbour, which served as a vital source of sustenance, transport routes and waka landing sites. The waters, regarded as living entities with mauri and mana, are protected by taniwha and nurtured by iwi as sacred resources.

The spiritual relationship of Te Ākitai Waiohua with land and water continues today, reinforcing identity, wellbeing, and cultural continuity. Damage to these taonga risks severing these connections, underscoring the need for their protection.

The Project team has worked with representatives to work through matters raised through the CVA and I have proposed a number of conditions on the Proposed Designation and resource consents as set out in following sections to address matters raised.

16.3.5 Ngaati Te Ata Waiohua

A Cultural Values Statement (CVS) was received from Ngaati Te Ata Waiohua to affirm their whakapapa-based relationship to the whenua (land), wai (waters), and taonga (resources) within the Te Ara Hauāuru Project Area, with a primary focus on areas east of the Whau River.

It is understood for Ngaati Te Ata Waiohua, of foremost priority is the *"protection, preservation, and sustainable management of natural and cultural resources within Te Ara Hauāuru and the wider landscapes it connects."*

Ngaati Te Ata Waiohua neither supports nor opposes the Te Ara Hauāuru project. In the CVS Ngaati Te Ata Waiohua have outlined their requirements in relation to this application and NZTA will continue to engage with Ngaati Te Ata Waiohua through the next Project phases. There will be opportunities for involvement in monitoring, cultural design as the Project is implemented.

16.4 No potential effects on the exercise of customary rights

The Project will include works within the CMA, requiring consents/permits for including construction of structures in the CMA, disturbance of substrate, alteration or removal of vegetation, occupation and use of infrastructure structures within the CMA.

No customary marine title or protected customary rights groups are relevant to the Project. NZTA has identified 16 applicant groups under the MACAA and engaged with all applicant groups in June 2025, irrespective of that fact. Letters were sent to all applicant groups with details on the Project with contact information if groups had an interest in the Project or wanted further information. Of the 16 customary marine title applicants contacted, six responded requesting further information about the Project. NZTA have met with those groups to discuss their areas of interest and further correspondence will be sent prior to the end of 2025 with further Project updates, lodgement timeframes and next steps.

There are no Sites and Places of Significance to Mana Whenua within the Project Area as identified in the AUP and overlays, and there is no known marae or Māori freehold land within the Proposed Designation.

16.5 Statutory Acknowledgement Areas

There are four Statutory Acknowledgement Areas within the Project Area including:

- Te Kawerau ā Maki statutory acknowledgement area covering much of the Project Area from Te Atatū to Westgate.
- Arch Hill Scenic reserve and areas of the CMA in the Hauraki Gulf (including Henderson and Huruhuru Creeks) are statutory acknowledgment areas for Te Ākitai Waiohua.
- Areas of the CMA in the Hauraki Gulf (including the Henderson and Huruhuru Creeks) are included in the statutory acknowledgement area of Ngāi Tai ki Tāmaki.

Further details on the Statutory Acknowledgement Areas are within Part 2 of this application. NZTA is working closely with Te Kawerau ā Maki and Te Ākitai Waiohua as Project partners. Ngāi Tai ki Tāmaki attend the CIIG, however have not expressed an interest in the Project.

16.6 Recommended measures to avoid, remedy or mitigate effects

The partnership between NZTA and Te Kawerau ā Maki, Ngāti Whātua Ōrākei, Te Ākitai Waiohua has involved extensive and regular engagement with the Project team through the IWG hui to discuss issues of interest and to address areas of concern.

I have proposed conditions on the Proposed Designation and resource consents that mean that the ongoing involvement of iwi will occur in the Project design and construction. There will be continued recognition of iwi cultural values throughout the Project life cycle.

The Proposed Designation conditions set out that NZTA will engage with Iwi during detailed design to identify how cultural values will be reflected in the Project. This includes:

- Te Kawerau ā Maki for west of the SH16 causeway to Brigham Creek station.
- Ngāti Whātua o Kaipara from Westgate to Brigham Creek Station; and
- Ngāti Whātua Ōrākei, Te Ākitai Waiohua and Ngaati Te Ata for works east from Te Whau / SH16 causeway to Ian McKinnon Drive.

I have included a condition on the resource consents that a Cultural Monitoring Plan is prepared prior to construction for each stage of work. This is to be prepared in collaboration with each of Te Kawerau ā Maki, Ngāti Whātua o Kaipara, Ngāti Whātua Ōrākei, Te Ākitai Waiohua and Ngaati Te Ata within the geographic areas identified above for the proposed designation conditions.

Conditions proposed on the resource consents and designation that assist in addressing some of the matters raised though hui and CVAs include:

- Minimising effects on geological features at Western Springs and Waitītiko / Meola Creek
- Treatment of stormwater from impervious surfaces
- Use of native eco sourced vegetation for landscape planting and in SEAs and riparian margins.
- Retention of native, mature vegetation where practicable.

17. Construction noise and vibration

Ms Wilkening has prepared an Assessment of Construction Noise and Vibration Effects (included in Part 6), that contains predictions for construction noise and vibration and recommends methods to avoid, remedy or mitigate these potential noise and vibration effects. The methodology for the assessment followed a conservative approach representing a worst-case scenario for construction noise. This methodology is explained in the Construction Nosie and Vibration Assessment included in Part 6.

17.1 General construction noise and vibration effects

Where high noise activities are likely (e.g. demolition of nearby buildings, piling of bridges or retaining walls, and earthworks), these activities will occur for short periods of time in proximity to any one building, over a few days or weeks at most before moving along the alignment or being completed. Construction of stations will be more contained to a singular location.

Overall, the predicted noise levels for the majority of works will be able to comply with the relevant standards, which means that effects are generally acceptable inside neighbouring buildings. Some exceedances of the daytime criterion may occur where works are proposed within 50m of receivers.

For the majority of dwellings, compliance with the 5mm/s PPV limit to avoid any building damage can be achieved. However, vibration levels may exceed the amenity criterion (of 1mm/s PPV) for brief durations while vibratory rollers pass at a number of buildings. This is likely to occur for one or two days at a time and will be similar to what would be expected for road resurfacing.

A small number of buildings are predicted to receive vibration levels above 5mm/s PPV without mitigation.

17.2 Site-specific construction noise and vibration effects

Ms Wilkening, in her assessment, has identified specific areas where the Project may result in exceedances of the noise and vibration criteria. I summarise these instances in the sections below.

17.2.1 Subdivision at Westgate Drive, Parkwood Avenue, Puihi Crescent and Tieke Lane, Westgate

A number of double-storey townhouses front SH16 at this subdivision between 28 Westgate Drive and Parkwood Avenue, and future subdivision at Puihi Crescent and Tieke Lane. The Project is proposed to be constructed on land immediately between these dwellings and SH16. Some shielding is provided to the ground floor of these dwellings by the existing boundary fencing. Ms Wilkening assesses that these dwellings may experience noise levels of up to 80dBL_{Aeq} for brief periods as construction passes by.

The footbridge across SH16 connecting Westgate Drive to Oreil Avenue is proposed to be replaced as part of the Project. This will likely be required to be undertaken at night-time to avoid major disruption to the state highway. While Ms Wilkening sets out that this work will not be particularly noisy, it will likely result in exceedances of night-time noise criteria at the closest dwellings at 28 Westgate Drive.

17.2.2 Works in the Coastal Marine Area

Construction is proposed to be undertaken in the CMA to construct bridges over Huruhuru Creek and Henderson Creek. Temporary staging platforms will be required for the construction of these bridges. One pile is proposed within the stream channel at Henderson Creek. Ms Wilkening confirmed with Mr Bredin that no marine mammals are present in this area, and the potential effects on other marine fauna are considered low. Therefore, Ms Wilkening concurs with Mr Bredin, that construction noise and vibration effects are on marine fauna in the CMA are low and no specific mitigation is required.

17.2.3 Royal Road School

Royal Road School is immediately beside the proposed Royal Road station. A number of dwellings are proposed to be removed (114 – 118 Royal Road) which will result in demolition noise at the school. Some of these dwellings are within 3m of the closest school buildings, and therefore demolition will need to be

conducted with significant care. Noise levels during demolition, and construction of the proposed retaining wall may cause disruption to school operations due to high noise.

17.2.4 Royal Road station – local bus bridge

A new bridge is proposed across SH16 adjacent to the existing Royal Road bridge for local buses. The construction of this bridge will likely be required to be undertaken at night-time (at least in part). The closest dwellings may receive noise of between 60 and 65 dB L_{Aeq}. With windows closed, internal noise levels are predicted to be at the upper end of acceptability.

17.2.5 Te Atatū station – local bus bridge

A new local bus bridge is proposed across SH16 from the proposed station location to Ōrangihina Reserve. The construction of this bridge will likely be required to be undertaken at night-time (at least in part). The closest dwellings may receive noise of between 55 and 60 dB L_{Aeq}. With windows closed, internal noise levels would be generally acceptable temporarily, and would not cause sleep disturbance.

17.2.6 Ambassador Theatre and Former ASB Building, Point Chevalier

Ms Wilkening and Ms O'Neil together discussed the Ambassador Theatre and former ASB building that are heritage buildings (subject to a Historic Heritage Extent of Place overlay in the AUP). Ms O'Neil advised that the buildings are likely to have vibration sensitive plaster mouldings.

Ms Wilkening in her assessment set out that construction activity (such as bored piling) may reach vibration levels of 5mm/s PPV without mitigation at the rear of the Ambassador Theatre if the building is retained. Vibration levels of 5mm/s PPV or greater may cause building damage, or damage to sensitive heritage features such as original plaster mouldings.

The ASB building, although outside the Proposed Designation, will be in close proximity to the potential demolition of the neighbouring building, and construction works for the Point Chevalier station. Ms Wilkening and Ms O'Neil advise that demolition and construction works will need to be undertaken carefully to reduce vibration and damage to any elements of the building.

17.2.7 Western Springs and MOTAT

The Indicative Design for the busway through Western Springs will pass between SH16 and the row of mature trees front Great North Road on an elevated viaduct structure. Piling to construct this viaduct structure and bridge over St Lukes Road will generate vibration. However, Ms Wilkening advises that the nearest receivers are more than 70m away within the site of the Museum of Transport and Technology (MOTAT). At this distance, any potential vibration caused by construction activity will be less than 2mm/s PPV, well within the day-time amenity criteria and building protection criteria. Whilst some buildings within this site are scheduled heritage in the AUP, Ms Wilkening advises that they are heavy commercial structures and not considered to be vibration sensitive.

17.2.8 Arch Hill and Grey Lynn

Retaining walls are proposed between Ivanhoe Road and Partridge Street where the Indicative Design crosses to the southern side of SH16. The construction of these walls, including piling will generate high noise levels for receivers to the north in Arch Hill and Grey Lynn. Any potential exceedances of noise criteria will be temporary as construction moves along the corridor.

17.3 Recommended measures to avoid, remedy or mitigate noise and vibration effects

I agree with Ms Wilkening that a CNVMP is the best way to ensure that construction noise and vibration effects will be managed and mitigated using the appropriate best practicable option (BPO) at the time of construction. I have therefore recommended a condition on the Proposed Designations requiring the preparation of a CNVMP prior to construction works commencing. These management plans are typical and well understood on large construction projects, and their implementation is an appropriate way to mitigate noise and vibration effects of such projects.

Ms Wilkening recommends a number of management and mitigation measures where exceedances of construction and/or vibration criteria are likely to occur. I consider that these measures will be included in any CNVMP prepared for a stage of work for the Project where they remain appropriate once detailed design has been undertaken, and more information is known about the construction methodology.

I have recommended a condition on the Proposed Designations requiring the preparation of CNVMP(s), and these are to include:

- description of the works and anticipated equipment/processes;
- hours of operation, including times and days when construction activities would occur;
- identification of receivers where noise and vibration criteria apply;
- a hierarchy of management and mitigation options;
- methods and frequency for monitoring and reporting on construction noise and vibration;
- 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;
- contact details of a project liaison person;
- 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;
- procedures and requirements for the preparation of a Schedule to the CNVMP (see below);
- 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;
- identification of all buildings considered Particularly Vibration Sensitive (this may include the Ambassador Theatre if retained);
- methodology and programme of desktop and field audits and inspections to be undertaken; and
- requirements for review and update of the CNVMP.

Where exceedances of the noise and vibration criteria are predicted to be infringed, Ms Wilkening recommends that Schedules be appended to the CNVMP, which will provide additional information alongside general management and mitigation options within the CNVMP. I have therefore recommended that preparation of Schedules to a CNVMP are a condition of the Proposed Designations. Schedules are intended to be specific to the activity and receiver they relate to. They will contain detailed information on communication, management and mitigation specific to a certain task or area.

Schedules are prepared as works progress, and often have a tight turnaround time of a few days. The following information would be required as part of the preparation of a Schedule to a CNVMP:

- the activity location, start and finish dates;
- the nearest neighbours to the activity;
- the predicted noise and/or vibration for all receivers where the levels are predicted or measured to exceed the applicable standards;
- 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;
- proposed mitigation options that have been selected, and any mitigation options that have been discounted as being impracticable and the reasons why;
- documented communication and consultation with affected persons;
- summary of the consultation undertaken with owners and occupiers of sites subject to the Schedule, and how consultation has and has not been taken into account; and
- the location, time and types of monitoring.

Overall, I consider that with the CNVMP and Schedules, the potential effects of the Project in relation to construction noise and vibration can be reduced to low.

18. Operational noise and vibration

Ms Wilkening has prepared an Assessment of Operational Noise and Vibration Effects (included in Part 6), which sets out predictions of noise and vibration for receivers sensitive to noise within 100m of the busway shown on the Indicative Design, where the receivers are on the same side of SH16.

The existing noise environment in the Project Area is dominated by traffic noise from SH16. Noise barriers have been installed as part of previous motorway works at a number of locations along SH16 that provide good noise reduction to houses behind. Ambient noise levels measured along the alignment ranged from 49 dB $L_{Aeq(24h)}$ to 61 dB $L_{Aeq(24h)}$. Ms Wilkening notes that the inhabitants of dwellings will be acclimatised to continuous traffic noise given their proximity to the existing SH16.

Station noise

While the noise generated by vehicles at stations is covered by the traffic noise assessment, other features such as public address systems are not covered by NZS 6806 (the standard which has guided the assessment). Therefore, the station noise assessment has been undertaken against the relevant zoning rules of the AUP.

Traffic vibration

Ms Wilkening sets out in her report that traffic vibration is generally only generated when heavy vehicles drive over bumps or dips in the road. For a newly sealed road, such as the busway surface, likely vibration is limited to 2m from the new road edge. There are no receivers outside the Proposed Designation this close to the busway edge. Vibration from traffic movements on the busway will be well below the levels at which buildings could be damaged, including heritage buildings with sensitive features such as plaster mouldings.

18.1 Traffic noise effects

Ms Wilkening notes that the operation of the busway is not expected to generate additional traffic noise. Bus movements are relatively infrequent compared to existing traffic volumes on the adjacent SH16. Electric buses will use the busway and these can be considerably quieter than diesel buses. However, the removal of existing buildings and structures that currently provide a degree of shielding, will expose some Protected Premise Facilities (PPFs) to higher noise levels from SH16.

Most PPFs in proximity to the Project will not experience perceptible changes in traffic noise levels as a result of the Project. Where changes do occur, they are expected to be minor, with predicted increases typically of 1dB or less (which is not noticeable).

To address the potential effects of traffic noise, Ms Wilkening recommends the retention of existing SH16 acoustic walls, or relocation where this is not possible, to continue to manage noise from SH16. Ms Wilkening also recommends that some existing acoustic walls be increased in height. With the retention, relocation and/or enhancement of existing noise walls, the majority of PPFs are not predicted to experience perceptible changes in noise levels from SH16. In some cases, changes to existing noise walls may reduce noise levels at receivers further away from the Project Area.

For noise walls to be effective, Ms Wilkening advises that they must be positioned to block line of sight between receivers and the noise source (in this case, SH16). One example of where noise walls may not be effective is in Arch Hill and Grey Lynn, where existing receivers are elevated above SH16. Noise walls therefore are not predicted to be effective in this location. In locations where noise walls cannot be located to effectively manage traffic noise from SH16, a small number of receivers may receive an increase in noise levels. A subset of these properties already experience noise levels in Category C.As discussed by Ms Wilkening in her assessment, traffic noise is determined to be Category C where the internal noise inside a dwelling is 40 dB $L_{Aeq(24h)}$ or above, and the external noise is greater than 67 dB $L_{Aeq(24h)}$.

18.2 Station noise effects

The proposed stations are generally located in areas with high existing traffic noise and will be sufficiently distant from sensitive receivers, such that station noise is likely to be imperceptible to most sensitive receivers. Buses within stations will operate at low speeds and will not noticeably contribute to the overall noise environment.

Ms Wilkening predicts noise levels at all stations will comply with all relevant daytime and night-time noise limits. Public address systems at the stations can comply with the relevant noise limits in each AUP zone.

18.3 Operational vibration effects

Ms Wilkening sets out in her report that traffic vibration is only generated when heavy vehicles drive over bumps or dips in the road. For a newly sealed road (as the busway will be), Ms Wilkening predicts that vibration will only be experienced by receivers within 2m of the edge of the busway. It is unlikely that any receivers will remain in this 2m window following completion of construction of the busway, and no receivers outside of the Proposed Designation will be within this identified risk contour.

Ms Wilkening also assesses that, for the scheduled heritage buildings at Point Chevalier (former ASB and Ambassador Theatre), the likely vibration experienced as a result of the operation of the Project will be well below levels that may cause damage to features of these buildings. These buildings front Great North Road which experiences traffic volumes for heavy vehicles far greater than what is proposed for the busway.

18.4 Recommended measures to avoid, remedy or mitigate noise and vibration effects

18.4.1 Traffic noise

To mitigate potential traffic noise effects, Ms Wilkening sets out in her report three methods generally used as follows:

- Selecting noise reducing surfacing material (e.g. smooth asphalt);
- Installation of acoustic barriers / noise walls; and
- Upgrading buildings by installing double glazing, insulation and alternative ventilation so doors and windows can remain closed.

Ms Wilkening recommends that a smooth asphalt surface be used for the Project, and I have therefore included this as a condition on the relevant Proposed Designations.

SH16 has existing noise barriers, and the Project will retain these in their current location where practicable. Based on the Indicative Design, Ms Wilkening has recommended that a number of the existing noise walls are modified to increase their height, or in some cases, the installation of new noise walls is proposed.

I have recommended, a condition for the relevant Proposed Designations, that will require the Best Practicable Option (BPO) to be determined to manage potential traffic noise effects at the time of detailed design of the Project. This will be undertaken by a SQP.

In a small number of cases for PPFs that receive noise in Category C, the Project may result in an increase in noise levels due to removal of intervening structures and buildings. As noted above, noise walls will not be effective in some areas that currently receive traffic noise in Category C. Ms Wilkening recommends that building modification is investigated if there is an increase of 1 decibel or more when the Project is in place for these Category C PPFs. I have recommended this as a condition on the Proposed Designation as this will manage effects on those receiving noise levels from SH16 in the highest noise category.

Ms Wilkening identified that there are no PPFs in proximity to the Proposed Designations for:

- Busway between Brigham Creek and Westgate Te Waiarohia Station (NoR 1);
- Brigham Creek Rarawaru Station and Park and Ride (NoR 4);
- Westgate Te Waiarohia Station (NoR 2);
- Lincoln Road Wai o Pareira Station (NoR 7); and
- Point Chevalier Station (NoR 11).

Therefore, the proposed conditions to manage operational noise are only relevant for:

- Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau station (NoR 2);
- Busway between Royal Road Mānutewhau station and Te Whau River (NoR 3);

- Royal Road Mānutewhau station (NoR 6);
- Te Atatū Ōrangihina station (NoR 8);
- Busway between Waterview interchange and west of Ivanhoe Road (NoR 9);
- Busway between Ivanhoe Road and Ian McKinnon Drive (NoR 10); and
- Western Springs Station (NoR 12).

18.4.2 Traffic vibration

Ms Wilkening does not consider that mitigation is needed for potential operational vibration of the Project because there are no receivers in close enough proximity to the Project that will experience vibration effects. As such, I have not recommended any conditions on the Proposed Designations to manage operational vibration effects.

18.4.3 Station noise

Ms Wilkening does not consider that mitigation is needed for potential operational noise at proposed stations, because noise generated by the Project within stations will not be audible over existing noise generated by SH16 and arterial roads in proximity to the stations. Any public address systems installed within stations will comply with relevant noise limits and will likely be inaudible. As such, I have not recommended any conditions on the Proposed Designations to manage operational noise of stations.

18.4.4 Summary

Overall, Ms Wilkening considers that, with the implementation of mitigation she has recommended, the Project can be operated to result in no significant adverse effects on the noise environment of PPFs retained adjacent to the Project Area. I consider the conditions proposed on the Proposed Designation adequately manage effects from construction and operational noise and vibration.

19. Transport

Ms Bates has prepared an Assessment of Transport Effects that assesses the actual and potential effects of the future construction and operation of the Project as it relates to transport and recommends ways of managing these effects. This assessment is included in Part 6 and summarised below.

19.1 Assessment of construction effects

As outlined in Part 3 of this Application, and supported by Ms Bates' assessment, the Project will deliver significant positive transport improvements for the region and for residents of northwest Auckland. The Project will provide lasting benefits in terms of connectivity and efficiency once completed.

While I acknowledge construction activity will generate some construction traffic effects, I consider they are temporary and necessary in order to secure the transport outcomes sought by the Project. I also consider that such effects are typical for a Project of this size and are typical of a growing and evolving urban area. NZTA (and AT) are well placed and experienced with managing these types of construction works to minimise disruption.

Ms Bates has provided an assessment of the potential construction effects of the Project based on an indicative construction methodology and construction staging as summarised in Part 2.

Construction of the Project will require a number of temporary changes to the transport network. These changes are likely to result in temporary adverse effects, as set out by Ms Bates. Those effects will arise from the required working spaces around existing roads, temporary changes to road layouts, and increased use of existing local roads and state highways by heavy vehicles. Some footpaths, crossings, shoulders, cycle lanes, and traffic lanes will also need to be closed temporarily, and temporary speed limits may lead to delays and affect some property accesses.

Ms Bates sets out in her report that the temporary adverse effects on transport during the construction of the Project are likely to manifest as:

- Traffic delays and congestion for road, state highway and shared path users;
- Reductions in parking availability;
- Changes to public transport services causing delays in journey times and a reduction in attractiveness of public transport;
- Potential safety risks for all road users as a result of construction vehicle movements and temporary road layout changes; and
- Temporary disruption or detours to private property access.

19.2 Assessment of operational effects

The operational effects of the Project have been assessed for the year 2051, when the Project is expected to be fully operational. A range of modelling was undertaken throughout the development of the Project and to assess the potential operational effects. This is described in more detail in the Assessment of Traffic Effects.

The Project may have potential effects on the operation of SH16 and local roads. Ms Bates considers that the effects of the Project on the ongoing operation of local roads and the state highway network are negligible. Traffic volumes on the state highway are predicted to remain similar, and the Project will not reduce available lane capacity. Modelling indicates that the Project will have a negligible impact on local roads.

The Project may result in the removal of publicly available carparking. I note that Auckland Transport, as the local roading controlling authority responsible for on-street carparking in the region (and publicly owned carparks at Point Chevalier and Western Springs), may remove carparking as of right. The Project will also provide an attractive alternative travel option, potentially reducing demand for private vehicle parking in the area.

Overall, the Project will deliver significant positive benefits. The benefits of the Project are described in detail in Part 3 of this application, and in the Ms Bates report. In summary, the Project will:

- Provide fast, frequent and reliable transport choices for communities in Auckland's northwest and inner west.
- Free up space on the motorway for heavy vehicles and those that need to drive their vehicle
- Improve access to employment opportunities; and
- Deliver economic benefits (regionally and nationally) as a result of reductions in congestion, travel times and associated increases in productivity.

19.3 Measures to avoid, remedy or mitigate potential adverse effects on transport

19.3.1 Construction

I agree with the findings of Ms Bates and consider that the development of a CTMP for each stage of work will manage the potential construction traffic effects identified. I have included this as a proposed condition on the Proposed Designations for the Project.

In particular, I consider that CTMPs will provide a framework for implementing appropriate traffic management measures tailored to the specific requirements of particular sites and stages of work. This includes addressing any site-specific access constraints or sensitivities and ensuring that potential adverse effects on the surrounding transport network such as traffic congestion, delays, safety risks, or disruption to pedestrian, cyclist and public transport movements are appropriately mitigated.

I note that specific recommendations in Ms Bates' report regarding construction sequencing (intended to manage potential construction traffic effects) are based on the Indicative Design. These matters will be considered through the development of the CTMP and the preparation of approvals from the relevant road controlling authority for local road works. I agree with Ms Bates that these are best developed further in the CTMP for a specific stage of work, when detailed design and construction methodologies are available.

As set out in the conditions on the Proposed Designations, the CTMP will include:

- Methods to manage the effects of temporary traffic management activities on the network;
- Measures to manage the safety of all transport users;
- The estimated numbers, frequencies, routes, and timing of traffic movements, including any specific non-working or non-movement hours to manage vehicular and pedestrian traffic near schools or to manage traffic congestion;
- Site access routes for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;
- Identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, including public transport, pedestrians and cyclists;
- Measures to maintain the function of the SH16 Shared User Path to a reasonable level of service, to the extent that is reasonably practicable, and where this isn't practicable, provide safe detour routes that provide a reasonable level of service;
- Methods to maintain access to and within properties and/or private roads where practicable, or to provide alternative arrangements when it will not be, including details of how access is managed for loading and unloading of goods;
- 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;
- Methods that will be undertaken to communicate traffic management measures to affected road users;
- Details of minimum network performance parameters during the construction phase, including any measures to monitor compliance with the performance parameters;
- Details of any measures proposed to be implemented in the event of thresholds for minimum network performance parameters being exceeded; and

- Auditing, monitoring and reporting relating to traffic management activities shall be undertaken in accordance with the requirements of the RCA.

CTMPs will be prepared prior to the start of construction for a stage of work. Where Project works are proposed on local roads, approvals will also be required from AT (or successor) through the Corridor Access Request (CAR) process. This process provides the local roading authority with oversight of proposed work, and the ability to manage interfaces or conflicts with other planned road closures or temporary traffic management measures on the network.

Overall, Ms Bates considers that the implementation of CTMP(s) for the Project will result in only minor, temporary effects.

19.3.2 Operation

The Project will deliver significant benefits, as outlined above and in Part 3 of this application. The Project may result in some adverse operational effects, but Ms Bates considers these are negligible. Overall, Ms Bates considers the Project will deliver many positive operational effects. I agree with the findings of Ms Bates and consider that no mitigation is required to manage traffic effects of the Project during operation.

Impacts to private properties in relation to traffic and access will be addressed through the PWA. I discuss this in Section 8. Driveways impacted by the works will be reinstated.

20. Network utilities

There are a number of existing utilities directly adjacent to SH16 including regionally and nationally significant utilities, which are owned and operated by several network utility operators (NUOs). The Proposed Designation interacts with a number of these existing utilities.

Some of the land to be designated for the Project is already subject to existing designations for network utilities. For Project works within these designations, written consent of the relevant requiring authority for the earlier designation is required under section 177(1)(a) of the RMA before works can commence. These approvals will be sought by NZTA closer to the start of construction, once detailed design has been progressed so any works required to existing utilities is well understood. Table 20-1 below summarises the key known existing utilities within the Proposed Designation.

Consultation with all requiring authorities, and NUOs whose approval will be required in the future, has taken place and will continue as the Project is developed. This consultation is detailed in Part 2 of this application and summarised in the sections below.

Table 20-1: Network utilities within the Proposed Designation

NUO	Asset	Location	Designation (if applicable)
Watercare Services Ltd	Central Interceptor Main Works (under construction)	Western Springs	9466
	Northern Interceptor Shared Corridor (not yet constructed)	Westgate	9377
	Wastewater Pump Station (constructed and operational)	Te Atatū	9328
	Other wastewater / supply assets	Various locations	N/A
Transpower New Zealand Ltd	National Grid Subdivision Corridor, Compromised Corridor	Between Te Atatū and Triangle / Makora Road	N/A
	National Grid Substation Corridor	Triangle Road	N/A
Vector Ltd	Substation (constructed and operational)	Te Atatū	8855
	Substation (constructed and operational)	Westgate	8910
	110kV underground electricity transmission cable (constructed and operational)	Westgate and Massey	8918
	Medium voltage overhead lines	Various locations	N/A
	Gas lines	Various locations	N/A
	Asset tunnel	Under SH16 adjacent to Bond Street	N/A
Radio New Zealand Ltd	Telecommunication and radiocommunication transmission facility (constructed and operational)	Lincoln Road	7300
Other NUOs	Communication lines, fibre cables	Various locations	N/A

20.1 Network utility operators

20.1.1 Watercare Services Limited

Watercare Services Limited (Watercare) plans, owns, operates and maintains a network of existing water and wastewater infrastructure throughout the Project corridor. Watercare infrastructure includes water and wastewater transmission pipelines, pump stations, access manholes, and associated facilities. The key interfaces with Watercare's assets are summarised in Table 20-2.

Two Watercare designations in three locations intersect with the Project being the North Harbour 2 Watermain/Northern Interceptor Shared Corridor (9377) at Gunton Drive and Moire Road, and the Central Interceptor Main Works (9466) at 770 Great North Road in Grey Lynn.

Table 20-2: Key interfaces between Watercare assets and the Project

Key interface type	Description
Water infrastructure	▪ North Harbour 2 Watermain (Gunton Drive) (D9377) ▪ Waitākere 2 Watermain (Fred Taylor Drive) ▪ North Harbour Watermain (Royal Road) ▪ Western Springs Watermain (Arch Hill Station) ▪ Arch Hill 1 Watermain (Niger Street)
Wastewater infrastructure	▪ Massey North Branch (Brigham Creek Road / Westgate) ▪ Northern Interceptor (Moire Road) (D9377) ▪ Swanson Branch (Lincoln Station) ▪ Pump Station 44 (Henderson Creek) ▪ Western Interceptor (Henderson Creek and Te Atatū / Lincoln Road) ▪ Te Atatū Branch (Te Atatū Station and Te Atatū Road) ▪ Ōrākei Main Sewer (Point Chevalier) ▪ Central Interceptor (Western Springs) (D9466) ▪ Branch 7 Arch Hill (Western Springs)
Future projects	▪ Motions Interceptor ▪ Carrington Road Transmission Pipe

The Project will be managed so it does not cause unplanned or undue disruption to Watercare's network and users. The Project team has engaged with Watercare since late 2024 to ensure early identification of potential interface points. From July 2025 onwards, regular coordination meetings have supported detailed discussions about asset locations, operational requirements, and construction methodologies.

This engagement has enabled NZTA and Watercare to collaboratively assess potential interfaces between the Project and Watercare's assets and identify practicable design and construction solutions. In particular, the North Harbour 2 Watermain (NH2) has complex construction implications and NZTA and the Watercare NH2 Project Team are working together to ensure both projects can be accommodated and planned with the least amount of disruption. Through broader discussions, NZTA also acknowledges the need for Watercare to provide continued services, with the ability to have safe and open access to their assets for maintenance and operational purposes, and for NZTA to plan and manage works well in advance of works needing to commence, particularly within constrained shut down periods.

NZTA will continue to engage with Watercare as detailed design for the Project progresses, to make arrangements in relation to Project works in accordance with the Government Roading Powers Act and relevant utilities legislation including the Utilities Access Act 2010 and National Code of Practice for Utility Operators Access to Transport Corridors. Where Project works intersect with land subject to Watercare's designations in the AUP, NZTA will seek written approval from Watercare in accordance with section 177 of the RMA 1991 prior to works commencing.

20.1.2 Vector Limited

Vector Limited (Vector) owns, operates and maintains electricity, gas, and fibre infrastructure within the Project corridor. These assets include underground cables and overhead lines of varying voltages including subtransmission, substations, transformers, switchgear, fibre optic cables and gas main pipelines.

Two sites are designated by Vector under the AUP including the Westgate Substation (8910) and Te Atatū Substation (8855). Other key interface locations currently identified along the corridor are at Fred Taylor Drive, Westgate, Royal Road, Triangle Road, Huruhuru Road Bridge, the Lincoln on-ramp, Lincoln Road, Te Atatū, Carrington Road, Point Chevalier, Bond Street, and Ian McKinnon Drive.

The Project will be managed so it does not cause unplanned or undue disruption to Vector's network and customers. These meetings have focused on, sharing data, identifying interfaces with Vector's assets and collaboratively exploring solutions where conflicts have been identified, including significant relocation of strategic assets.

This engagement has fostered a constructive joint approach with Vector in assessing potential impacts and identifying practicable alternative alignments that aims to meet the needs of both parties. NZTA acknowledges Vector's requirements to ensure ongoing access for the safe maintenance and operational

purposes to the existing assets, and the need for co-ordinated scheduling between parties for long lead activities.

NZTA will continue to engage with Vector throughout detailed design of the Project and make arrangements with Vector where relocation, access to maintain assets or existing property rights are affected by the Project. This will be managed between NZTA and Vector and in accordance with the Government Roading Powers Act 1989 and network utilities legislation including the Electricity Act 1992, Telecommunications Act 2001, Gas Act 1992, Utilities Access Act 2010 and National Code of Practice for Utility Operators Access to Transport Corridors.

Where Project works are proposed within land designated by Vector in the AUP, NZTA will seek written approval from Vector under section 177 of the Resource Management Act 1991 prior to works commencing.

20.1.3 Transpower

Transpower owns, operates and maintains a network of high voltage transmission lines (110kV and 220kV) and steel transmission towers. Access tracks to Transpower infrastructure assets are provided for maintenance activities.

Transpower's assets are nationally significant infrastructure protected under the National Policy Statement on Electricity Transmission 2008 (NPSET). In the AUP, this protection is implemented through the National Grid Corridor Overlay (Chapter D26). The overlay identifies areas around high-voltage transmission lines and substations where development is managed to avoid adverse effects on the operation, maintenance, and upgrade of the National Grid.

The Project traverses the National Grid Corridor Overlay at various locations between Te Atatū peninsula and Triangle Road in Massey. Discussions with Transpower have occurred throughout the development of the Project and Indicative Design, and the Indicative Design has been modified to address initial advice form Transpower. Of the potential 23 interactions identified within the Project Area, two are identified as being in close proximity or infringe on Transpower clearance minimum requirements. NZTA is currently awaiting formal feedback from Transpower on the indicative design.

The Project will be managed so it does not cause unplanned or undue disruption to Transpower's assets or its users. The Project team has engaged with Transpower since September 2024 and continues to co-ordinate and seek alignment where key interfaces have been identified.

NZTA will continue to work collaboratively with Transpower as the Project moves into the detailed design phase, the coordinate project activities in accordance with the Government Roading Powers Act, the Electricity Act 1992, Utility Access Act 2010, and the National Code of Practice for Utility Operators' Access to Transport Corridors.

In the event that the Project undertakes activities in proximity to Transpower assets, approval to undertake these works, and any derogations from Transpower standards will need to be obtained from Transpower prior to works commencing.

20.1.4 Other Network Utility Operators

A number of other NUOs including Connexa, Fortysouth, One NZ, Spark, Vital, 2Degrees, Kordia and Chorus own, operate and maintain communications and transmission infrastructure within the Project corridor. These assets include underground cables (including high criticality cables to large scale data centres), fibre networks, and mobile tower structures. Spark has indicated their future plans to install new assets alongside SH16 between Royal Road and the St Lukes eastbound off-ramp.

NZTA acknowledges the importance of these assets and seeks to ensure that the Project does not cause unplanned or undue disruption to these telecommunications networks, particularly for high criticality assets. The Project team has engaged with Connexa, Fortysouth, One NZ, Spark, Vital, 2Degrees, Kordia and Chorus since late 2024 to identify potential interfaces and clashes between the Project and existing and planned networks. Engagement has informed asset locations, operational requirements, potential relocation requirements and construction methodologies.

It was identified that the Project crosses the Kordia/Television New Zealand microwave transmission corridor designation (Designation 3300) through the existing Waterview interchange to the west of Point Chevalier.

This designation is a protection corridor of a specified height and width to ensure no buildings, structures or trees obstruct a continuous microwave transmission path between a radio tower in west Auckland and the city centre. The Project is at grade in this location and will therefore not interact with the microwave transmission path and associated designation.

NZTA will continue to engage with relevant NUOs throughout the detailed design phase and will make arrangements with relevant NUOs where assets require relocation, or where access to assets or property rights are impacted by the Project. This will be managed between NZTA and the relevant NUO in accordance with the Government Roading Powers Act 1989 and network utilities legislation including the Electricity Act 1992, Telecommunications Act 2001, Utilities Access Act 2010 and National Code of Practice for Utility Operators Access to Transport Corridors.

20.2 Management measures

20.2.1 Existing utility protocols

The Utilities Access Act 2010 and associated National Code of Practice for Utility Operators' Access to Transport Corridors (Code of Practice) provides protocols for utility operators conducting works within existing road reserve.

The Code of Practice allows utility operators to access the road reserve (excluding motorways) as of right, subject to reasonable conditions imposed by the transport authority. Auckland Transport manages access to the road reserve for local roads in Auckland through the Corridor Access Request (CAR) process.

The Code of Practice sets out expectations for NZTA as motorway controlling authority in relation to utilities. Where existing utilities are to be impacted by motorway improvement works, NZTA must coordinate with utility operators. NZTA may also be responsible for completing any relocation or protection works for utilities, in consultation with the operator.

All parties have a duty to take all practicable steps to protect other parties' assets when working within transport corridors.

20.2.2 Section 176 / Section 177 Approvals

Where an existing utility is subject to a designation, NZTA will be required to seek approval under s177 of the RMA from the relevant requiring authority to work within the existing designation. NZTA will work with the relevant requiring authority through the s176/s177 process to agree an approach that aligns with both parties' objectives for their respective work.

Where utility operators seek to conduct works within the proposed designation for the Project, they will require approval under section 176 of the RMA.

20.2.3 Ongoing engagement

NZTA will continue engaging with NUOs throughout the project throughout future design and construction phases. At those stages, more detailed information will be available to inform the timing, any relocation or protection measures as well as future opportunities to undertake works that the NUOs may be planning for their renewals or upgrades.

20.2.4 Summary

Major utility assets were a key consideration during the optioneering undertaken to inform the Project's development. The Project works may require the protection, diversion and/or relocation of network utility services at various locations. I consider that there are a number of legislative protections for NUOs outside of the RMA approvals sought that will ensure that any Project interfaces that arise with utilities are appropriately managed. Engagement with NUOs will continue throughout the development of the Project.

21. Summary of measures to manage potential adverse effects

Overall, the assessments conclude that the Project will have some adverse effects on the environment. However, these effects are able to be avoided, remedied or mitigated and I have proposed conditions on the Proposed Designations and resource consents to manage these effects. Table 21-1 below summarises potential adverse effects and the measures proposed to manage these effects.

Table 21-1: Summary of measures to manage potential adverse effects

Topic	Likely magnitude of effect before mitigation	Summary of potential adverse effects	Mechanism proposed to avoid, remedy, or mitigate potential adverse effect	Effect post mitigation
Built heritage	High	▪ Potential permanent loss of heritage values as a result of demolition of Ambassador Theatre, and unscheduled Fisheries Building and commercial buildings within the Point Chevalier historic townscape. ▪ Potential construction vibration effects on original plaster mouldings and carpentry of former Auckland Savings Bank in Point Chevalier. ▪ Potential loss of Former Chamberlain Golf Clubhouse (Note: not the primary feature of the subject Historic Heritage Extent of Place).	**Effect on Point Chevalier Historic Townscape** ▪ To retain the original building footprints of the Point Chevalier historic townscape (Commercial buildings, Ambassador Theatre, Fisheries buildings) to the extent practicable. ▪ If full retention is not practicable, building surveys are to be undertaken to determine whether parts of the building or internal features can be retained, or adaptively re-used. ▪ Recording and archival photography of the scheduled Ambassador Theatre and interpretive material to be installed where retention and adaptive reuse are not possible. **Former Chamberlain Park clubhouse** ▪ Retention of the former Chamberlain Park clubhouse building to the extent practicable. ▪ If retention of the former Chamberlain Park clubhouse is not practicable, recording and archival documentation of the former Chamberlain Park clubhouse and installation of an interpretive material at Western Springs Station documenting the heritage values of the original Chamberlain Park Golf Course clubhouse and surrounds. **Vibration Effects and construction damage** ▪ Prior to construction, a BHCMP and CNVMP will be prepared which will include specific management and measures to protect the retained heritage buildings from damage during construction.	**Point Chevalier Historic Townscape** Hierarchy of mitigation recommended in the proposed conditions. ▪ If retention is possible for all – low effect ▪ Partial retention – low-moderate effect ▪ No retention – moderate effect. Noting that the fisheries and commercial buildings can be removed without resource consent as they are not scheduled in the AUP. **Former Chamberlain Park clubhouse** ▪ If clubhouse building is retained – negligible effect. ▪ If clubhouse building cannot be retained – moderate effect. **Vibration Effects and construction damage** ▪ Low-negligible.
Community	Significantly positive	▪ Social benefits associated with improved access and mode choice, including increased access to	▪ Potential effects on pedestrian access addressed through proposed CTMPs ▪ NZTA will continue to work with Auckland Council regarding the acquisition or	▪ Significantly positive (operational). ▪ Temporary, low level of effect during construction.

Topic	Likely magnitude of effect before mitigation	Summary of potential adverse effects	Mechanism proposed to avoid, remedy, or mitigate potential adverse effect	Effect post mitigation
		opportunities for employment, study, recreation and social connection. ▪ The Project will enhance Auckland's social wellbeing and physical environment through improved transport networks and urban intensification, and improve the health and safety of the community through safer active transport infrastructure. ▪ Some effects on parks and open spaces possible during construction. Permanent loss of informal recreational space at McCormick Green.	compensation of parks, open space and community facilities required to facilitate the Project.	
Contaminated land	Low	Potential for the disturbance of contaminated soils (defined as HAIL activities) during construction and potential effects to human health and the environment during construction.	▪ Detailed Site Investigation (DSI) be undertaken prior to earthworks on HAIL sites identified within the Proposed Designation. ▪ Preparation of a CSMP and, if necessary, a Remedial Action Plan in the event that a DSI confirms the presence of contaminated soils. ▪ Remedial Action Plan as required.	Negligible.
Ecology	▪ Terrestrial Vegetation with SEA – low-moderate. ▪ Terrestrial vegetation outside of SEA – very low–low. ▪ Bat foraging habitat – low. ▪ Killing or injuring bats, bat rooting habitat – moderate. ▪ Native birds – moderate. ▪ Streams and watercourses – moderate.	▪ Vegetation clearance resulting in habitat fragmentation, habitat removal and edge effects. ▪ Potential loss of bat foraging habitat, disturbance or bat roosts, direct effects on bats present during construction works. ▪ Potential loss / disturbance of native bird nesting habitat. ▪ Potential loss of freshwater ecosystem values, stream bed disturbance as a result of culverting, vegetation removal, bridging. ▪ Construction effects on freshwater ecosystems such as sedimentation, accidental discharges from	▪ Replacement planting and pest plant removal in SEAs. ▪ Mitigation planting in riparian margins. ▪ Kauri dieback management measures. ▪ Pre-clearance checks during the bird nesting season to identify nesting areas, construction setbacks. ▪ Native fish salvage and relocation. ▪ Bat protocols if clearance of suitable bat habitat required. ▪ CCMP.	▪ Terrestrial vegetation in SEAs – low / low-moderate. ▪ Streams and freshwater ecosystems – low-moderate. ▪ Native fish – very low. ▪ Bats – low. ▪ Marine (estuarine) – very low.

Topic	Likely magnitude of effect before mitigation	Summary of potential adverse effects	Mechanism proposed to avoid, remedy, or mitigate potential adverse effect	Effect post mitigation
	▪ Native fish – moderate. ▪ Marine (estuarine) – very low. Operational effects – very low.	construction activity causing water quality degradation. ▪ Accidental killing/injury of native fish during construction (e.g. culverting and in-stream works). ▪ Mangrove removal, sediment remobilisation, bed disturbance in estuarine environment. Permanent habitat loss less than 1%.		
Hydrogeology	Low	▪ No identified groundwater users ▪ No impacts to surface water bodies ▪ Potential groundwater dewatering and associated ground settlement on adjacent buildings is negligible. ▪ No additional groundwater-related effects during the operation of the Project.	▪ No mitigation is required to manage groundwater and settlement related effects.	▪ Negligible – low.
Construction stormwater	Low	Potential erosion and sediment discharge effects of earthworks, streamworks and CMA activities during construction.	▪ ESCPs prepared for each stage of work. ▪ CCMP prepared for works within the CMA. ▪ Progressive stabilisation of exposed earthwork areas.	▪ Low.
Stormwater and flooding	Negligible or low	▪ Potential stormwater quality effects from the impervious surfaces of the Project are negligible – low. ▪ Potential stream channel erosion effects are negligible. ▪ There is no new inundation of floor levels due to the Project, and additional flooding on property inundated in the existing environment is minimal. ▪ In most locations, the Project is likely to reduce flood depths and have a positive impact.	▪ Potential flooding effects will be managed through specific flood and overland flow path outcomes that will be incorporated in the future design stages. ▪ NZTA will treat all stormwater runoff from the Project prior to discharge to the environment. ▪ Energy dissipation and scour protection (erosion control) measures will be provided for all stormwater network outfalls and culvert outlets which will minimise bed scour and bank erosion in receiving environments.	▪ Flooding and overland flows – low-negligible. ▪ Water quality. NZTA's commitment to treat stormwater runoff will secure negligible – positive effects. ▪ Stream channel erosion – low – negligible.
Landscape and visual	Low-moderate	▪ Potential construction effects on visual amenity, landscape character and natural character are localised,	▪ Landscape planting at batter slopes and stations where practicable.	▪ Low-moderate during construction (temporary). ▪ Low in most locations during operation.

Topic	Likely magnitude of effect before mitigation	Summary of potential adverse effects	Mechanism proposed to avoid, remedy, or mitigate potential adverse effect	Effect post mitigation
		temporary and expected from construction activities. ▪ The busway will add variety and visual interest and will reinforce the existing (transport) patterns and character of the urban landscape. ▪ Potential operational visual amenity and landscape character effects from proposed structures and stations are localised and in keeping with the existing character which is a highly modified urban setting. ▪ Potential visual amenity effects and potential effects on landscape character from structures at Western Springs	▪ Retention of mature pōhutukawa alongside Great North Road in Western Springs (see Section 6) where practicable.	▪ Low-moderate at Te Atatū, St Lukes and Ian McKinnon Drive connection.
Outstanding Natural Features	Low-moderate	▪ Potential effects on the Harbourview Pleistocene terraces ONF are low. ▪ Indicative Design does not impact the north-west lava flow ONF at Western Springs. ▪ Potential effects on Waitītiko / Meola Creek and estuary ONF are low as the Waitītiko / Meola Creek will be bridged	▪ No specific mitigation is required for the Harbourview Pleistocene Terraces in Te Atatū. ▪ Minimise impacts on exposed features of the north-west lava flow features. ▪ Requirement that the Project bridge Waitītiko / Meola Creek (not extend the existing culvert) to reduce impacts.	▪ Harbour view Pleistocene terraces – low. ▪ North-west lava flow – negligible. ▪ Waitītiko / Meola Creek and estuary – low.
Cultural values		Potential effects on iwi cultural values, heritage and aspirations.	▪ Ongoing partnership and engagement. ▪ Conditions on Proposed Designations providing for iwi involvement during detailed design of the Project. ▪ Cultural Monitoring Plan proposed for resource consents. ▪ Proposed conditions requiring consultation with iwi on management plans required for the resource consents.	
Construction noise and vibration	Moderate	▪ Temporary adverse noise and vibration effects of construction activities including night-time works	▪ Preparation of CNVMPs ▪ Schedules to detail specific management measures where exceedances of	▪ Low.

Topic	Likely magnitude of effect before mitigation	Summary of potential adverse effects	Mechanism proposed to avoid, remedy, or mitigate potential adverse effect	Effect post mitigation
		(where it is impracticable to undertake the works in the daytime) ▪ Vibration effects on adjacent buildings of construction activities including the historic heritage buildings outside the Proposed Designation at Point Chevalier.	construction noise or vibration criteria are predicted. ▪ Pre and post building condition surveys where relevant.	
Operational noise and vibration	Low–moderate	▪ Potential operational noise effects from the busway and combined noise levels of the busway and SH16, on adjacent sensitive receivers along the corridor are an indirect effect result of the Project. The Project itself will not result in any change in traffic noise levels. ▪ Changes to noise levels due to the loss of shielding provided by buildings to be removed ▪ The predicted changes in road traffic noise due to the implementation of the Project are small, ranging from +2 to -2 dB for the vast majority of PPFs. ▪ No adverse operational noise effects from the stations on adjacent sensitive receivers given the existing traffic noise levels from SH16.	▪ Low noise road surface (asphalt) to be used ▪ Implementation of the BPO traffic noise mitigation option. In most cases this is relocation or minor extension of noise walls. Some PPFs may require building modification (e.g. double glazing) where noise walls are not effective.	▪ Low.
Operational traffic	Significantly positive	No adverse operational transport effects. The Project will deliver significant positive transport outcomes.	▪ None required.	▪ Significantly positive.
Construction traffic	Moderate-high	Temporary traffic effects during the construction of the Project.	▪ Preparation of CTMPs for stages of work.	▪ Low.

22. Statutory assessment

22.1 Planning framework

Schedule 5, clause 5(1)(h) and clause 12(1)(d) of the FTAA require an assessment against the relevant provisions of the following documents.

- National environmental standards;
- Other regulations made under the Resource Management Act 1991;
- National policy statements made under the Resource Management Act 1991;
- The New Zealand coastal policy statement;
- The regional policy statement or proposed regional policy statement;
- The AUP or proposed plan changes; and
- A planning document recognised by a relevant iwi authority and lodged with a local authority.

22.2 Proposed Plan Change – Plan Change 120: Housing Intensification and Resilience

Auckland Council publicly notified Proposed Plan Change 120: Housing Intensification and Resilience (PC 120) on 3 November 2025. PC120 seeks rezone land in many parts of the city to allow for intensification, with a particular focus on areas close to the city centre and commercial centres, train and busway stations, and along frequent bus routes. Additionally, PC120 seeks to strengthen rules in the AUP relating to building within areas prone to natural hazards, including the introduction of a 'restrictive' residential zone, for residential areas with the highest risk of natural hazards.

In accordance with section 86B(3) of the RMA, the proposed natural hazard rules and re-zoning proposed for natural hazard reasons in PC120 have immediate legal effect. These provisions have been considered alongside other proposed changes to provisions in the AUP under PC120 as part of the analysis of relevant planning documents in respect of the Project in the below table.

PC120 has also informed the basis of the receiving environment for the Project and associated assessment of effects.

22.3 Thematic assessment of relevant planning documents

A thematic assessment of relevant planning documents is summarised in Table 22-1.

Table 22-1: Summary of thematic assessment of relevant planning documents

Relevant planning document	Relevant objectives and policies	Analysis
Theme: Enabling infrastructure, including within an Overlay		
AUP [RPS] Infrastructure, transport and energy AUP [DP] AUP [RP] D9 Significant ecological area overlay D 13 Notable trees D 17 Historic heritage overlay, D18 Special Character Areas E26 Infrastructure E27 Transport I615 Westgate Precinct	B3.2.1(1), B3.2.1(2), B3.2.1(3), B3.2.1(4), B3.2.1(8), B3.2.2(1), B3.2.2(3), B3.2.2(6), B3.2.2(7), B3.2.2(8), B3.2.2(9), B3.3.1(1), B3.3.2(1), B3.3.2(3) D9.2(1), D9.3(8), D13.3(2), D17.3(24), D17.3(25), D17.3(26), E17.2(1), E17.2(3), E17.3(1) E26.2.1(1), E26.2.1(2), E26.2.1(4), E26.2.1(9), E26.2.2(1), E26.2.2 (2), E26.2.2 (4), E26.2.2(14), E26.2.2(15) E27.2(1), E27.2(2), E27.2(5) I615.3(17), I615.3(21) PC120 B10 (21B), (22)	The objectives and policies in Chapter B3 of the AUP recognises the importance of infrastructure (including transport infrastructure) in realizing Auckland's full economic potential. This includes integrating the provision of infrastructure with urban growth, avoiding incompatible land uses and increasing resilience. The provisions recognise the importance of the transport network in the movement of people, good and services, enabling growth, and providing choices. Objectives and policies in Chapter E26 of the AUP identify that infrastructure is critical to the social, economic, and cultural well-being of people and communities and the quality of the environment. The development, operation, use, repair, maintenance, upgrading and removal of infrastructure is anticipated, and the benefits infrastructure can have, as well as a range of adverse effects, are acknowledged within the objectives and policies. The objectives and policies of Chapter B3 seek to enable the development and operation of infrastructure, including in sensitive areas that are scheduled in the AUP in relation to historic heritage, provided adverse effects are avoided where practicable and an operational and functional need to locate in sensitive areas is demonstrated. Objectives and policies in Chapter E17 seek to protect trees in roads and the cultural, amenity, landscape, and ecological values they contribute. Provision of transport infrastructure and utilities is enabled. The AUP directs that all modes of transport should be integrated with land use so that the benefits of an integrated transport network can be realised, and the adverse effects of traffic generation on the transport network can be managed. This includes enabling effective, efficient, and safe transport that supports the movement of people, goods and services, integrates with, and supports a quality compact urban form, enables growth, avoids, remedies or mitigates adverse effects on the quality of the environment and amenity values, and facilitates transport choices. **Assessment** In my opinion, the Project is consistent with the infrastructure objectives and policies as the Project provides for a wide range of transport opportunities and benefits for the community and as part of improving the wider integrated regional transport network. Additionally, the Project will deliver a range of economic benefits as outlined in Part 3 of this application. The Project has sought to avoid or appropriately mitigate adverse effects on environmentally sensitive or culturally sensitive features including minimising works in the relevant overlays within the Project area through the options assessment process. The Project traverses SEAs, ONFs, the National Grid Corridor, the Historic Heritage Overlay Extent of Place (Ambassador Theatre Point Chevalier, Gateway at Western Springs), the Notable Trees overlay (two notable pōhutukawa trees located at 30 Potatau Street and 2 Kirk Street, Grey Lynn) and Special Character Areas Overlay (Residential and Business-Bond Street). Additionally, the Project will affect trees within the road corridor and Open Space zone The Project will result in earthworks and vegetation alteration and/or removal within the SEAs and riparian margins of watercourses and road reserve along the corridor; however, any potential effects will be mitigated by the landscape planting, mitigation planting in the SEA and riparian margins where appropriate, and management of earthworks as set out in the proposed conditions of designation and resource consents. The potential effects of the Project on the Overlays traversed by it are assessed above. The Project has a functional and operational need to be in its proposed position to deliver the desired transport outcomes and benefits, and the alternatives assessment undertaken process concluded that it is not practicable or in some instances possible to avoid all sensitive overlays in the AUP.

Relevant planning document	Relevant objectives and policies	Analysis
		Chapter E26 recognises that linear infrastructure may have an operational need to traverse features or areas of value identified in the AUP and this theme permeates the other AUP provisions (eg E26.2.2(6), E17(3)(1)). These policies recognise the benefits derived from infrastructure, the adverse effects of not providing the infrastructure and seeks consideration of how the infrastructure contributes to the strategic form or function, or supports the planned growth and intensification, of Auckland. The Project has considered the impact on street trees and trees in Open Space zones and can retain some, whilst necessitating the removal of others. The Westgate Precinct provisions (in particular, Sub-precincts A, E and F) provide for public transport facilities, and in particular, seek that facilities are integrated with the wider precinct while supporting compact, intensive urban growth within Sub-precinct A. I have considered the proposed amendments to the RPS in PC120 and note that these proposed provisions still enable infrastructure in areas subject to natural hazards. The Indicative Design is within the flood plain overlay, which has immediate legal effect, at various points throughout the Project Area. I consider that the Project is consistent with Chapter B3 of the RPS and the relevant objectives and policies of the AUP in relation to infrastructure and transport including in overlays, zone and precinct provisions. While PC120 is still in its infancy, it is my opinion that the Project is consistent with the relevant provisions as they relate to infrastructure.
Theme: Urban growth and development capacity		
NPS-UD AUP [RPS] B2 Urban growth and form B3 Infrastructure, transport and energy AUP [DP] E27 Transport I615 Westgate Precinct	Policy 1(c), 1(e), 1(f) Policy 3, Policy 6 B2.2.1(1A), B2.2.1(1), B2.2.2(5)(c), B2.4.1(1), B2.4.1(3), B2.4.1(6), B2.4.2(6), B2.5.2(2), B3.2.1(5), B3.3.1(1)(c), B3.3.2(3), B3.3.2(4)(b), B3.3.2(5)(a) E27.2(1), E27.2(2), E27.2(5), E27/2(6) I615.3(17), I615.3(21)	The National Policy Statement on Urban Development (NPS-UD) seeks to ensure urban environments are well-functioning and enable all people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety. Auckland is recognised as a Tier 1 urban environment in the NPS-UD, and therefore is the subject of the strongest policy direction relating to intensification and density of urban form. The NPS-UD directs an integrated approach to infrastructure planning and funding decisions with urban development. The objectives and policies of the AUP seek to provide sufficient feasible development capacity for housing with set dwelling targets over the next 30 years. To reach these targets, adequate infrastructure must exist or be provided prior to or with development. **Assessment** The objectives and policies places emphasis on the importance of providing short, medium and long term residential and business capacity. This includes long-term strategic planning for urban development and generally indicates that ad hoc or out of sequence urban expansion is less desirable than that which is planned and integrated. The Project is consistent with these objectives and policies by providing transport infrastructure that supports eventual urban growth and intensification. The Project and proposed designations will ensure that transport infrastructure is planned and integrated (and identified in the AUP) to meet the feasible development capacity targets over the next 30 years. The NPS-UD and AUP recognise the benefits of urban development where they contribute to people's social, economic, cultural, and environmental wellbeing. Policy 1 of the NPS-UD notes that a 'well-functioning urban environment' has, as a minimum, good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport. The Project will contribute to an accessible, high-quality, effective, efficient and safe transport route (including public and active transport modes) that support the movement of people, goods and services for Auckland's northwest and inner-west areas. The Westgate Precinct provisions direct that development of the precinct must align with infrastructure delivery timelines, and that facilities are integrated with the wider Westgate metropolitan area supporting compact urban growth. I consider that the Project is consistent with the NPS-UD and the relevant objectives and policies of the AUP in relation to urban growth and development capacity. I have placed no weight on objectives and policies pertaining to

Relevant planning document	Relevant objectives and policies	Analysis
		urban growth and form in PC120 as it is in its infancy, and the associated provisions do not have immediate legal effect.
Theme: National Grid		
NPS:ET AUP [RPS] B3 Infrastructure, transport and energy AUP [DP] E 26 Infrastructure E27 Transport	Objective, Policies 1, 10 B3.2.1(7), B3.2.2(7) D26.2(1), D26.3(1), E26.2.1(7)	The objectives and policies of Chapter B3 of the AUP RPS also encourage co-location of infrastructure where safe to do so, and operational and technical requirements are satisfied. Specific objectives and policies of the AUP aim to ensure the efficient development, operation, maintenance, upgrading and removal of regionally significant infrastructure (including the National Grid) is not compromised by subdivision, use and development by ensuring operational and technical requirements and standards are satisfied. **Assessment** Engagement with Transpower has been undertaken throughout the development of the Project. Major utility assets (including the National Grid) were considered as part of optioneering undertaken to inform the Project. Transpower's feedback was taken into consideration, and the indicative design has been developed to provide adequate clearance between the Project and overhead lines. Further engagement will be undertaken with Transpower during the development of detailed design for the Project. Works within certain clearance distances of Transpower assets such as the National Grid require various work approvals. These will be worked on with Transpower once the design of the Project has been progressed further and exact clearance distances are known. PC120 addresses activities within the National Grid overlay, but there are no proposed amendments to the objectives and policies. Overall, I consider that the Project is consistent with the NPS:ET and the relevant objectives and policies of the AUP in relation to electricity transmission infrastructure.
Theme: Mana whenua		
AUP [RPS] *B4 Natural heritage* *B6 Mana Whenua* AUP [DP] AUP [RP] *E1 Water quality and integrated management* *E11 Land disturbance regional* *E12 Land disturbance district*	B4.2.1(2), B6.2.1(1), B6.2.1(2), B6.3.1(1), B6.3.1(2), B6.3.1(3), B6.3.2(1), B6.3.2(2)(d), B6.3.2(3), B6.3.2(4), B6.3.2(6), B6.5.1(1), B6.5.1(3), B6.5.1(5), B6.5.2(1), B6.5.2(4), B6.5.2(5), B6.5.2(6), B6.5.2(9), B7.4.1(6) E1.2(2), E11.3(3), E12.3(1), E12.3(2)(c), E12.3(4)	The AUP requires recognition and the provision of the principles of Te Tiriti o Waitangi, in particular through ngā mana whenua participation in resource management processes. The principles of Te Tiriti o Waitangi are also recognised and provided for in the sustainable management of natural and physical resources, wāhi tapu and other taonga. Sites and places of significance to mana whenua are recognised and provided for in the objectives and policies of the AUP. Assessment The Project has been developed in partnership with Te Kawerau ā Maki, Ngāti Whātua Ōrākei and Te Ākitai Waiohua. The Project team has been with Project iwi partners on a fortnightly basis from the early stages of project development. NZTA also maintains a wider Iwi integration forum with a wider group of Iwi of Tāmaki on a monthly basis. NZTA invited Iwi to prepare cultural values assessments in relation to the Project. CVAs were received from Te Ākitai Waiohua and Ngaati Te Ata Waiohua. Ngāti Whātua Ōrākei did not believe a CVA was required for the Project and prefer to continue to develop relationships and a common understanding with NZTA and the Project team. Te Kawerau ā Maki provided a letter in 2023 setting out their expectations for the Project. They also prepared a letter of support. NZTA is committed to ongoing engagement with Iwi/hapū which closely aligns with the long-term view of the AUP. Should accidental archaeological discoveries be made, the protocols set out in the Archaeological Management Plan and associated HNZPT General Authority application will apply, including informing iwi of discoveries. I consider that the Project is consistent with the relevant objectives and policies of the AUP in relation to mana whenua values.

Relevant planning document	Relevant objectives and policies	Analysis
Theme: Indigenous Biodiversity and Ecological Values		
NPS-IB AUP [RPS] B7 Natural resources AUP [DP] AUP [RP] E12 Land disturbance district E15 Vegetation management and biodiversity	Objective 1, Clause 1.7, Policy 3, 4, 8, 10, 14, 15, 17 B7.2.1(2), B7.3.1(3), B7.3.2(1), B7.3.2(4), B7.3.2(5), B7.3.2(6), B7.4.1(4), B7.4.1(5), B7.4.2(1)(a), B7.4.2(1)(d), B7.4.2(7)(b), B7.4.2(9), B7.5.1(2), B7.5.2(1)(f) E11.2(1), E11.2(2), E11.3(1), E11.3(2), E11.3(4), E11.3(6A), E11.3(7), E12.2(1), E12.3(1), E12.3(2)(c), E15.2(1), E15.2(2), E15.3(2), E15.3(3) E15.3(4)(b), E15.3(7).	The NPS-IB seeks to maintain indigenous biodiversity across New Zealand so that there is at least no overall loss in indigenous biodiversity. The objective and policies of NPS-IB seek that a cautionary approach is used when considering effects on indigenous biodiversity both within and beyond Significant Natural Areas (SNAs) and including areas supporting highly mobile fauna. Increased indigenous vegetation cover in urban and non-urban environments is promoted, as is information gathering and monitoring of indigenous biodiversity. The NPS-IB sets out a need to recognise and allow for activities which contribute to New Zealand's social, economic, cultural and environmental wellbeing, and provides a consenting pathway for specified infrastructure that provides significant national or regional public benefits and has a functional or operational need to locate in a particular location where there are no practicable alternatives. While the AUP was prepared prior to the NPS-IB being gazetted, I consider that the objectives and policies of the AUP are consistent with the NPS:IB. In relation to large scale infrastructure projects there is not a notable change in policy direction. The assessment of the Project against the NPS-IB is therefore aligned with the assessment of the corresponding AUP provisions and AUP is consistent with the NPS-IB The AUP objectives and policies seek to protect and enhance ecological values across terrestrial, freshwater and coastal environments. The primary method the AUP uses to protect biodiversity is the identification of SEAs. Significant adverse effects are to be avoided as far as practicable, and where avoidance is not practicable, adverse effects are to be minimised. Other adverse effects on biodiversity and ecosystems are to be avoided, remedied or mitigated. The provisions do acknowledge that avoidance of areas with biodiversity values is not always practical for infrastructure. Where biodiversity is affected, measures to protect and restore biodiversity through legal protection and active management should be considered. **Assessment** In my opinion, the Project falls within the definition of Specified Infrastructure in the NPS IB, as 'infrastructure that is necessary to support housing development, that is included in a proposed or operative plan or identified for development in any relevant strategy document". The ecological habitats are detailed in the Assessment of Ecological Effects Report and are summarised in Section 10 above. The Project traverses a constrained and highly urbanised environment adjacent to the existing SH16 transport corridor. The policies of the NPS-IB and AUP provide for infrastructure in sensitive areas considering the benefits of providing the infrastructure, its role in supporting planned growth and the functional and operational need of the infrastructure to locate/traverse in those areas. The functional and operational need for the Project to pass through in SEAs is demonstrated through the detailed alternatives assessment process, the range of alternatives considered (which sought to balance benefits with constraints), and the need to meet the requiring authority's objectives for the Project. Additionally, the ecological effects of the Project identified generally fall within low to moderate levels. Proposed conditions of consent include the requirement for removal of pest plant species that will assist in improving the SEAs traversed by the Project. I consider that the Project is consistent with the relevant objectives and policies of the NPS-IB and AUP in relation to vegetation management and biodiversity values.
Theme: Natural Hazards		
AUP [RPS] Including PC120 AUP [DP] including PC120	B2.3.1(1), B10.2.1(2), B10.2.1(2A), B10.2.1(3), B10.2.1(4), B10.2.1(5), B10.2.1(6), B10.2.2(7), B10.2.2(8), B10.2.2(8A), B10.2.2(10), B10.2.2(11), B10.2.2(21B),	The objectives and policies of the AUP enable and recognise the importance of infrastructure to support urban growth which includes integrating the provision of resilient transport networks and infrastructure in these areas and avoiding effects in areas subject to natural hazards and risk and adapting to the effects of climate change. Specific AUP objectives and policies reinforce the unique requirements of infrastructure and that it can have an operational or functional need to locate within a natural hazard area. Where infrastructure is required to be located

Relevant planning document	Relevant objectives and policies	Analysis
	B10.2.2(22), B10.2.2(23), B10.2.2(24), E12.2(1), E12.3(5), E12.3(6), E36.2(1), E36.2(2), E36.2(3), E36.2(3A), E36.2(3B), E36.2(3C), E36.2(4), E36.2(6), E36.2(7), E36.2(8), E36.3(1), E36.3(3), E36.3(4), E36.3(4A), E36.3(4B), E36.3(5G), E36.3(21), E36.3(23), E36.3(26), E36.3(29), E36.3(30), E36.3(35), E36.3(36), E36.3(37).	within a hazard area, significant adverse effects on people and property are sought to be avoided and otherwise mitigated to the extent practicable. New proposed policies in PC120 E36.3(36) and E36.3(37) require the consideration of potential to reduce natural hazard risks to Māori Land, Treaty Settlement land, marae, urupā, and mana whenua cultural heritage and values, and, where practicable, avoid infrastructure that would require new or increased reliance on coastal protection structures within a 100-year timeframe. **Assessment** I consider that the objectives and policies in proposed Plan Change 120 are aligned with the intent of the existing AUP provisions in Chapter E36 regarding the need to enable construction, operation and maintenance of infrastructure where there is a functional or operational need for its proposed location, and that risks to people, property and the environment are mitigated to the extent practicable. Specifically, proposed changes to E36.2(4) directs that infrastructure located in natural hazard areas avoid the creation or exacerbation of risks from natural hazards, or, where this is not achievable, the residual effects are mitigated to the extent practicable. The Assessment of Stormwater and Flooding Effects notes that in most cases, the Project will result in negligible/low effects. In some cases, the Project will result in positive effects with respect to existing flooding on nearby property. The Project will not create new natural hazard risks. Through the options assessment process, and further design development and refinement, consideration has been given to the avoidance of areas subject to natural hazards such as flooding and sea-level rise. Where natural hazards, such as floodplains, cannot be avoided, the Project has demonstrated the functional and operational need to cross these areas. The proposed flood hazard condition will appropriately mitigate any residual effects by prompting consideration of flood hazard risks during detailed design. The indicative design which has been assessed and appropriately sensitivity tested in the Assessment of Stormwater and Flooding Effects demonstrates that there are a number of potential design options that can be implemented within the proposed designation to mitigate potential flood hazard effects. Overall, I consider that the Project is consistent with the objectives and policies of the AUP in relation to natural hazards, and proposed objectives and policies within Plan Change 120 regarding natural hazards.
Theme: Freshwater		
NPS-FM AUP [RPS] AUP [DP] AUP [RP]	Policies (2), (5), (6), (7), (9) B7.2.1(2), B7.3.1(3), B7.3.2(1), B7.3.2(4), B7.3.2(5), B7.3.2(6), B7.4.1(4), B7.4.1(5), B7.4.2(1)(a), B7.4.2(1)(d), B7.4.2(7)(b), B7.4.2(9). E12.2(1), E12.3(1), E12.3(2)(c).	The overarching concept of the NPS-FM is Te Mana o te Wai, which refers to the fundamental importance of water and its life supporting capacity. Key policies of the NPS-FM include the need to ensure the health of degraded water bodies and freshwater ecosystems is improved (Policy 5), that there is no further loss of extent of natural inland wetlands (Policy 6), that the loss of river extent and values is avoided to the extent practicable (Policy 7) and that the habitats of indigenous freshwater species are protected (Policy 9). The relevant AUP objectives and policies seek to protect and enhance ecological values in freshwater environments. The permanent loss and significant modification or diversion of lakes, rivers, streams (excluding ephemeral streams), and wetlands are to be avoided, unless, amongst other matters, it is necessary to provide for infrastructure, and no practicable alternative exists. The objectives and policies seek to manage subdivision, use, development, including discharges and activities in the beds of lakes, rivers, streams, and in wetlands, to limit the establishment of structures within the beds of lakes, rivers and streams and in wetlands to those that have a functional need or operational requirement to be located there. **Assessment** Consents under the NES-FW are sought for the Project in relation to culvert extensions. The infrastructure proposed as part of the Project will have significant regional or national benefits, as described in Part 3 of the Substantive

Relevant planning document	Relevant objectives and policies	Analysis
		Application. There is a functional need for the infrastructure to be located where proposed adjacent to the state highway, with stations at key destinations and areas of residential land use. Stormwater discharge from the Project will be treated before discharging to the environment. Best practice erosion and sediment control measures will be deployed during construction to ensure the potential effects on freshwater bodies are minimised. Some freshwater environments may be impacted by the Project predominantly through discharge of stormwater from the Project, culvert extensions and bridge structures. Through the implementation of the proposed conditions, the quality of freshwater will be maintained while recognising the capacity constraints of streams and receiving water bodies. The proposed transport infrastructure is critical to enable existing and future communities to provide for their social, economic and cultural wellbeing. In my view, the Project contributes to the achievement of these objectives and policies by avoiding or minimising potential adverse effects on water bodies and freshwater ecosystems.
Theme: Coastal		
NZCPS AUP [RPS] AUP [RCP]	Objectives 1 – 6, policies 2, 6, 11, 13, 18, 21, 22, 23, 25 B7.4.1(2), B7.4.1(4), B7.4.1(5), B7.4.1(6), B7.4.2(1), B7.4.2(3), B8, B6.2.2 E12.3(1), F2.5.2(1), F2.5.2(2), F2.5.3(1), F2.5.3(2), F2.7.2(2), F2.7.3(3), F2.11.2(3), F2.11.3(7), F2.14.2(2), F2.14.3(1), F2.14.3(5), F2.14.3(7), F2.16.2(1), F2.16.2(3), F2.16.3(3)	The NZCPS recognises the importance of infrastructure to the social, economic, and cultural well-being of communities, particularly where there is a functional need for it to be located in the coastal environment. The relevant objectives and policies of the NZCPS allow for infrastructure where potential adverse effects on natural character, landscapes, water quality, and public access are avoided or mitigated. The relevant AUP objectives and policies in relation to coastal matters seek to enable infrastructure in the CMA where it has a functional or operational need to be located in the CMA, and where potential adverse effects are avoided, remedied or mitigated. **Assessment** The Project includes two bridge crossings over two tributaries of the Wai-o-Pareira/Henderson Creek (within the CMA). Given that the Project runs parallel to SH16, there is a functional need to locate the Project over the CMA. Works in the CMA has been reduced as far as practicable through the design where one pile is proposed within the channel of the Wai-o-Pareira/Henderson Creek which is necessary to support the significant infrastructure. We have proposed an Erosion and Sediment Control Plan (ESCP) which will include mitigation measures to be implemented and Coastal Construction Management Plan (CCMP) through the proposed resource consent conditions to manage the potential effects from construction of the Project on the coastal environment. New or upgraded stormwater outfalls are required as part of the Project. All operational stormwater from the Project will be treated before discharging to the CMA. Public access to the CMA will be maintained or restricted while the activities occur in the CMA where there is a need to maintain the health and safety of the public whilst the activities occur in the CMA. The proposed CWMP will include a final construction methodology with recommended management measures to be implemented to ensure public access to and along the CMA is provided including safe navigation passage. I support the proposed resource condition to ensure the new bridge crossings over the CMA provide adequate clearance for recreation use in watercourses below. Existing footpaths and accessways will be retained or relocated as necessary for the Project. I consider that overall, the Project is consistent with the relevant NZCPS and AUP objectives and policies as it is necessary to locate the Project over the CMA as it is a significant infrastructure with a functional or operational need, of regional or national benefit and there are no practicable alternatives that are reasonably available. Adverse effects on the coastal environment have been avoided through the design where one pile is proposed in the channel of the CMA and potential effects can be appropriately mitigated and managed through the proposed ESCP and CCMP which will be implemented during construction.
Theme: Land Disturbance		

Relevant planning document	Relevant objectives and policies	Analysis
AUP [DP] AUP [RP]	E11.2(1), E11.2(2, E11.2(3), E11.3(1), E12.2(1), E30.2(1), E30.3(2)	The objectives and policies of the AUP seek to ensure that land disturbance is undertaken in a manner which protects the safety of people and avoids, remedies or mitigates adverse effects arising from land disturbance, and that contaminant discharge from the land is managed to protect the environment and human health, and to enable land to be used for suitable activities now and in the future. The AUP also seeks that adverse effects in scheduled natural and physical resources (relating to natural heritage, mana whenua, natural resources, the coastal environment, historic heritage, and special character) are avoided where practicable. **Assessment** The Project will be constructed in stages. The cut to fill ratio for proposed earthworks is relatively similar, given the relatively flat topography directly adjacent to SH16. ESCPs will be prepared for each stage of work in accordance with GD05 which will ensure that the potential erosion and sedimentation effects of earthworks are mitigated effectively. I support this recommended condition. DSIs will be undertaken prior to construction for land which has been identified as a HAIL site. A CSMP is proposed in conditions of resource consents and a Remedial Action Plan if required. This will address potential effects in relation to disturbance of contaminated soils. I support these recommended conditions.
Theme: Historic Heritage		
AUP [RPS] B3 Infrastructure, transport and energy B5 Historic heritage and special character AUP [DP] E26 Infrastructure	B3.2.1(1), B3.2.1(2), B3.2.1(3), B3.2.2(1), B3.3.1(1), B3.3.2(1), B3.2.1(3) B5.2.1(1), B5.2.2(6), B3.2.1(7), B5.3.1(2), B5.3.2(4)(c), B5.3.2(4)(d) E26.2.1(9), E26.2.2(4), E26.2.2 (6)	The RPS recognises the importance of heritage to the identity of Auckland, and the importance of active stewardship to protect it from inappropriate subdivision use and development. The provisions seek to avoid significant adverse effects on scheduled historic heritage, where practicable, and to encourage new development to have due regard to significant historic heritage. The policies of Chapter B3 and E26 seek to enable the development, operation and maintenance of infrastructure, in sensitive areas that are scheduled in the AUP in relation to historic heritage, provided adverse effects are avoided or managed where practicable and an operational and functional need to locate in sensitive area arises. While the objectives and policies of the AUP generally seek to enable protection, maintenance restoration and conservation of scheduled heritage. Notably, Objective D17(2) protects scheduled historic heritage from inappropriate use and development. **Assessment** A thorough and robust approach was taken to select the preferred alignment for the Project, which included identification and consideration of the potential effects on built heritage. The Project may impact some scheduled built heritage sites, including the Ambassador Theatre in Point Chevalier, and the former Chamberlain Park clubhouse in Western Springs. It is my opinion that the use and development is appropriate given the linear nature of the busway, the robust alternatives assessment undertaken to identify the busway alignment through Point Chevalier and Western Springs and Point Chevalier Station location. I support the conditions that seek the retention (or retention of parts), where practicable, of the identified scheduled built heritage. Additionally, and in response to Ms O'Neil's assessment regarding the potential effects on the Point Chevalier historic townscape, I support the recommendation that the original building footprints of the Fisheries Building and Commercial building either side on the Ambassador are also retained where practicable. I note that this is recommended despite the demolition of these buildings being provided for in the AUP as a permitted activity. If retention is not practicable, the reasons for this will be detailed in the Outline Plan as required by the proposed designation condition. A more onerous condition that would require absolute protection is not, in my opinion, appropriate given the permitted activity status of demolition. The potential construction effects on built heritage retained can be appropriately managed through the proposed CNVMP condition, and the proposed BHCMP. The Project may result in the removal of four dwellings subject to a Special Character overlay. The Project travels alongside the existing SH16 and therefore does not interrupt the existing streetscape patterns. It is my opinion that

Relevant planning document	Relevant objectives and policies	Analysis
		the Project is not offensive to the Objectives and Policies of the Special Character overlay. The removal of the four dwellings within the Overlay immediately adjacent to SH16 will not be a recognisable loss given the Overlay covers an extensive area from St Marys Bay, Ponsonby and Freemans Bay through to parts of Mt Eden, Epsom and Remuera. The Project passing through this Overlay, immediately adjacent to SH16, will reflect the existing infrastructure corridor, and will not detract from the overall values of the Overlay. Overall, I consider that the Project is consistent with the relevant objectives and policies of the AUP in relation to historic heritage and special character.
Theme: Open Space		
AUP [DP]	E16.2(1), E16.2(2), E16.3(2), E16.3(3), H7.2(2), H7.3(3) H7.5(1), H7.5.3(4), H7.6.2(2), H7.6.3(4), H7.8.2(1), H7.8.3(2)	**Summary of Objectives and Policies** The general objectives and policies of open space zones in the AUP seek to enable infrastructure while avoiding, remedying or mitigating adverse effects on residents, communities and the environment. Objectives and policies in Chapter E16 of the AUP seek to protect the cultural, amenity, landscape and ecological values of trees in open space and increase the quality and extent of tree canopy cover in open space zones. **Assessment** The Project will reallocate public open space to an alternative public use, being the busway and its associated stations. In some instances, loss of public open space zoned land will not change the current land use (for example where there are stormwater ponds that may be augmented to treat the runoff from the busway). In other instances, the land use will remain a public asset, but the use will change from open space reserve land to busway and associated activities such as stations, access by pedestrian, cyclist or private vehicle where there is a pick up /drop off facility. The Project will provide travel choices that may enhance accessibility of key open spaces and recreational facilities (such as Ōrangihina reserve, Western Springs). Overall, I consider that the Project is not inconsistent with the relevant objectives and policies of the AUP in relation to open space zoned land. The Project will provide regionally and nationally significant infrastructure, enhancing access to parks and community facilities.
Theme: Residential		
AUP [DP]	H3.2(4), H3.3(7) H4.2(1), H4.2 (2), H4.2(4), H4.3(1), H4.3(2), H4.3(9) H5.2(1), H5.2(4), H5.3(1), H5.3(8) H6.2(1), H6.2(4), H6.3(1), H6.3(9)	**Summary of Objectives and Policies** The objectives and policies of residential zones adjacent to the Project seek to ensure land is efficiently used to provide higher density urban living, increase housing capacity and improve choice and access to public transport. Specific objectives and policies also seek to recognise the functional and operational requirements for development, in particular that non-residential activities provide for communities' social, economic and cultural well-being while avoiding, remedying or mitigating adverse effects on residential amenity. **Assessment** The Project will serve current and future planned urban growth in Auckland's northwest and inner-west. The Project will improve connections within and between residential communities, economic opportunities and recreational sites. I consider that the Project is generally consistent with the relevant objectives and policies of the AUP in relation to residential zones.
Theme: Business		
AUP [DP]	H9.2(5), H9.3(2), H9.3(3), H9.3(12)	**Summary of Objectives and Policies**

Relevant planning document	Relevant objectives and policies	Analysis
	H11.2(2), H11.2(8), H11.3(3), H11.3(12), H11.3(20) H12.2(2), H12.2(3), H12.2(12), H12.3(3), H12.3(12) H14.2(2), H14.2(3), H14.2(8), H14.3(3), H14.3(12), H14.3(21) H17.2(3), H17.2(4), H17.3(4)	The objectives and policies of relevant business zones seek to recognise functional and operational needs of activities and development, while ensuring adverse effects on amenity values and the natural environment of adjoining open space and residential areas are appropriately avoided, remedied or mitigated. **Assessment** The Project will improve access to major employment centres and provide contributions toward the future form and quality of major centres and business zones. Overall, I consider that the Project is consistent with the relevant objectives and policies of business zones.
Theme: Future Urban		
AUP [DP]	H18.2(1), H18.2(2), H18.2(3), H18.2(4), H18.3(1), H18.3(2), H18.3(3), H18.3(4), H18.3(5), H18.3(6)	**Summary of Objectives and Policies** The relevant objectives of Chapter H18 seek for land to be developed to achieve the objectives of the Rural Production Zone until such time as it has been rezoned for urban purposes, and that urbanisation is avoided until the sites have been rezoned. The relevant policies seek to avoid use and development that may result in the inefficient and ineffective operation of the local and wider transport network, require significant upgrades to infrastructure, inhibit the efficient provision of infrastructure or undermine the form or nature of future urban development. Further, use and development is required to maintain and complement rural character and amenity. **Assessment** The Project will traverse a small portion of Future Urban Zone (FUZ) land near Brigham Creek. The proposed Brigham Creek station (and busway between Brigham Creek and the city centre) will enable future urban developments to be efficiently and effectively serviced by fast, frequent public transport. The Project responds to existing and proposed urban development in the surrounding FUZ land. Overall, I consider that the Project is consistent with the objectives and policies of Chapter H18 of the AUP.
Theme: Notable Trees		
AUP [DP]	D13	**Summary of Objectives and Policies** The objective and policy D13.3(1) in are relevant to the Project. The objective and policy seek to retain and protect notable trees from inappropriate subdivision, use and development. **Assessment** The Project will require the pruning of branches of Notable Tree 837 at 21 Kirk Street which overhang the Proposed Designation. This pruning will be needed to provide clear access for construction equipment required to construct the structure that will pass over SH16 at the eastern end of the Project. This work is assessed as being minor. The Project will require access along Potatau Street, under the drip line of Notable Tree 129. The Project does not require any works on that tree, which will not as a result be impacted by the Project. In my opinion the Project is consistent with the relevant provisions of D13.

22.4 Part 2 Resource Management Act 1991 Assessment

As required by Schedule 5, clause 5 (1)(g), the following is an assessment of the activity against sections 5, 6 and 7 of the RMA.

22.4.1 Section 5 – Purpose

Section 5 of the Resource Management Act 1991 (RMA) set out the purpose of the Act, which is:

> *"to promote sustainable management of natural and physical resources"*

Sustainable management is further defined in s5(2) as

> *"managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enable people and communities to provide for their social, economic, and cultural well-being and for their health and safety while-*
>
> - *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
> - *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
> - *avoiding, remedying, or mitigating any adverse effects of activities on the environment."*

The Project will enable social and economic wellbeing by significantly enhancing accessibility to and reliability of public transport services for northwest Auckland. The Project will improve access to employment, education and community services.

The Project supports uptake of public transport use amongst a car-dependent community and will help to preserve the capacity of the transport network and urban environment for future generations.

The potential adverse effects of the Project will be appropriately avoided, or mitigated as set out in the proposed conditions of consents and Proposed Designations.

I consider that the Project is consistent with the purpose of Section 5 of the RMA.

22.4.2 Section 6 – Matters of National Importance

Table 22-2 summarises the assessment of the Project against matters of national importance.

Table 22-2: Summary of assessment against matters of national importance

Matter of national importance	Assessment
The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:	Adverse effects on natural character values identified have been considered through the alternatives assessment process. The Project traverses a predominantly urban environment, adjacent to and within the setting of existing transport infrastructure. Two new bridge crossings are proposed over two tributaries of the Wai-o-Pareira/Henderson Creek which is within the CMA. These two bridge crossings are located adjacent to the existing SH16 bridges. Other bridges will cross over Totara Creek, Rarawaru Stream and Waitītiko / Meola Creek. The Project has minimised the footprint and works in the CMA and watercourses (including its margins). The two bridge structures in the CMA cannot be avoided. Both bridges are proposed adjacent to existing SH16 bridges. Structures in the CMA for transport reasons are common given the linear nature of such activities. Any potential effects on terrestrial and wetland ecology and coastal environment from the Project (including being regionally significant infrastructure) will be appropriately managed and mitigated through the proposed conditions. Stormwater runoff from new impervious areas will be treated before discharging to the environment, appropriately managing downstream effects on water quality. I consider that the Project represents an appropriate use or development of the natural environment for the reasons outlined above, and the significant benefits of the Project as stated in Part 3.
The protection of outstanding natural features and landscapes	There are three Outstanding Natural Features within the Project. The Project has sought to avoid impacts on Outstanding Natural Features where practicable through design choices such as bridging.

Matter of national importance	Assessment
from inappropriate subdivision, use, and development	A bridge structure is proposed at Meola Creek to avoid impacts on the watercourse, reduce potential impacts on riparian vegetation and the visible features of the ONF. The Project will not directly impact the basalt flows at St Lukes Road interchange as an elevated viaduct is proposed at this location. The Project will only impact the very edge of the Te Atatū Pleistocene Terraces leaving much of the feature intact. The modification along the edge is unavoidable and is already within and modified environment including public walking paths and drainage systems.
The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna	The Project will impact very limited areas of significant indigenous vegetation as set out in the Assessment of Ecological Effects The quality of these areas has not been assessed as High or Very High. The effects are assessed as moderate (at most). The loss of vegetation will be appropriately mitigated.
The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers	The Project will maintain public access to and along the CMA, unless it is necessary for health and safety, and operational reasons. Bridge structures maintain the ability of users to access the coastal marine area. Existing public accessways (for example, the Henderson Creek shared path) will be retained, with temporary disruptions as a result of realignment of access where necessary, or to manage health and safety of the public during construction.
The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga	Te Kawerau ā Maki, Ngāti Whātua Ōrākei and Te Ākitai Waiohua are iwi project partners and have been involved in the development of the Project from the outset through the Project Steering Committee and the Project's Iwi Working Group. NZTA also maintains a wider Central Iwi Integration Group (CIIG) and provides regular Project updates. Iwi groups have been invited to prepare Cultural Values Assessments (CVAs). CVAs were received from Te Ākitai Waiohua and Ngaati Te Ata Waiohua. Ngāti Whātua Ōrākei did not believe CVA was required for the Project and prefer to continue to develop relationships and a common understanding with NZTA and the Project team. Te Kawerau ā Maki provided a letter in 2023 setting out their expectations for the Project. They also prepared a letter of support. The ongoing partnership with iwi/hapū has provided an understanding and the incorporation of iwi/hapū values and expression throughout the Project. The proposed HNZPT general authorities also provide for the involvement of iwi groups should archaeological material be discovered during construction of the Project as discussed in Part 5.
The protection of historic heritage from inappropriate subdivision, use, and development	Historic built heritage has the potential to be impacted by the Project, as discussed in Section 5. The potential effects on built heritage will be appropriately mitigated through the proposed Heritage Construction Management Plan, protocols to manage construction vibration, and the proposed conditions requiring the consideration of retention of all or parts of identified built heritage at the detailed design phase. The potential to disturb unrecorded sites during construction is managed by seeking a pre-cautionary HNZPT approval. An accidental protocol will also be established.
The protection of protected customary rights	NZTA acknowledges that the environment is a taonga that must be managed carefully and that Māori have a kaitiaki responsibility and obligation of care over their communities and environments.
The management of significant risks from natural hazards.	The Project will be designed to ensure that risks posed by natural hazards such as flooding are managed appropriately. This is secured by the proposed conditions on the designations relating to the achievement of flood hazard outcomes. Other natural hazard risks, such as land instability, have been considered through geotechnical investigations undertaken for the Project.

22.4.3 Section 7 – Other matters

Section 7 of the RMA sets out other matters that shall be given particular regard in relation to managing use, development, and protection of natural and physical resources. I consider the following matters to be relevant to the Project as summarised in Table 22-3.

Table 22-3: Summary of assessment against other matters

Other matter	Assessment
Kaitiakitanga	Te Kawerau a Maki, Ngāti Whātua Ōrākei and Te Ākitai Waiohua have been integral to the project and provided valuable input through the Project Steering Committee and Iwi Working Group which has met fortnightly. This engagement has helped to shape and inform the Project. Iwi were also invited to prepare CVAs for the Project which provides the Project team with an understanding of important cultural concepts and areas of interest applicable to further project stages.
The ethic of stewardship	Beyond Kaitiakitanga, the Project represents a duty of care and responsibility in the delivery of transport infrastructure that will serve the broadest range of the community

Other matter	Assessment
	through improving access to employment, education and recreation from and to one of the fastest growing sub regions of Auckland.
The efficient use and development of natural and physical resources	The Project will enhance the capacity of the existing transport corridor and contribute to a more efficient transport network as a physical resource.
Efficient end use of energy	N/A
The maintenance and enhancement of amenity values	The Project will improve connectivity to key destinations, including retail and recreational centres.
Intrinsic values of ecosystems	Where practicable, the Project team has endeavoured to minimise impacts on ecological features through development of the Indicative Design. Appropriate mitigation will be undertaken where ecosystem values will be compromised, in accordance with the proposed conditions.
Maintenance and enhancement of the quality of the environment	The quality of the environment will be maintained through proposed landscape planting, ecological mitigation and other measures to manage construction phase effects such as the implementation of ESC measures. The Project will enhance the built environment through the provision of a valuable public transport facility.
Any finite characteristics of natural and physical resources	N/A
The protection of the habitat of trout and salmon	N/A
The effects of climate change	The Project responds to the potential effects of climate change by providing a resilient, low-emission transport option for Aucklanders. The effects of climate change have been considered through the use of adjusted predicted rainfall data in the assessment of flooding and stormwater effects. The Project will be designed with reference to updated rainfall model scenarios considering the latest climate change predictions.
The benefits to be derived from the use and development of renewable energy	N/A

22.5 Hauraki Gulf Marine Park Act 2000

The Hauraki Gulf Marine Park Act 2000 provides special recognition for the Hauraki Gulf/Tīkapa Moana and establishes an integrated management framework for its islands, catchments, and coastal marine area. Sections 7 and 8 of the Act are of relevance to this proposal and must be treated as if they were a National Policy Statement and a New Zealand Coastal Policy Statement under the RMA. Section 13 of the HGMPA requires that all persons exercising powers under the RMA have particular regard to these provisions when considering resource consent applications affecting the Gulf, its islands, or catchments.

Overall, I consider that the Project demonstrates alignment with the intentions of the HGMPA, and has been designed to avoid, remedy or mitigate adverse effects on the ecological health and life-supporting capacity of the Gulf.

22.6 Other statutory and non-statutory documents

The Government Policy Statement (GPS) on land transport 2024-34, outlines strategic priorities for the next decade, including major public transport Projects like Northwest Rapid Transit, to enhance transport options, reduce congestion and emissions. The GPS emphasises the Government's commitment to the Project and sets clear expectations in the GPS for the consideration of alternative funding sources to deliver the investment and delivery models to increase the speed of delivery. I have summarised the GPS above in Section 3.1.

22.6.1 National Land Transport Programme 2024 – 2027

The National Land Transport Programme 2024 – 2027 (NLTP) is a three-year programme of priority transport activities prepared by NZTA to give effect to the GPS priorities. It includes revenue from the

National Land Transport Fund (NLTF) on behalf of the Crown and funding from local councils (through rates). The NLTP 2024 – 2027 identifies the Project as a key focus for investment in public transport and has allocated $650 million of possible (but not committed) funding to the project planning phase and for the start of construction.

22.6.2 State Highway Investment Proposal 2024 – 2034

The State Highway Investment Proposal (SHIP) identifies a programme of work (including maintenance, operation, renewals and improvements) for the state highway network over the next three years to deliver on the Government's strategic objectives as set out in the GPS.

The NWRT project is identified in the SHIP programme as a major public transport project funded through the NLTF for the project development phase.

22.6.3 Auckland Rapid Transit Pathway

The Auckland Rapid Transit Pathway (ARTP) sets out the 30-year plan for progressing and developing Auckland's rapid transit network. The Project is allocated into Phase 1 of the ARTP as the most urgently needed within the RTN network due to the scale of existing corridor deficiencies, and the ARTP highlights that delivery could be staged over time and extend into Phase 2.

22.6.4 The Auckland Plan 2050

The Auckland Plan 2050 sets the high-level strategic direction to 2050 to contribute to Auckland's social, economic, environmental and cultural wellbeing, and to address key challenges including high population growth. The Plan outlines six outcomes required to achieve an Auckland where people want to live, work and visit including Belonging and Participation, Māori Identity and Wellbeing, Homes and Places, Transport and Access, Environment and Cultural Heritage and Opportunity and Prosperity. Under each of the outcomes are key directions and focus areas which set out how the outcomes will be achieved.

It is important that projects directly respond to the key focus areas to make a meaningful contribution to the overall direction of the Auckland Plan. In my view, the Project is well aligned with the key transport and access outcome of the Auckland Plan and will deliver benefits for Focus Area 4 (make walking, cycling and public transport preferred choices for many more Aucklanders) by:

- Addressing a significant gap in the rapid transit network.
- Significantly improving travel reliability, travel times and customer experience.
- Delivering local improvements for bus passengers, pedestrians and cyclists to access proposed busway stations.

22.6.5 Auckland Regional Land Transport Plan 2024-2034

The Auckland Regional Land Transport Plan 2024-2034 (RLTP) proposes a 10-year programme of prioritised transport projects and services to be put forward for national funding from the NLTP. The RLTP has been developed by Auckland Transport, Auckland Council, NZTA and KiwiRail; reflecting priorities at a local and central government level.

The Project addresses the majority of key problems identified in the Auckland RLTP and is strongly aligned with the objectives sought from investment including:

- better connect people, places, goods and services;
- improve the resilience and sustainability of the transport system;
- significantly reduce the greenhouse gas (GHG) emissions it generates; and
- to provide and accelerate better travel choices for Aucklanders.

22.7 Fast-track Approvals Act decisions

Section 85 of the FTAA sets out when a panel must decline an application. None of the matters that require a panel to decline an approval are relevant to the Project. It is noted that:

- The approvals are not for an ineligible activity (see Part 2); and
- Granting the approvals would not be inconsistent with obligations arising under existing relevant Treaty settlements (see Part 2) and there are no customary rights applicable to the Project.

Section 85 also sets out that a panel may decline an approval if the adverse impacts of an approval are out of proportion to the Project's regional or national benefits, even after taking into account conditions. It is my view that, taking into account the potential adverse impacts of the Project assessed in this AEE by Ms Hicks and the recommended conditions of consent and designations, there are no adverse impacts associated with the Project that cannot be appropriately avoided, remedied or mitigated.

In my opinion, the significant regional and national benefits of the Project (outlined in Part 3 of this Application) far outweigh any residual adverse effects on the environment.

23. Conclusion

The Project has significant social and economic benefits on a regional and national scale, as outlined in Part 3 of this Application.

The Project is consistent with the relevant national and regional planning documents we have identified above, and is aligned with Sections 5, 6 and 7 of the RMA.

The actual and potential adverse effects on the environment have been assessed, as summarised in this AEE. In our view, the proposed conditions provided in Appendix A and Appendix B appropriately address the identified effects, in the context of the immense benefits of the Project. We consider that the potential residual adverse effects after consideration of proposed conditions of designation and resource consents are minor and, overall, are significantly outweighed by the significant regional and national benefits of the Project.

Appendix A. Proposed designation conditions

Te Ara Hauāuru Northwest Rapid Transit Project – Proposed Designation Conditions

Purpose

The purpose of the designation is to construct, operate, maintain, and improve a rapid transit corridor, and ancillary structures, works and activities.

Referencing

[For reference only – conditions will be split into 12 separate sets before being included in the AUP].

Notice of Requirement(s) overview

Reference	Notice of Requirement(s)
NoR 1	Busway between Brigham Creek Rarawaru station and Westgate Te Waiarohia station
NoR 2	Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station
NoR 3	Busway between Royal Road Mānutewhau station and Te Whau River
NoR 4	Brigham Creek Rarawaru station and Park and Ride
NoR 5	Westgate Te Waiarohia station
NoR 6	Royal Road Mānutewhau station
NoR 7	Lincoln Road Wai o Pareira station
NoR 8	Te Atatū Ōrangihina station
NoR 9	Busway between Waterview Interchange and Western Springs
NoR 10	Busway between Western Springs and Ian McKinnon Drive
NoR 11	Point Chevalier station
NoR 12	Western Springs station

Definitions

The table below defines the acronyms and terms used in the designation conditions. Defined terms are capitalised.

Acronyms and defined terms

Acronym/term	Definition/meaning
AUP	Auckland Unitary Plan
BPO	Means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to: (a) the nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects (b) the financial implications, and the effects on the environment, of that option when compared with other options (c) the current state of technical knowledge and the likelihood that the option can be successfully applied
CNVMP	Construction Noise and Vibration Management Plan
Completion of Construction	When construction of the Project (or part of the Project) is complete and it is available for use
CTMP	Construction Traffic Management Plan
Council	Auckland Council
Manager	The Manager – Resource Consents of Council, or authorised delegate
NoR	Notice of Requirement
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA
Particularly Vibration	(a) Former ASB building (AUP Scheduled Heritage Building 2798), 1210 Great North Road, Point Chevalier (Fee Simple, 1/1, Part Lot 16 Deposited Plan 2300)

Acronym/term	Definition/meaning
Sensitive building	(b) Ambassador Theatre (AUP Scheduled Heritage Building 1680), 1218-1220 Great North, Point Chevalier (Fee Simple, 1/1, Part Lot 2 Deposited Plan 21452 and Part Lot 1 Deposited Plan 9064)
Project	Te Ara Hauāuru Northwest Rapid Transit
Requiring Authority	NZ Transport Agency
RMA	Resource Management Act 1991
SQP	Suitably Qualified Person

Proposed conditions

Proposed conditions

NoR number	Condition number	Condition
ALL	1.	**Lapse** The designation shall lapse if not given effect to within 25 years from the date on which it is included in the AUP.
1, 2, 3, 9 and 10	2.	**Primary Designation *(Augier* condition*)*** This designation shall be considered as the primary (earlier) designation where it overlaps with designation *[insert relevant station designation number*].
ALL	3.	**Outline Plan(s) and Management Plans** (a) Outline Plan(s) may be submitted in parts or in stages to address particular activities (e.g. design or construction aspects), or to reflect the staged implementation of the Project. (b) Outline Plans shall include any management plan or plans that are relevant to the management of effects of those activities or stage of work, unless otherwise stated below, which may include: (i) Construction Noise and Vibration Management Plan (ii) Built Heritage Construction Management Plan [NoR 9 and 11 only] (iii) Tree Protection Methodology [NoR 9 and 10 only]
ALL	4.	**Conditions following Completion of Construction** Following Completion of Construction, all conditions except Condition 37 cease to have an effect and do not apply to any subsequent work associated with on-going operation and maintenance of the Project.
PRE CONSTRUCTION CONDITIONS		
1, 2, 4 and 5	5.	**Cultural Values *(Augier* condition*)*** The Requiring Authority shall engage with Te Kawerau ā Maki and Ngāti Whātua o Kaipara during detailed design to identify how their cultural values will be reflected in the Project.
3, 6, 7 and 8	6.	**Cultural Values *(Augier* condition*)*** The Requiring Authority shall engage with Te Kawerau ā Maki during detailed design to identify how their cultural values will be reflected in the Project.
9, 10, 11 and 12	7.	**Cultural Values *(Augier* condition*)*** The Requiring Authority shall engage with Ngāti Whātua Ōrākei, Te Ākitai Waiohua and Ngaati Te Ata Waiohua during detailed design to identify how their cultural values will be reflected in the Project.
ALL	8.	**Flood Hazard** For the purposes of Condition 9 (a) Danger Rating means low (green), moderate (yellow) or high (red) danger rating determined in accordance with Schedule A. (b) Building/s means any lawfully established residential, commercial or community building, which exists at the time the Outline Plan is submitted, and excludes sheds, garages and other ancillary buildings.

NoR number	Condition number	Condition
		(c) Maximum Probable Development is the maximum impervious area permitted in the current zone/s in the AUP or, 70% impervious area if the land is zoned Future Urban in the AUP. (d) Pre-Project Development means the Maximum Probable Development at the time the Outline Plan is submitted. (e) Project Development means the Pre-Project Development and the Project.
ALL	9.	(a) The Project shall be designed so that it does not cause the following beyond the Designation: (i) An increase in Danger Rating; and (ii) Either: (A) A more than 50mm increase in flood level on land parcels with Building(s) and a Low Danger Rating; or (B) A more than 100mm increase in flood level on: i. land parcels with no Building(s) present. ii. land parcels with Building(s) and a Moderate or High Danger Rating. (b) Compliance with (a) shall be demonstrated through flood modelling: (i) To show the difference in the 1% Annual Exceedance Probability (AEP) flood levels for Pre-Project Development and Project Development; (ii) Using 332mm for the 24 hour rainfall depth that includes a 3.8 degree Celsius increase in temperature for climate change; and (iii) Undertaken by a SQP. (c) The Requiring Authority does not need to comply with (a) if the relevant landowner agrees to an alternative approach. (d) In the Outline Plan, the Requiring Authority shall: (i) demonstrate how (a) will be complied with by reference to flood modelling undertaken in accordance with (b); or (ii) provide confirmation of any written agreement secured to reflect landowner agreement pursuant to (c) above.
9	10.	**Supermarket Access – 1136 Great North Road, Point Chevalier** For the purposes of Condition 11 and Condition 12: (a) Supermarket means the supermarket located at 1136 Great North Road, Point Chevalier, being Lot 1-2 Deposited Plan 390127 and Lot 4 Deposited Plan 14537 and Lot 3 Deposited Plan 99933. (b) Supermarket loading zone means the area shown on Schedule B. (c) Delivery Vehicle(s) means a 23m HPMV B-train and a 19.5m HPMV semi-trailer (d) Manoeuvrability means compliance with RTS-18 New Zealand on-road tracking curves for heavy motor vehicles with a 12.5m radius of turn.
9	11.	(a) The Requiring Authority shall design the Project so that: i. there is a permanent vehicle access point for Delivery Vehicles from Parr Road North to the Supermarket loading zone that complies with the Auckland Transport –Transport Design Manual (TDM) standard engineering details for a commercial vehicle crossing as at the time of designation. ii. manoeuvrability for Delivery Vehicles is achieved from the permanent vehicle access point on Parr Road North to the Supermarket loading zone.
9	12.	(a) The Requiring Authority shall consult with the operator of the Supermarket when preparing the relevant CTMP required by Condition 16. (b) During Project construction, the Requiring Authority shall:

NoR number	Condition number	Condition
		(i) As far as practicable, maintain vehicle access and manoeuvrability for Delivery Vehicles from Parr Road North to the Supermarket loading zone between 3am-10pm, 7 days a week. (ii) Where it is not practicable to comply with (i) above: (A) minimise the duration of disruption to Delivery Vehicles. (B) provide the operator of the Supermarket with at least 3 weeks' notice in writing, except in the case of an unforeseen emergency.
2	13.	**Supermarket Access – Woolworths Westgate Shopping Centre** For the purposes of Condition 14 and Condition 15: (a) Supermarket means the supermarket located at Westgate Shopping Centre, Westgate and Fernhill Drive, being Section 2 Survey Office Plan 561132. (b) Supermarket loading zone means the area shown on Schedule [TBC]. (c) Delivery Vehicle(s) means [TBC]. (d) Manoeuvrability means compliance with RTS-18 New Zealand on-road tracking curves for heavy motor vehicles with a 12.5m radius of turn.
2	14.	(a) The Requiring Authority shall consult with the owner of the Supermarket when designing the Project in relation to a permanent vehicle access point for Delivery Vehicles from Maki Street to the Supermarket loading zone.
2	15.	(a) The Requiring Authority shall consult with the operator of the Supermarket when preparing the relevant CTMP required by Condition 16. (b) During Project construction, the Requiring Authority shall: i. As far as practicable, maintain vehicle access and manoeuvrability for Delivery Vehicles from Maki Street to the Supermarket loading zone between [TBC] ii. Where it is not practicable to comply with (i) above: (A) minimise the duration of disruption to Delivery Vehicles. (B) provide the operator of the Supermarket with at least 3 weeks' notice in writing, except in the case of an unforeseen emergency.
CONSTRUCTION CONDITIONS		
ALL	16.	**Construction Traffic Management Plan (CTMP)** (a) The CTMP shall be prepared prior to the start of construction works and shall be provided to the Manager for information. The objective of the CTMP is to appropriately manage any adverse traffic safety and efficiency impacts on other road users caused by the Project. (b) To achieve this objective, the CTMP shall include: (i) Methods to manage the effects of temporary traffic management activities on the network; (ii) Measures to manage 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 to manage vehicular and pedestrian traffic congestion near schools or to manage traffic congestion. (iv) Site access routes 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 for the safe management and maintenance of traffic flows, including public transport, pedestrians and cyclists; (vi) Measures to maintain the function of the existing Shared User Path to a reasonable level of service, to the extent that is reasonably practicable, and where this is not practicable, provide safe detour routes that provide a reasonable level of service

NoR number	Condition number	Condition
		(vii) Measures to maintain access to and from properties and/or private roads where practicable, or to provide alternative arrangements when it will not be, including details of how access is managed for loading and unloading of goods, rubbish collection, and mail/courier deliveries; (viii) 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; (ix) Methods that will be undertaken to communicate traffic management measures to affected road users; (x) 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 minimum network performance parameters identified in Condition 16(b)(x) above being exceeded. (xii) Auditing, monitoring and reporting relating to traffic management activities shall be undertaken in accordance with the requirements of the Road Controlling Authority.
ALL	17.	**Construction Noise** (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 Table 1 as far as practicable. **Table 1: Construction noise standards** (b) Where compliance with the noise standards set out in Table 1 is not practicable, the methodology in Condition 20 shall apply.
ALL	18.	**Construction Vibration Criteria** (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

Time of week	Time period	dB L_{Aeq}	dB L_{AFmax}
Activities sensitive to noise			
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sundays and public holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75
All other buildings occupied during the works			
All days	0730-1800	70	N/A
	1800-0730	75	N/A

<table>
<tr><th>NoR number</th><th>Condition number</th><th>Condition</th></tr>
<tr><td></td><td></td><td>comply with the Category A vibration standards set out in Table 2 as far as practicable and shall comply with the Category B day time criteria.

<table>
<tr><th>Receiver</th><th>Location</th><th>Details</th><th>Category A</th><th>Category B</th></tr>
<tr><td rowspan="2">Occupied sensitive use buildings *</td><td rowspan="2">Inside the building</td><td>2000-0630</td><td>0.3mm/s ppv</td><td>1mm/s ppv</td></tr>
<tr><td>0630-2000</td><td>1mm/s ppv</td><td>5mm/s ppv</td></tr>
<tr><td>Other occupied buildings</td><td>Inside the building</td><td>0630-2000</td><td>2mm/s ppv</td><td>5mm/s ppv</td></tr>
<tr><td>Any buildings identified as Particularly Vibration Sensitive</td><td>Inside the building</td><td>As per relevant use above</td><td>As per relevant use above</td><td>2.5 mm/s ppv</td></tr>
<tr><td rowspan="2">All other buildings</td><td rowspan="2">Building foundation</td><td>Vibration – transient</td><td rowspan="2">5mm/s ppv</td><td>BS 5228-2 Table B.2</td></tr>
<tr><td>Vibration - continuous</td><td>BS 5228-2 50% of Table B.2 values</td></tr>
</table>
* BS 5228-2:2009 ‘Code of practice for noise and vibration control on construction and open sites – part 2: Vibration’

(b) Where compliance with the vibration standards set out in Table 2 is not practicable, the methodology in Condition 20 shall apply.</td></tr>
<tr><td>All</td><td>19.</td><td>Construction Noise and Vibration Management Plan

(a) The Requiring Authority shall engage a SQP to prepare CNVMP prior to the start of construction.

(b) The objective of the CNVMP is to identify:
(i) How Conditions 17 and 18 will be achieved; and
(ii) The Best Practicable Option for managing construction noise and vibration effects where compliance with Conditions 17 and 18 cannot practicably be achieved.

(c) The CNVMP shall be prepared in accordance with Annex E2 of the New Zealand Standard NZS6803:1999 ‘Acoustics – Construction Noise’ and shall, as a minimum, address:
(i) description of the works and anticipated equipment/processes;
(ii) hours of operation, including times and days when construction activities would occur;
(iii) the construction noise and vibration criteria identified in Conditions 17 and 18;
(iv) identification of receivers where noise and vibration criteria apply;
(v) a hierarchy of management and mitigation options
(vi) methods and frequency for monitoring and reporting on construction noise and vibration;
(vii) procedures for communication and engagement with nearby residents and stakeholders, including notification of proposed construction activities, the period of construction activities, and management of noise and vibration complaints.
(viii) contact details of a project liaison person;
(ix) procedures for the regular training of the operators of construction equipment to minimise noise and vibration as well as expected construction site behaviours for all workers;
(x) procedures and requirements for the preparation of a Schedule to the CNVMP in accordance with Condition 20;</td></tr>
</table>

NoR number	Condition number	Condition
		(xi) 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; (xii) identify all buildings considered Particularly Vibration Sensitive. If the Ambassador Theatre is able to be retained in part or intact, then it must be considered as Particularly Vibration Sensitive as set out in Condition 18 Table 2 above; (xiii) methodology and programme of desktop and field audits and inspections to be undertaken so that that the CNVMP, Schedules and the best practicable option for management of effects are being implemented; and (xiv) requirements for review and update of the CNVMP.
All	20.	**Schedule to a CNVMP** (a) A Schedule to the CNVMP (Schedule) shall be prepared by a SQP prior to the start of construction for an activity to which it relates, in consultation with the owners and occupiers of sites subject to the Schedule, when: (i) construction noise is either predicted or measured to exceed the noise standards in Condition 17; or (ii) construction vibration is either predicted or measured to exceed the Category A standard at the receivers in Condition 18. (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. (c) To achieve the objective, the Schedule shall include details such as: (i) Construction activity location, start and finish times; (ii) the nearest neighbours to the construction activity; (iii) the predicted noise and/or vibration for all receivers where the levels are predicted or measured to exceed the applicable standards in Conditions 17 and 18 and the predicted duration of the exceedance; (iv) for works proposed between 2000h and 0630h, the reasons why the proposed works must be undertaken during these hours and why they cannot be practicably undertaken during the daytime; (v) the proposed mitigation options that have been selected, and any mitigation options that have been discounted as being impracticable and the reasons why; (vi) a summary of the consultation undertaken with owners and occupiers of sites subject to the Schedule, and how consultation has and has not been taken into account; and (vii) location, times and types of monitoring. (d) The Schedule shall be submitted to the Manager for information at least five working days (except in unforeseen circumstances) in advance of the start of construction that are covered by the scope of the Schedule. (e) Where material changes are made to a Schedule required by this condition, the Requiring Authority shall consult the owners and/or occupiers of sites subject to the Schedule prior to submitting the amended Schedule to the Manager for information in accordance with (d) above.
9 and 11	21.	**Built Heritage - Commercial Building, Ambassador Theatre and Fisheries Building (Point Chevalier)** (a) To the extent practicable, the Requiring Authority shall retain the original building footprints, located at and shown in Schedule C; (i) 1224-1228 Great North Road (Commercial Building)

NoR number	Condition number	Condition
		(ii) 1218-1220 Great North Road (Ambassador Theatre) AUP Scheduled Heritage Building 1680, and (iii) 1212-1216 Great North Road (Fisheries Building). (b) If the retention of the original building footprints is not practicable; the Requiring Authority shall undertake building surveys by a SQP to determine whether it is reasonably practicable to retain: (i) part of the buildings including adaptive re-use in the project design; and (ii) AUP scheduled internal features of the Ambassador Theatre. (c) If the retention of the buildings is not practicable, the Requiring Authority shall: (i) Undertake archival documentation and recording of the Ambassador Theatre (ii) Install interpretive material at the Point Chevalier Station that documents the heritage values of Point Chevalier town centre. (d) The Outline Plan shall set out how the hierarchy of measures in (a) to (c) have been applied.
9	22.	**Built Heritage - Former Chamberlain Park Clubhouse** (a) To the extent practicable, the Requiring Authority shall retain the former Chamberlain Park Clubhouse located at 990 Great North Road, Western Springs and shown in Schedule D. (b) If the retention of the building is not practicable, the Requiring Authority shall: (i) Undertake archival documentation and recording of the building (ii) Install interpretive material at the Western Springs Station that documents the heritage values of the original Chamberlain Park Golf Course clubhouse and surrounds. (c) The Outline Plan shall set out how the hierarchy of measures in (a) and (b) have been applied.
9 and 11	23.	**Built Heritage Construction Management Plan** (a) The Requiring Authority shall engage a SQP to prepare a Built Heritage Construction Management Plan prior to the start of construction. The objective of the Built Heritage Construction Management Plan is to identify methods to manage construction effects on the buildings listed in Condition 21 and 22 and adjacent Scheduled Heritage Building [AUP 2798] former ASB Building,1210 Great North Road, Point Chevalier. (b) The Built Heritage Construction Management Plan shall include: (i) Measures to protect retained built heritage buildings from damage during construction, such as barriers and protective screens. (ii) Demolition and deconstruction methods for any heritage buildings not being retained. (iii) Pre- and post- construction works building condition surveys in accordance with the Construction Noise and Vibration Management Plan required by Condition 19 above. (iv) Measures to monitor the buildings during construction works (v) Accidental damage protocols.

NoR number	Condition number	Condition
9	24.	**Waitītiko / Meola Creek, Western Springs - Outstanding Natural Feature** The Requiring Authority shall design and construct a bridge structure to cross the Waitītiko / Meola Creek, Western Springs within the Outstanding Natural Feature (AUP ID 95). This condition does not restrict piers within the Outstanding Natural Feature.
9	25.	**Northwest Lava Flow, Western Springs - Outstanding Natural Feature** (a) The Project shall be designed to minimise impacts on the exposed face of the Northwestern Lava Flow Outstanding Natural Feature (AUP ID 132) as far as practicable. (b) The Outline Plan(s) shall describe the measures that will be implemented to minimise any permanent impacts.
All	26.	**Landscape Planting** (a) The Requiring Authority shall, where practicable: (i) Retain existing mature, native vegetation (ii) Plant at stations and batter slopes (iii) Use eco-sourced native vegetation (iv) Integrate planting with any planting required by conditions of resource consents for the Project. (b) For planting under (a), the Requiring Authority shall: (c) Undertake planting within the first planting season following Completion of Construction; (i) undertake pest plant control for a five year period; and (ii) monitor planted areas and undertake replacement planting as necessary for a five year period or until 80% canopy cover is achieved (whichever is less). (d) The measures described in (a) shall be shown in the Outline Plan.
9	27.	**Tree Protection Methodology** (a) Prior to the start of construction, the Requiring Authority shall engage a SQP to prepare a tree protection methodology for the trees identified in Schedule E (existing at the time of construction). The tree protection methodology shall demonstrate how the design and location of the Project has avoided, remedied or mitigated effects on any tree listed in Schedule E. (b) The methodology shall include: (i) Procedures such as protective fencing, ground protection and physical protection of roots, trunks and branches; and (ii) Methods and procedures to be used when the trees are pruned and/or work is undertaken within the rootzone.
OPERATIONAL CONDITIONS		
2, 3, 6, 8, 9, 10, 12	28.	**Operational Traffic** **Low Noise Road Surface** The Requiring Authority shall implement an asphalt surface or similar low noise road surface throughout the Project (excluding any existing local roads with chip seal).
2, 3, 6, 8, 9, 10, 12		For the purposes of Conditions 29 to 37 (a) Building-Modification Mitigation – has the same meaning as in NZS 6806; (b) Noise Barrier is any barrier that has a minimum surface density of 15 kg/m^2 and is designed to have no gaps between the panels and the ground and between panels

NoR number	Condition number	Condition
		(c) Habitable Space – has the same meaning as in NZS 6806; (d) Mitigation – has the same meaning as in NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads; (e) NZS 6806 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads; (f) Protected Premises and Facilities (PPFs) – means only the premises and facilities identified in Schedule E "Identified PPFs".
2, 3, 6, 8, 9, 10, 12	29.	As part of the detailed design of the project, a SQP shall determine the BPO for mitigating noise effects on PPFs.
2, 3, 6, 8, 9, 10, 12	30.	(a) Prior to the start of construction works, a SQP shall identify those PPFs where, following implementation of the Noise Barriers: (i) The external traffic-noise level at the façade facing the Project is higher than 67 dB $L_{Aeq(24h)}$, and (ii) A noise level increase of 1 dB or more will occur due to the Project implementation; and (iii) where Building-Modification Mitigation might be required to achieve 40 dB $L_{Aeq(24h)}$ inside Habitable Spaces ('Category C Buildings') as far as reasonably practicable
2, 3, 6, 8, 9, 10, 12	31.	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 12 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.
2, 3, 6, 8, 9, 10, 12	32.	(a) For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition 30 above if: (i) the Requiring Authority's Suitably Qualified Person has visited the building and assessed the noise reduction performance of the building envelope; or (ii) 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 (iii) the building owner did not agree to entry within 12 months of the date of the Requiring Authority's letter sent in accordance with Condition 30 above (including where the owner did not respond within that period); or (iv) the building owner cannot, after reasonable enquiry, be found prior to Completion of Construction of the project. If any of (ii) to (iv) above apply to a Category C Building, the Requiring Authority is not required to offer to implement Building-Modification Mitigation to that building.
2, 3, 6, 8, 9, 10, 12	33.	(a) Subject to Condition 31 above, within six months of the assessment undertaken in accordance with Condition 30, the Requiring Authority shall write to the owner of each Category C Building advising: (i) if Building-Modification Mitigation is required to achieve 40 dB $L_{Aeq(24h)}$ inside habitable spaces; and (ii) the options available for Building-Modification Mitigation to the building, if required; and (iii) 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.
2, 3, 6, 8, 9, 10, 12	34.	Once Building-Modification Mitigation has been agreed, it shall be implemented in a reasonable and practical timeframe by arrangement with the owner.

NoR number	Condition number	Condition
2, 3, 6, 8, 9, 10, 12	35.	(a) Subject to Condition 31, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition 30 if: (i) the Requiring Authority has completed Building Modification Mitigation to the building; or (ii) an alternative agreement for mitigation is reached between the Requiring Authority and the building owner; or (iii) 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 31 (including where the owner did not respond within that period); or (iv) the building owner cannot, after reasonable enquiry, be found prior to Completion of Construction of the project.
2, 3, 6, 8, 9, 10, 12	36.	All noise barriers required as determined by the BPO assessment in accordance with Condition 29 shall be installed prior to the opening of the Project.
2, 3, 6, 8, 9, 10, 12	37.	The Noise Barriers that are part of the BPO shall be maintained so they retain their noise reduction performance as far as practicable.

Schedule A. Danger Rating Matrix and Flood Hazard Ratings

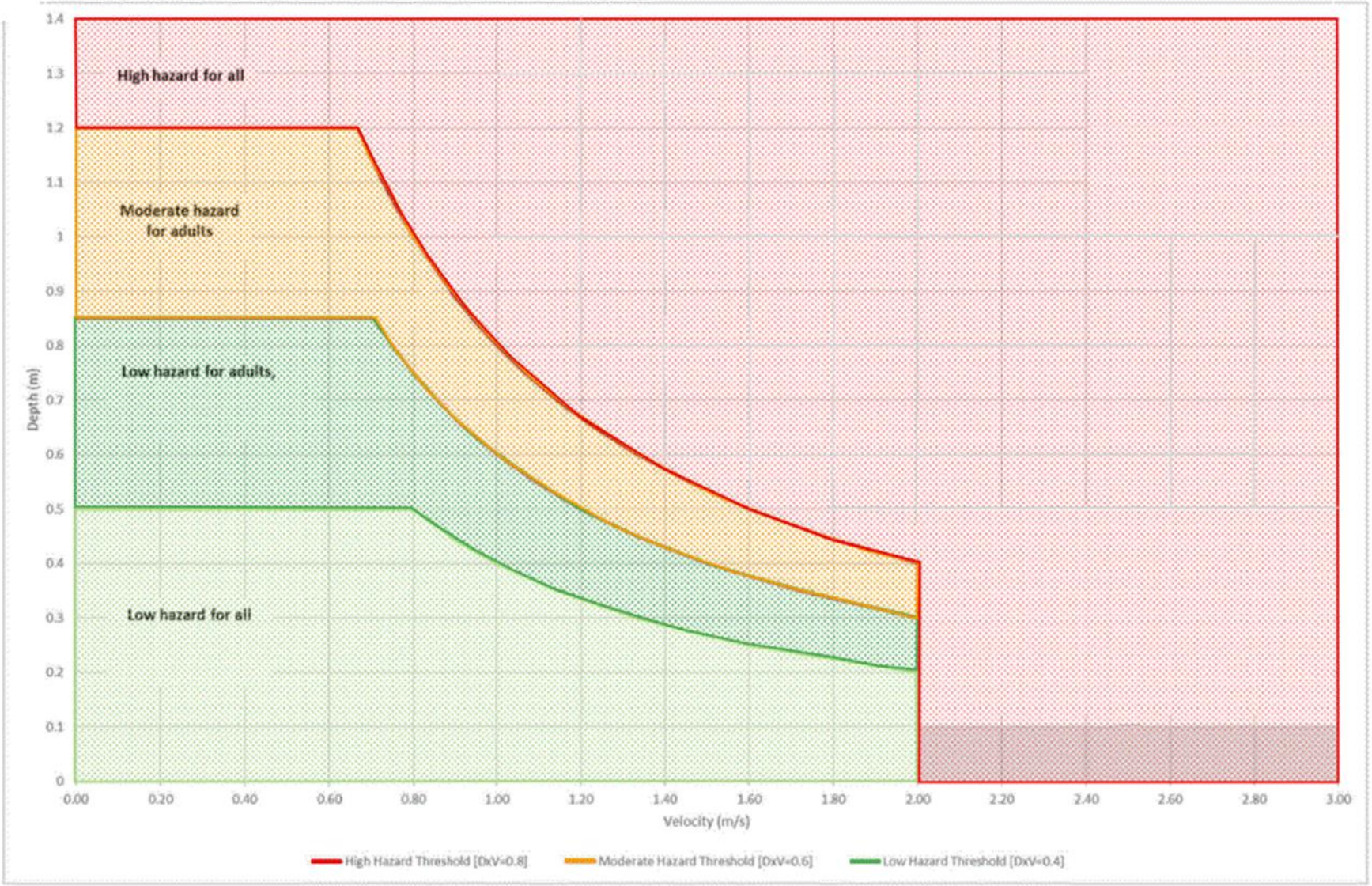
Danger Rating Matrix

Hazard				Hazard to People Outside				
The Danger Rating is determined based on the combination of the assessed Hazard Inside and Hazard Outside in accordance with this matrix.				Assess flood hazard along most likely evacuation route using the Flood Hazard Ratings Chart.				
	Conditions			An evacuation route is available and does not require wading	An evacuation route may be available but requires wading. Hazard is a function of depth and velocity of flooding along the evacuation route. (Refer to Flood Hazard Ratings Chart)			
		Hazard Rating		Very Low	Low hazard for all	Low hazard for adults	Moderate hazard	High hazard for all
			D & V Thresholds	n/a	(Refer to Flood Hazard Ratings Chart)	(Refer to Flood Hazard Ratings Chart)	(Refer to Flood Hazard Ratings Chart)	(Refer to Flood Hazard Ratings Chart)
Hazard to People Inside: Assess flood hazard inside the building based on depth over building flood level (assuming V = 0 m/s inside the building). Building floor levels are to be based on existing available information or desk top assessment methods.	Habitable floor remains dry	Very Low	Floodwaters are NOT touching the building footprint. Nil depth over habitable floor.					
			Floodwaters are touching the building footprint. Nil depth over habitable floor.					
	Habitable floor is wet.	Low hazard for all	Depth (D) over habitable floor: 0 ≤ D < 0.5m					
		Low hazard for able-bodied adults /	Depth (D) over habitable floor: 0.5 ≤ D < 0.85m					
		Moderate hazard	Depth (D) over habitable floor: 0.85 ≤ D < 1.2m					
		High hazard for all	Depth (D) over habitable floor: D ≥ 1.2m					

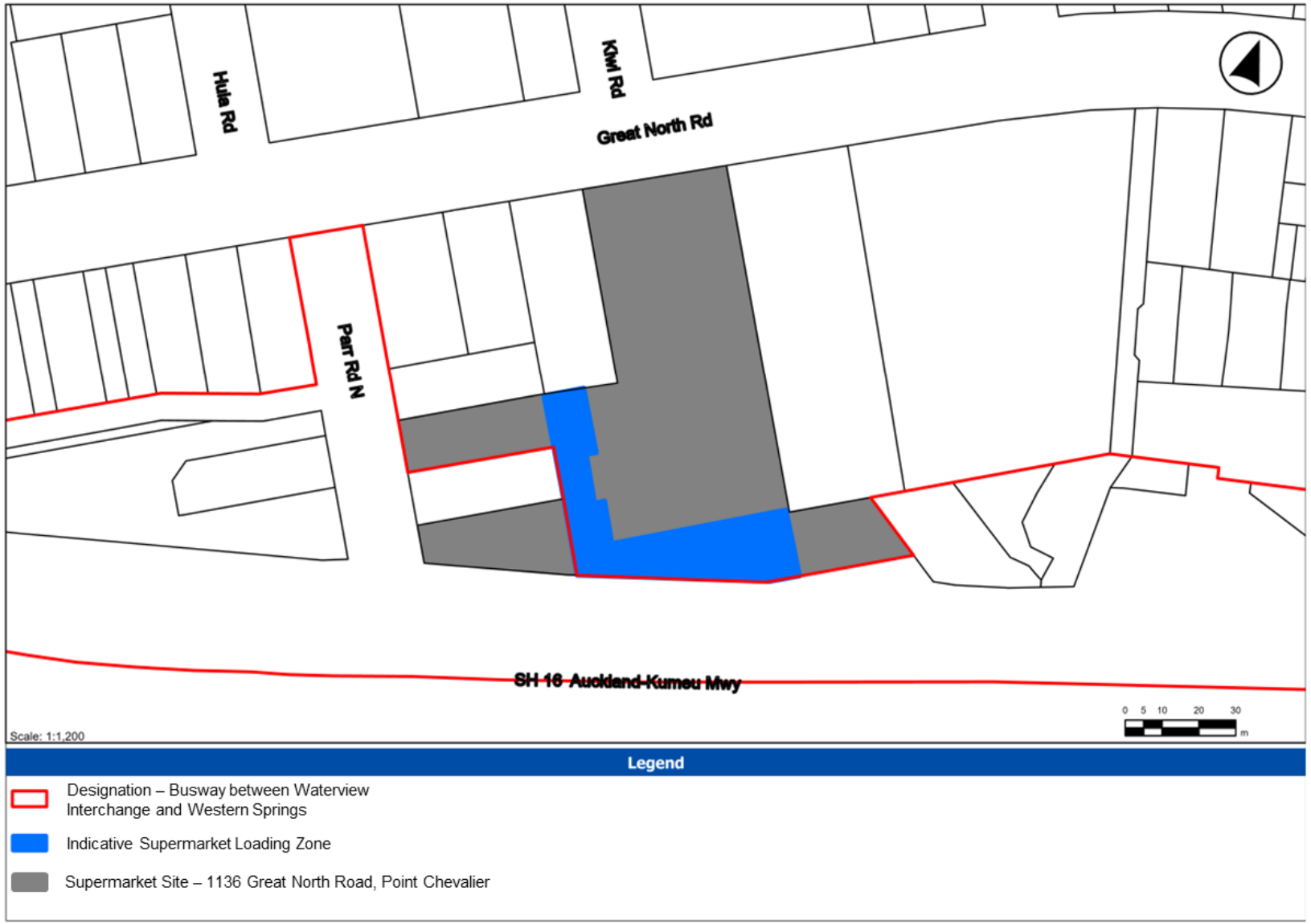
Intolerable Risk Threshold @ 1% AEP

DANGER RATING KEY
- HIGH DANGER
- MODERATE DANGER
- LOW DANGER

FLOOD HAZARD RATINGS



Schedule B. Supermarket Access – 1136 Great North Road, Point Chevalier

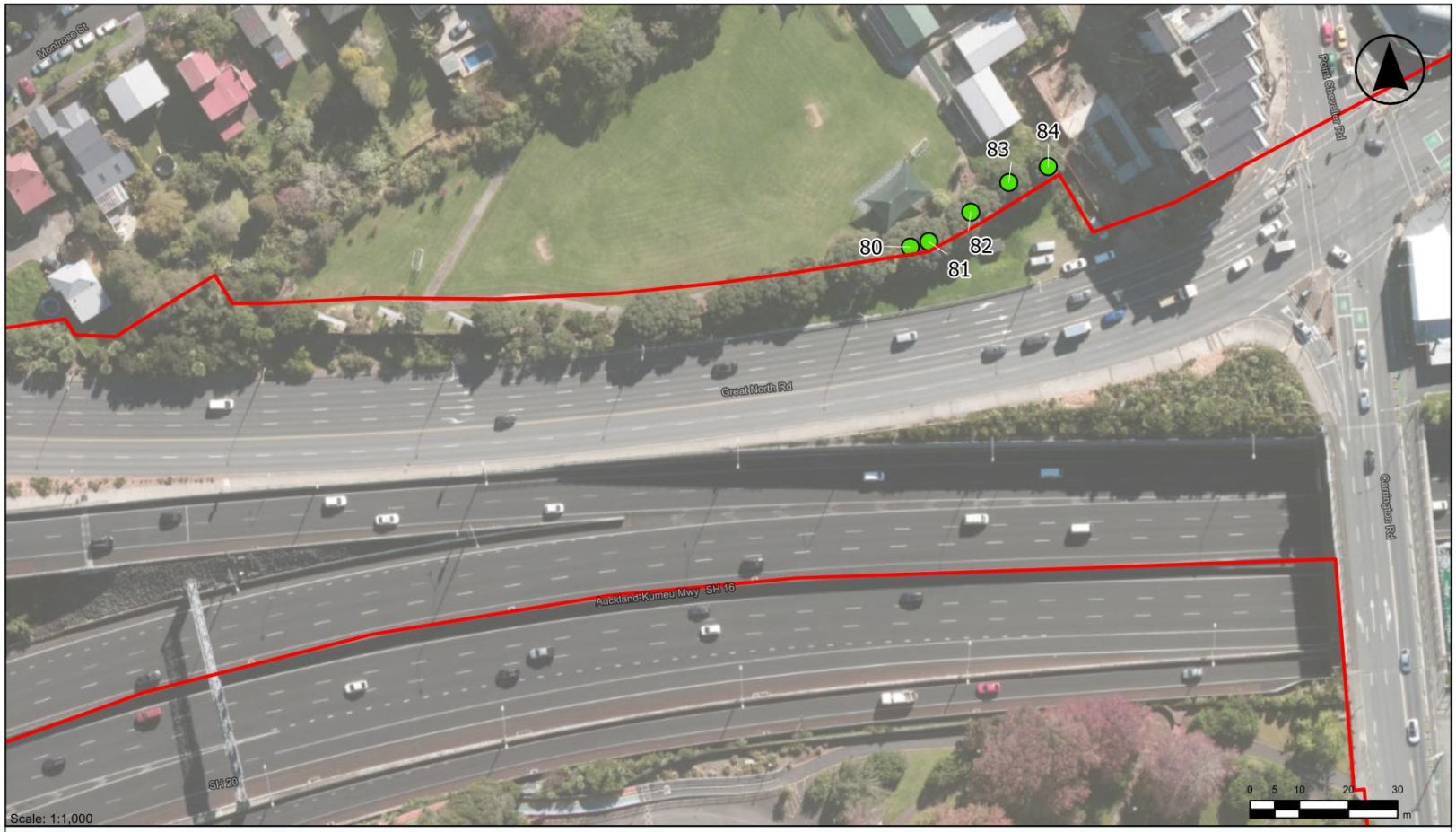


Schedule C. Original building footprints, Commercial Building, Ambassador Theatre and Fisheries Building – Point Chevalier – NoR 9 and 11


Legend
Designation
Original building footprints
1 Commercial building, 1224-1228 Great North Road
2 Ambassador Theatre, 1218-1220 Great North Road
3 Fisheries Building, 1212-1216 Great North Road
Great North Road
Parr Road North
Carrington Road
1
2
3

Schedule D. Former Chamberlain Clubhouse – NoR 9

Schedule E. Tree Schedule – NoR 9



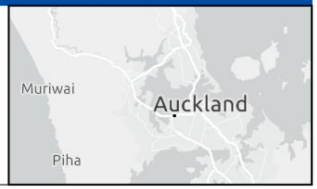
Legend

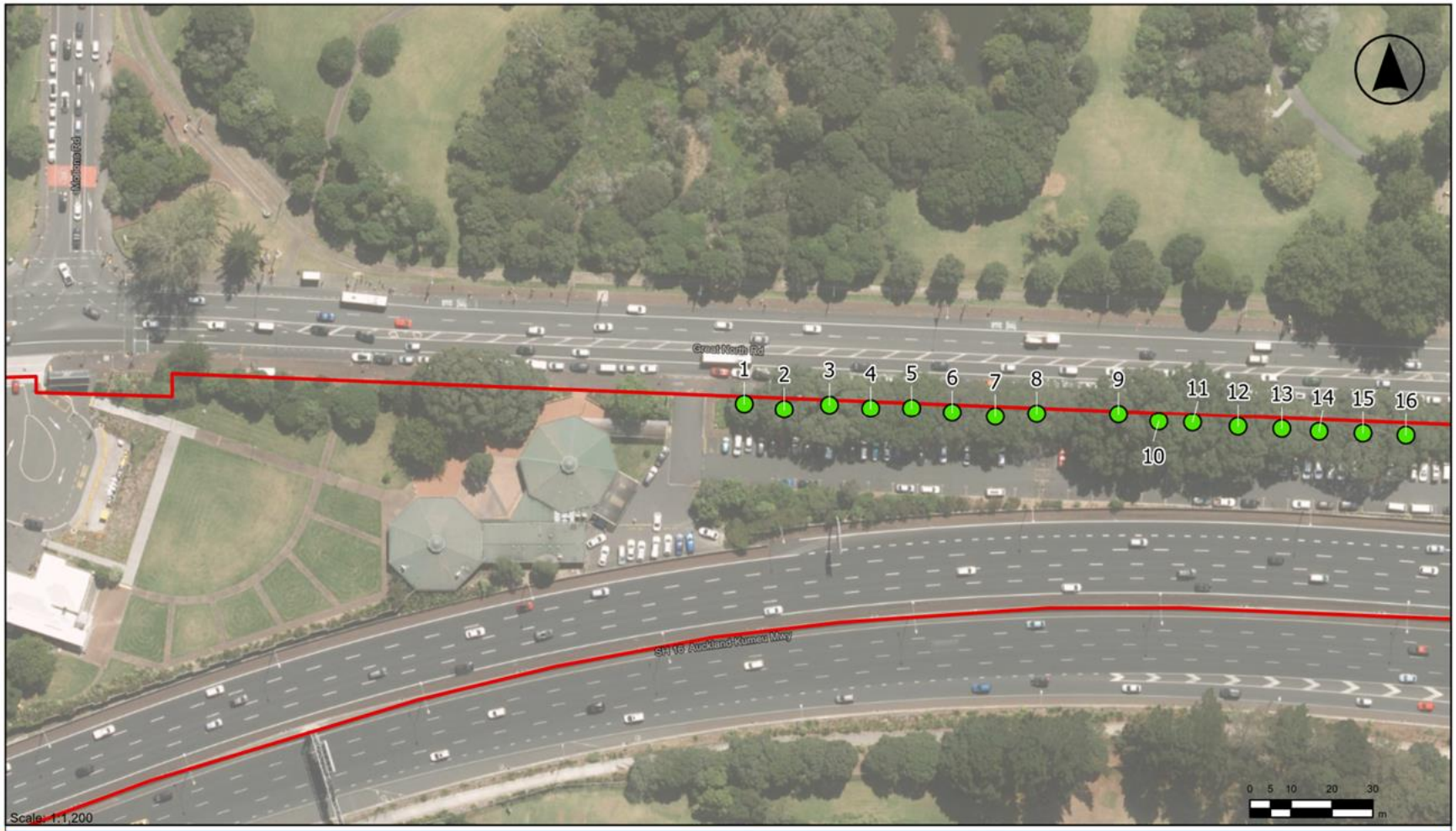
Northwest Rapid Transit

Designation - Busway between Waterview interchange and Western Springs

Tree locations

Trees





Legend

Northwest Rapid Transit

Designation - Busway between Waterview interchange and Western Springs

Tree locations

Trees

Legend

Northwest Rapid Transit

Designation - Busway between Waterview interchange and Western Springs

Tree locations

Trees

Legend

Northwest Rapid Transit

Designation - Busway between Waterview interchange and Western Springs

Tree locations

Trees

Schedule E. Tree Schedule – NoR 10

Legend

Northwest Rapid Transit

Designation - Busway between Western Springs and Ian McKinnon Drive

Tree locations

Trees

Schedule F. (Identified PPFs) – NoR 2

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau

Protected Premises and Facilities

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau

Protected Premises and Facilities

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau

Protected Premises and Facilities


Scale: 1:2,050
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau
Protected Premises and Facilities
Te Atatū Peninsula

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau

Protected Premises and Facilities

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau

Protected Premises and Facilities

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau

Protected Premises and Facilities

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau

Protected Premises and Facilities

Building Outline

Street Boundary

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau

Protected Premises and Facilities

Building Outline

Street Boundary

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and south of Royal Road Mānutewhau

Protected Premises and Facilities

Building Outline

Schedule F. (Identified PPFs) – NoR 3

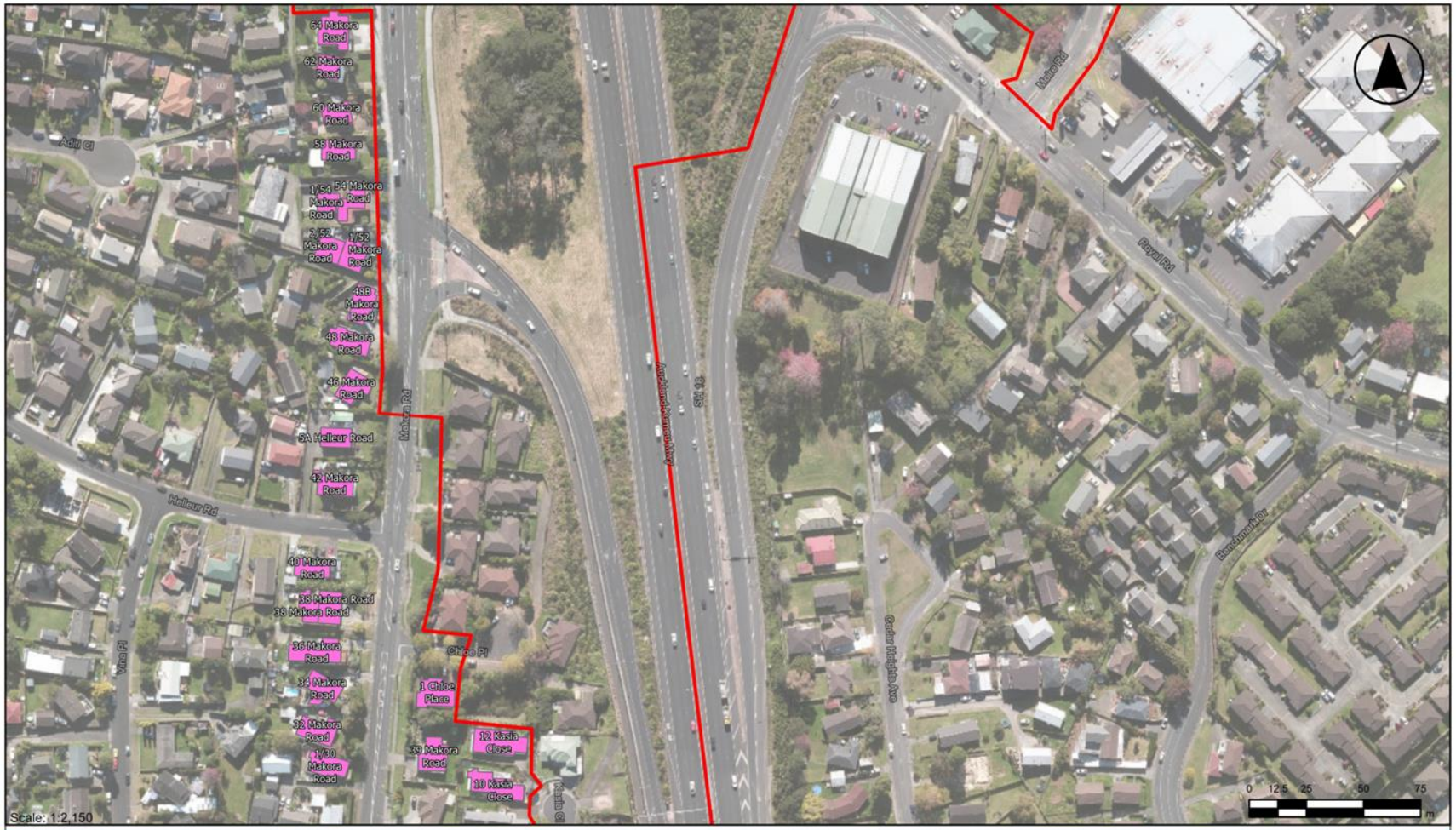
Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Protected Premises and Facilities

Building Outline



Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Protected Premises and Facilities

Building Outline

Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Protected Premises and Facilities

Building Outline


Scale: 1:2,150
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Te Atatū Peninsula


Scale: 1:2,150
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Protected Premises and Facilities
Building Outline
Te Atatū Peninsula
Auck


Scale: 1:2,150
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Protected Premises and Facilities
Building Outline
Te Atatū Peninsula


Scale: 1:4,000
0 20 40 80 120 m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Te Atatū Peninsula

Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

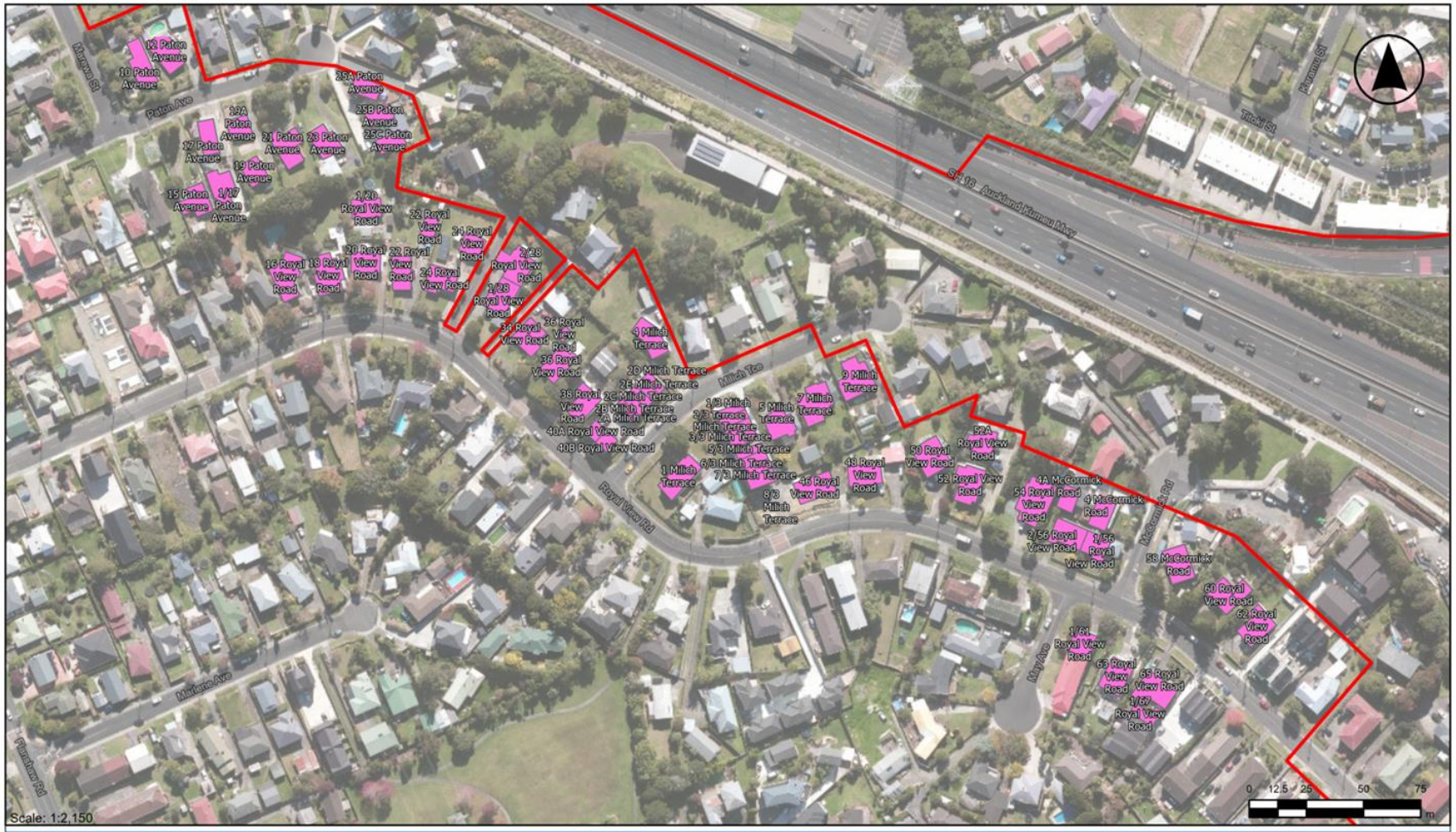
Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Protected Premises and Facilities

Building Outline


Scale: 1:2,150
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Protected Premises and Facilities
Building Outline
Te Atatū Peninsula
Auck


Scale: 1:2,150
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Protected Premises and Facilities
Building Outline

Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Protected Premises and Facilities

Building Outline

Schedule F. (Identified PPFs) – NoR 6

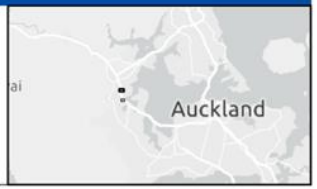
Legend

Northwest Rapid Transit

Designation - Royal Road Mānutewhau station

Protected Premises and Facilities

Building Outline



Schedule F. (Identified PPFs) – NoR 8

Schedule F. (Identified PPFs) – NoR 9

Legend

Northwest Rapid Transit

Designation - Busway between Waterview Interchange and Western Springs


Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Waterview Interchange and Western Springs
Protected Premises and Facilities
Building Outline
Muriwai
Auckland
Piha

Legend

Northwest Rapid Transit

Designation - Busway between Waterview Interchange and Western Springs

Protected Premises and Facilities

Building Outline

Legend

Northwest Rapid Transit

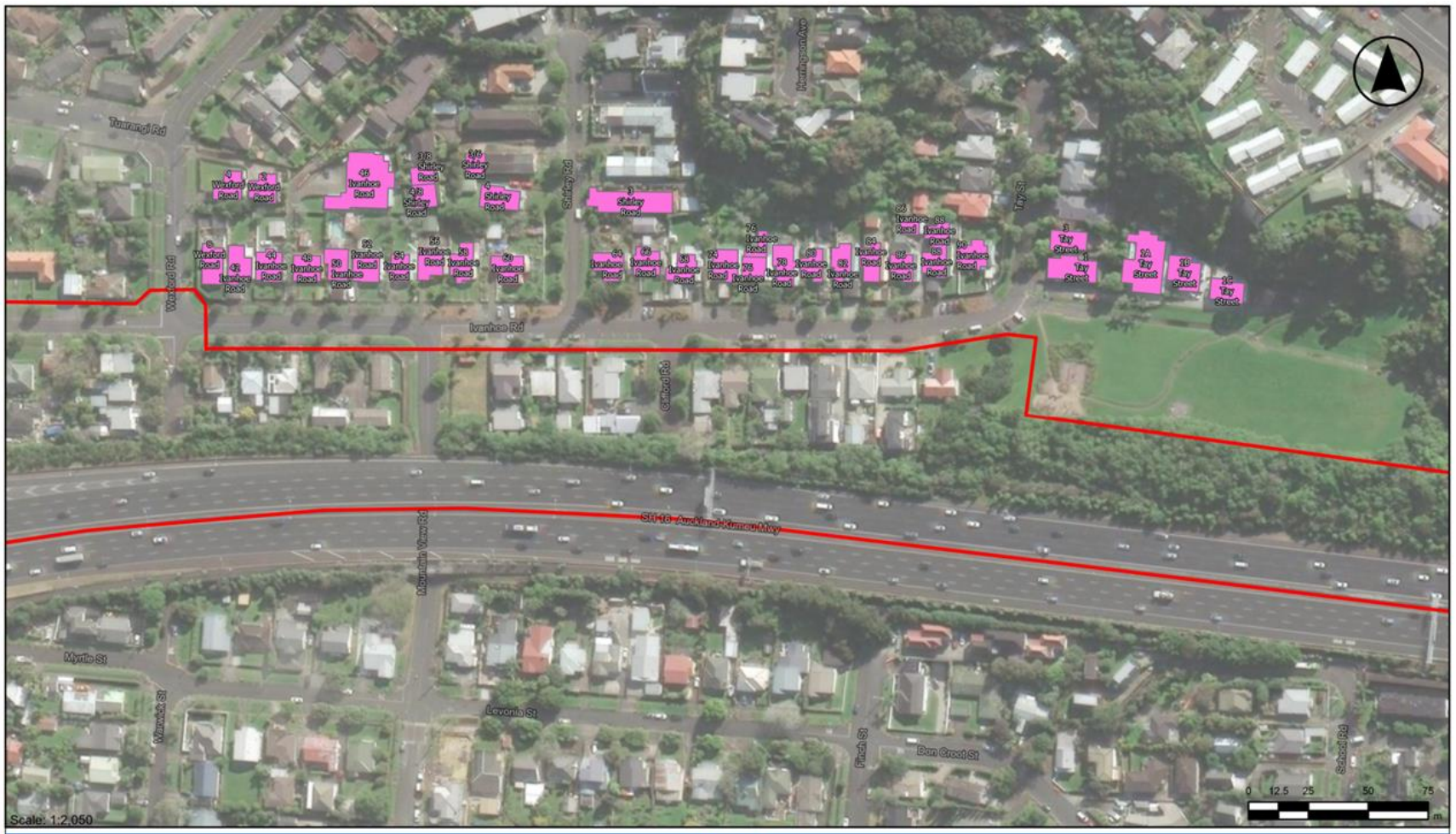
Designation - Busway between Waterview Interchange and Western Springs

Legend

Northwest Rapid Transit

Designation - Busway between Waterview Interchange and Western Springs

Schedule F. (Identified PPFs) – NoR 10



Legend

Northwest Rapid Transit

Designation - Busway between Western Springs and Ian McKinnon Drive

Protected Premises and Facilities

Building Outline

Legend

Northwest Rapid Transit

Designation - Busway between Western Springs and Ian McKinnon Drive

Protected Premises and Facilities

Building Outline


Scale: 1:2,050
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Western Springs and Ian McKinnon Drive
Protected Premises and Facilities
Building Outline
Te Atatū Peninsula


Scale: 1:2,050
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Western Springs and Ian McKinnon Drive
Protected Premises and Facilities
Building Outline
Te Atatū Peninsula


Scale: 1:2,050
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Western Springs and Ian McKinnon Drive
Protected Premises and Facilities
Building Outline
Te Atatū Peninsula


Scale: 1:2,050
0 12.5 25 50 75
m
Legend
Northwest Rapid Transit
Designation - Busway between Western Springs and Ian McKinnon Drive
Protected Premises and Facilities
Building Outline
Te Atatū Peninsula

Schedule F. (Identified PPFs) – NoR 12

Appendix B. Proposed resource consent conditions

Te Ara Hauāuru Northwest Rapid Transit – Proposed Regional Consent Conditions

All Resource Consents

These consents authorise the activities under sections 9(1), 9(2), 12, 13, 14 and 15 of the Resource Management Act 1991 (RMA) including Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES-CS) and Resource Management (National Environmental Standards for Freshwater Management) Regulations 2020 (NES-FW) as described in Table 1 for the purposes of the construction, operation, maintenance and improvement of the Project within the Site.

Definitions

The table below defines the acronyms and terms used in these conditions. Defined terms are capitalised in these conditions.

Acronyms and defined terms

Acronym/term	Definition/meaning
AEP	Annual Exceedance Probability
AUP	Auckland Unitary Plan
CCMP	Coastal Construction Management Plan
Consent Holder	NZ Transport Agency
Council	Auckland Council
CMA	Coastal Marine Area
Designation	The designation(s) for the Project, included in the Auckland Unitary Plan
ESC	Erosion and Sediment Control
Manager	The Manager – Resource Consents of Council, or authorised delegate
NES-CS	National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health
NES-FW	National Environmental Standards for Freshwater Management
Project	Te Ara Hauāuru Northwest Rapid Transit
RMA	Resource Management Act 1991
SEA	Significant Ecological Area
Site	The area defined by the boundary of the Designation(s) and extent of coastal permits as shown in Schedule A for the Project
SQP	Suitably Qualified Person
SQEP	Suitably Qualified and Experienced Practitioner for the purpose of the assessment of contaminated land
Watercourse(s)	A river or stream, excluding overland flow paths, as defined in the AUP

Conditions

Proposed conditions

<table>
<tr><th>Reference</th><th>Number</th><th>Condition</th></tr>
<tr><td colspan="3">GENERAL CONDITIONS</td></tr>
<tr><td>ALL</td><td>1.</td><td>Table 1 Resource Consent lapse and expiry
(a) The consents shall lapse as set out below from the date of commencement, unless they have been given effect, surrendered or been cancelled at an earlier date.
(b) The consents shall expire as set out below from the date of commencement.

<table>
<tr><th>Reference</th><th>Resource consents - Resource Management Act 1991</th><th>Proposed lapse date</th><th>Proposed Expiry date</th></tr>
<tr><td colspan="4">Land disturbance activities</td></tr>
<tr><td>LUCXXX</td><td>Land use (s.9) (1)) – Disturbance of potentially contaminated material (NES:CS)</td><td>25 years</td><td>Unlimited duration</td></tr>
<tr><td>LUCXXX</td><td>Land use (s.9(2)) – earthworks, vegetation alteration and removal</td><td>25 years</td><td>Unlimited duration</td></tr>
<tr><td colspan="4">Coastal Consents and Permits</td></tr>
<tr><td>CSTXXXX</td><td>Coastal marine area (s.12) – including construction and use of structures (including temporary occupation for construction) in the coastal marine area, occupation of the seabed and ancillary activities at Wai-o-Pareira / Henderson Creek and Huruhuru Creek such as disturbance of substrate and alteration or removal of mangroves.</td><td>25 years</td><td>35 years from the date of commencement</td></tr>
<tr><td colspan="4">Works in watercourses</td></tr>
<tr><td>LUSXXXX</td><td>Land use (s.13) – including new or upgraded structures in, on, under or over the bed of rivers, streams (including intermittent streams), works in watercourses, structures, stormwater infrastructure, erosion protection and temporary diversions.
Placement, use, alteration or reconstruction of a culvert in, on, or over the bed of a river (NES:FW)</td><td>25 years</td><td>35 years from date of commencement</td></tr>
<tr><td colspan="4">Diversion of Water</td></tr>
<tr><td>WATXXX</td><td>Water permit (s.14) – Diversion of groundwater and dewatering during construction, diversion of stormwater associated with new permanent impervious structures</td><td>25 years</td><td>35 years from the date of commencement</td></tr>
</table>
</td></tr>
<tr><td colspan="3">MANAGEMENT PLANS</td></tr>
<tr><td>ALL</td><td>2.</td><td>(a) Management plan shall:
(i) be prepared and implemented in accordance with the relevant management plan condition;
(ii) be prepared by a Suitably Qualified Person(s);
(iii) include sufficient detail relating to the management of effects associated with the relevant activities and/or stage of work to which it relates;
(b) The Consent Holder may prepare management plans in parts or in stages to address specific activities or to reflect the staged implementation of the Project.</td></tr>
</table>

Reference	Number	Condition
		(c) In preparing the Management Plans listed in Condition 3(b) the Consent Holder shall consult with: (i) Te Kawerau ā Maki for works between Brigham Creek Station and west of Te Whau River/ SH16 causeway; (ii) Ngāti Whātua o Kaipara for works between Brigham Creek Station and Westgate; (iii) Ngāti Whātua Ōrākei, Te Ākitai Waiohua and Ngaati Te Ata for works east from Te Whau / SH16 causeway to Ian McKinnon Drive.
ALL	3.	*Certification* (a) The management plans or other plans listed in (b)(i)-(iii) below shall be submitted to the Manager at least twenty (20) working days prior to the anticipated start of construction to be certified. The certification shall confirm that the management plan has been prepared in accordance with the condition(s) to which it relates. (b) The following plans shall be submitted for certification: (i) Erosion and Sediment Control Plan(s) (ii) Contaminated Soils Management Plan(s) (iii) Remedial Action Plan(s) (iv) Coastal Construction Management Plan (c) Any certified management plan may be updated or revised to reflect any changes in design, construction methods or management of effects: (i) Management plans may be amended to reflect minor changes in design, construction methods or management of effects. Re-certification is not required. (ii) If there is a material change proposed to a management plan that has been submitted to Council for certification then the Consent Holder is required to update a management plan by submitting the amendment in writing to Council for certification.
CONSTRUCTION CONDITIONS		
	4.	*Cultural Monitoring Plan* (*Augier* condition) (a) Prior to the start of construction, a Cultural Monitoring Plan (CMP) for each stage of work shall be prepared by a Suitably Qualified Person(s) identified in collaboration with: (i) Te Kawerau ā Maki for works between Brigham Creek Station and west of Te Whau River and SH16 Causeway; (ii) Ngāti Whātua o Kaipara for works between Brigham Creek Station and Westgate; (iii) Ngāti Whātua Ōrākei, Te Ākitai Waiohua and Ngaati Te Ata for works east from Te Whau /SH16 causeway to Ian McKinnon Drive. (b) The objective of the CMP is to specify cultural monitoring methods and activities to be undertaken during construction works. (c) To achieve the objective, the CMP shall specify: (i) requirements and protocols for cultural inductions for contractors and subcontractors; (ii) activities, sites and areas where cultural monitoring is required during particular construction works, and what that cultural monitoring will comprise; and (iii) the number of personnel who will undertake cultural monitoring, together with any geographic areas in which they will undertake it. (d) The CMP does not need to be submitted to Council for certification.

Reference	Number	Condition
LUCXXX CSTXXXX	5.	*Erosion and Sediment Control Plan (ESCP)* (a) Prior to the start of construction, the Consent Holder shall engage a SQP to prepare an ESCP. The purpose of the ESCP is to set out measures to be implemented during construction to minimise erosion and the discharge of sediment beyond the boundaries of the Site. (b) The ESCP(s) shall be prepared in accordance with Auckland Council's Guidance Document 005 – Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05) or updated version except as otherwise provided for in these conditions. (c) The ESCP shall include the following information: (i) Location of the work. (ii) Contour information. (iii) Details of construction methods. (iv) ESC measures for the works being undertaken within a particular construction area. (v) Catchment boundaries of works and devices installed (vi) Design criteria, typical and site-specific details of ESC. (vii) The identification of staff who will monitor compliance with the ESCP. (viii) Design details for managing the treatment, disposal and/or discharge of contaminants (e.g. concrete wash water). (ix) Chemical (or organic) treatment design and details including batch dosing. (x) Pumping procedures where dewatering is required. (xi) Earthworks programme and measures for the period between 1 May and 30 September. (xii) Methodology, timing, staging and sequencing of stream works including culvert extensions and replacements, and any erosion sediment control measures to be employed to mitigate the effects on waterbodies.
LUCXXX	6.	*Stabilisation* If areas are stripped and exposed to erosion, and works are not to occur within that area within a subsequent 14-day period, then stabilisation shall occur. This may include temporary stabilisation during staging of earthworks.
CONTAMINATED LAND		
LUCXXX, DISXXXX	7.	*Contaminated Land* (a) Prior to commencement of earthworks, the Consent Holder shall engage a SQEP to undertake a Detailed Site Investigation (DSI) within the Site for land identified in Schedule B as being potentially contaminated. The DSI, sampling and testing shall be overseen by a SQEP. (b) Where a DSI prepared in accordance with Condition 7(a) above confirms the likely presence of contaminated soils, a SQEP shall prepare a Contaminated Soils Management Plan (CSMP). The purpose of the CSMP is to identify measures to manage potential risks from disturbance of contaminated soils to the health of workers and the environment. (c) The CSMP shall contain procedures that are appropriate to mitigate the risks to the environment from the type, concentration and extent of contamination that was confirmed as likely being present during the DSI. (d) If the CSMP identifies contaminated soils requiring remediation within the Site, the Consent Holder must prepare a Remedial Action Plan. The purpose of the Remedial Action Plan is to identify a remedial strategy and controls to mitigate the risk posed by any contaminants identified in the CSMP. (e) The Remedial Action Plan shall include: (i) The remediation or management goal; (ii) Remediation methodology, including the rationale;

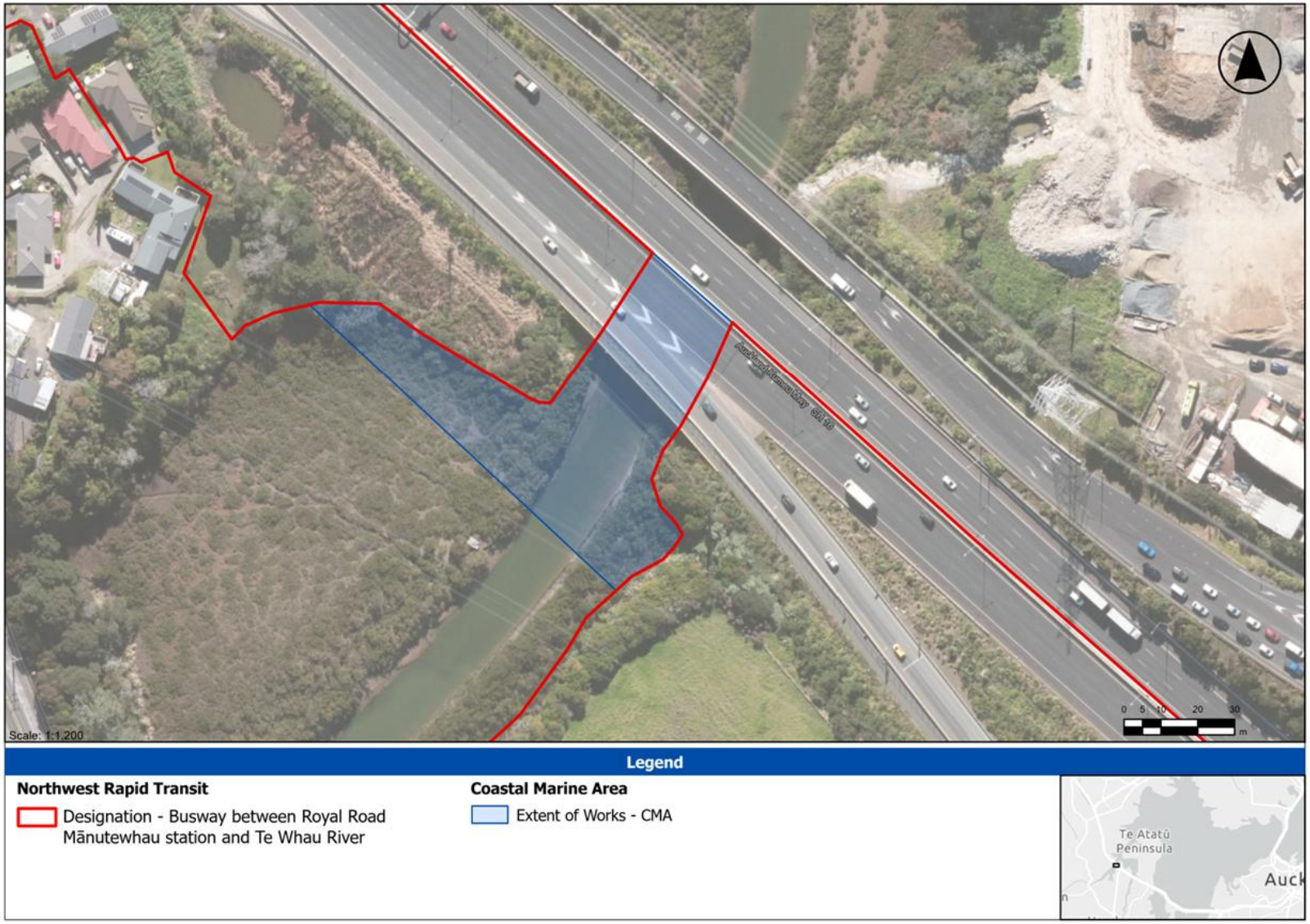
Reference	Number	Condition
		(iii) Contingency measures if the remediation methodology fails to reach the remediation or management goal; and (iv) Site validation sampling plan and reporting.
STORMWATER		
DISXXXX, LUCXXX, WATXXX	8. (*Augier* condition)	(a) The Consent Holder shall design the Project to direct all stormwater from impervious surfaces constructed for the Project to a stormwater treatment system before it is discharged to the environment. (b) The stormwater treatment system shall be designed to achieve a minimum of 75% total suspended solids removal.
DISXXXX	9.	The Consent Holder shall design the Project so that the discharge of stormwater from the Project does not increase stream velocity downstream of the stormwater outfall by more than 5% in a 95 percentile storm event.
DISXXXX, LUCXXX, WATXXXX	10.	Within three months of completion of construction works, the Consent Holder shall provide as-built plans of the stormwater management system for the Project to the Council.
WORKS IN WATERCOURSES		
LUSXXX	11.	*Tōtara Creek* The Consent Holder shall design the Project so that it does not permanently divert or reclaim the bed of the Tōtara Creek as shown in Schedule C.
DISXXXX, LUCXXX, WATXXX, LUSXXX	12.	*Scour Protection* (a) The Consent Holder shall design scour protection for the Project in accordance with Technical Report 2013/018 (Auckland Council 2013) for the following: (i) Stormwater outfalls using 176mm for the 10% AEP 24 hour rainfall depth that includes a 2.1 degree Celsius increase in temperature for climate change. (ii) Culvert inlets and outlets using 332mm for the 1% AEP 24 hour rainfall depth that includes a 3.8 degree Celsius increase in temperature for climate change.
DISXXXX, WATXXX, LUCXXX	13.	*Fish Passage* Fish passage shall be provided in all new culverts unless deemed by a SQP to be: (a) unnecessary because: (i) there is no upstream fish habitat; or (ii) there are other existing barriers to fish passage; or (b) impracticable. ***Advice note:*** *This condition does not apply to culvert extensions or any culvert that complies with the conditions in regulation 70 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.*
ECOLOGICAL MANAGEMENT		
LUCXXX	14.	*Mitigation Planting in SEAs* (a) If vegetation is removed in SEAs within the Designation as shown Schedule D, the Consent Holder shall: (i) Within SEA_T_2040, plant native vegetation where vegetation is removed for construction and there are no permanent works; (ii) Within SEA_T_5124:

Reference	Number	Condition
		(A) not permanently remove vegetation from more than half of the SEA_T_5124 within the Designation; and (B) remove pest plants and plant native vegetation in all areas of SEA_T_5124 within the Designation not impacted by permanent works. (C) Any mitigation planting undertaken in accordance Condition 14(a)(ii)(B) can also be counted as mitigation planting under Condition 15 for works in a watercourse. (iii) Within SEA_T_3262 and SEA_T_4938: (A) plant native vegetation where vegetation is removed for construction; and (B) For vegetation removed for the permanent works (i.e. bridging), plant an equivalent area within these SEAs, or elsewhere within the Proposed Designation as advised by a SQP. (b) For planting under (a) the Consent Holder shall: (i) engage a SQP to determine plant species and sourcing, density and sizing; (ii) undertake planting within the first planting season following completion of construction; (iii) undertake pest plant control for a five year period; and (iv) monitor planted areas and undertake replacement planting as necessary for a five year period or until 80% canopy cover is achieved (whichever is less).
LUCXXX	15.	*Works in Watercourses* (a) For any permanent culverts and stormwater outfalls in a watercourse, the Consent Holder shall plant the riparian margin along the watercourse. The riparian margin planting shall be no less than the area of the watercourse and riparian margin occupied by the culvert or outfall. The planting shall: (i) be located within the same stream; or (ii) be located elsewhere within the Designation as advised by a SQP (b) If vegetation is removed from a stream riparian margin during temporary construction works in the Designation, the Consent Holder shall plant native vegetation in all areas of the riparian margin where vegetation was removed. (c) For planting under (a) and (b) the Consent Holder shall: (i) engage a SQP to determine plant species and sourcing, density and sizing; (ii) undertake planting within the first planting season following completion of construction; (iii) undertake pest plant control for a five year period; and (iv) monitor planted areas and undertake replacement planting as necessary for a five year period or until 80% canopy cover is achieved (whichever is less).
LUCXXX	16.	*Native Birds* If vegetation clearance (excluding vegetation on land zoned residential) is to occur during the native bird nesting period (September to February inclusive), the Consent Holder shall engage a SQEP to: (a) Undertake native bird nesting surveys before vegetation is cleared (b) If active native bird nests are found, identify set back distances for construction works until the young birds have fledged or the nest is naturally abandoned.

Reference	Number	Condition
LUSXXX	17.	*Fish Salvage and Relocation* (a) The Consent Holder shall salvage and relocate native freshwater fish to the extent practicable prior to any dewatering or diversion in a section of a watercourse that a SQP determines supports a population of native fish. (b) The salvaged native fish should be relocated within the same stream with similar hydrological conditions or other suitable habitat determined by a SQP.
LUCXXX	18.	*Bat management* Prior to the removal of any trees in the area shown in Schedule E that, in the opinion of a SQP, may be used as roost for bats, then the Consent Holder shall apply the Department of Conservation Bat Roost Protocols (Protocols for minimising the risk of felling occupied bat roosts October 2024) or updated version.
LUCXXX	19.	*Kauri Die-Back Management* (a) The Consent Holder shall implement kauri dieback management measures for the kauri tree identified in Schedule F in the event that the kauri tree is present at the time of construction. (b) Kauri dieback management measures shall be in accordance with Biosecurity Order 2022 (National Pest Management Plan for *Phytophthora agathidicida)* and the Auckland Regional Pest Management Plan 2020 – 2030 (Auckland Council, 2021) or updated versions.
COASTAL PERMIT		
CSTXXXX	20.	*Coastal Construction Management Plan (CCMP)* (a) Prior to the commencement of works within the Coastal Marine Area (CMA), the Consent Holder shall prepare a CCMP. The objective of the CCMP is manage construction effects in the Coastal Marine Area. The CCMP shall include; (i) Timing, staging and sequencing of coastal works (ii) A final construction methodology and plans of the temporary and permanent structures within the CMA (iii) The route to be used for accessing the site for construction purposes (iv) Methods to ensure that, where practical, when removing mangroves, mangroves are cut as close to the sediment as possible and leave root masses intact where possible; (v) Methods to maintain a safe navigation channel where practicable past the works site, and periods where navigation past the site may be restricted, and how this will be communicated to affected channel users. (vi) The construction footprint, demarcating those areas in the CMA and coastal edges which need to be physically marked onsite, with access (for vehicles and staff) restricted to the footprint; (vii) Contingency plans in case of discharges to the coastal marine area during works; (viii) General site management, including details of: (A) the bunding or containment of fuels and lubricants to prevent the discharge of contaminants; (B) methods to ensure that any equipment or machinery to be stored on the temporary staging is appropriately secured above mean high water springs, and methods to ensure that no spills into the coastal marine area will occur; (ix) methods to maintain or restrict public access to and along the coastal marine area while the activities are being carried out;

Reference	Number	Condition
		(x) A removal methodology for temporary platform and piles extraction, for mangrove removal and disposal for cleared mangroves and spoil from drilling for piles; and (xi) Details of reinstatement upon completion of the activities in the CMA.
CSTXXXX	21.	*Bridge Crossings of Henderson and Huruhuru Creek* The Consent Holder shall design the permanent bridge crossings of Wai-o-Pareira / Henderson Creek and Huruhuru Creek so that the minimum freeboard height of any bridge soffit above mean high water springs is no less than that of the existing adjacent SH16 bridges that cross these watercourses.
CSTXXXX	22.	*Permanent Occupation* The Consent Holder shall provide as built plans of all structures occupying the CMA to the Manager within 3 months of the completion of construction.

Schedule A. Extent of area for coastal permits



Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Coastal Marine Area

Extent of Works - CMA

Schedule B. Land identified as potentially contaminated

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station

Areas of Interest - Hail Sites

A10 - Persistent pesticide bulk storage or use


SH16 Northwestern Motorway
Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station
Areas of Interest - Hail Sites
A10 - Persistent pesticide bulk storage or use
Te Atatū Peninsula
Auck

Legend

Northwest Rapid Transit

Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station

Areas of Interest - Hail Sites

A10 - Persistent pesticide bulk storage or use


Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station
Te Atatū Peninsula


Scale: 1:2,500
0 15 30 60 90 m
Legend
Northwest Rapid Transit
Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station
Areas of Interest - Hail Sites
A10 - Persistent pesticide bulk storage or use
Te Atatū Peninsula


Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station
Areas of Interest - Hail Sites
A10 - Persistent pesticide bulk storage or use
B4 - Substations or switchyards
Te Atatū Peninsula


Scale: 1:2,500
0 15 30 60 90 m
Legend
Northwest Rapid Transit
Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station
Te Atatū Peninsula


Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station
Areas of Interest - Hail Sites
A10 - Persistent pesticide bulk storage or use
Te Atatū Peninsula

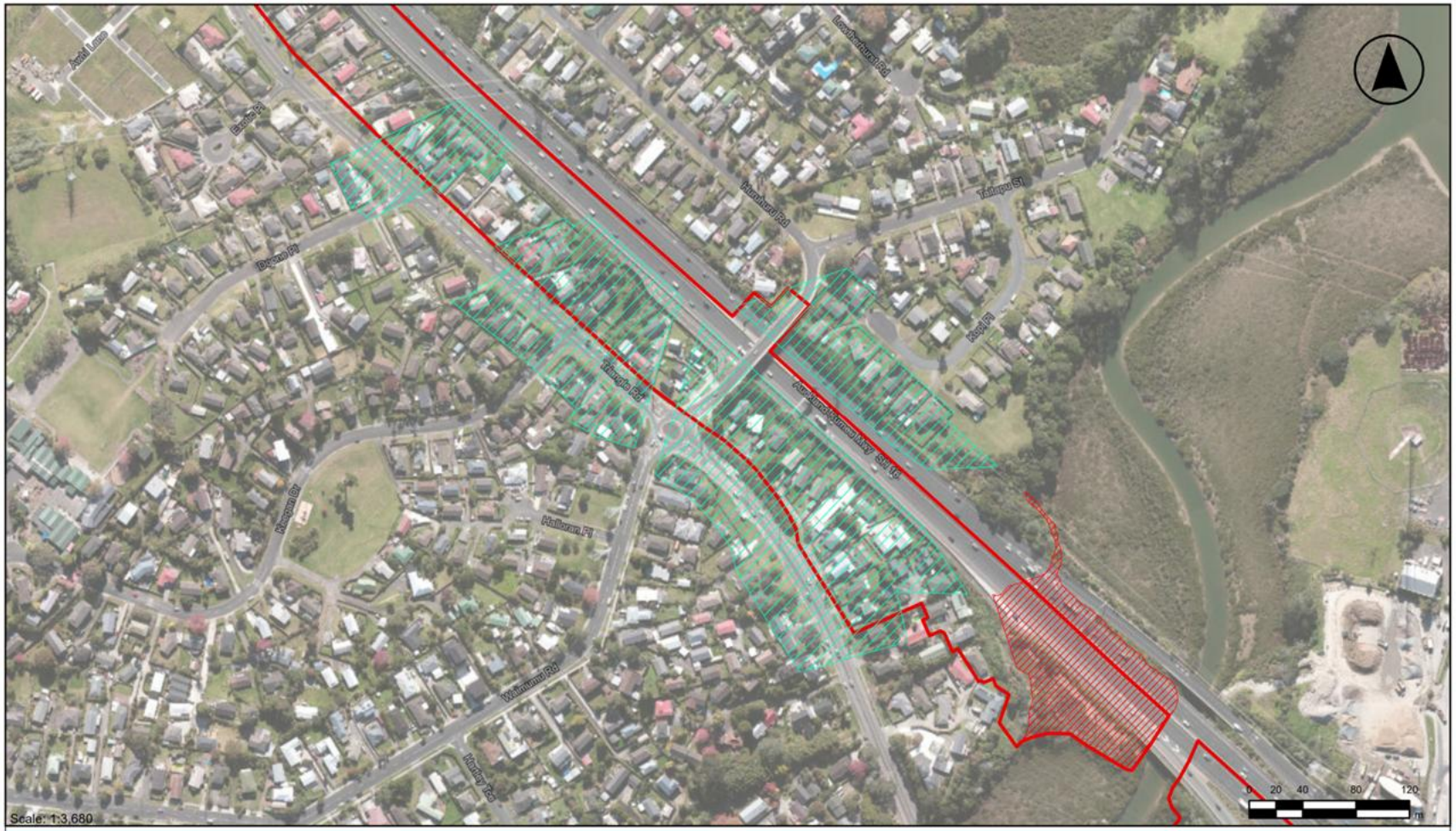

Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Areas of Interest - Hail Sites
A10 - Persistent pesticide bulk storage or use
F7 - Service station
Auckland

Legend

Northwest Rapid Transit

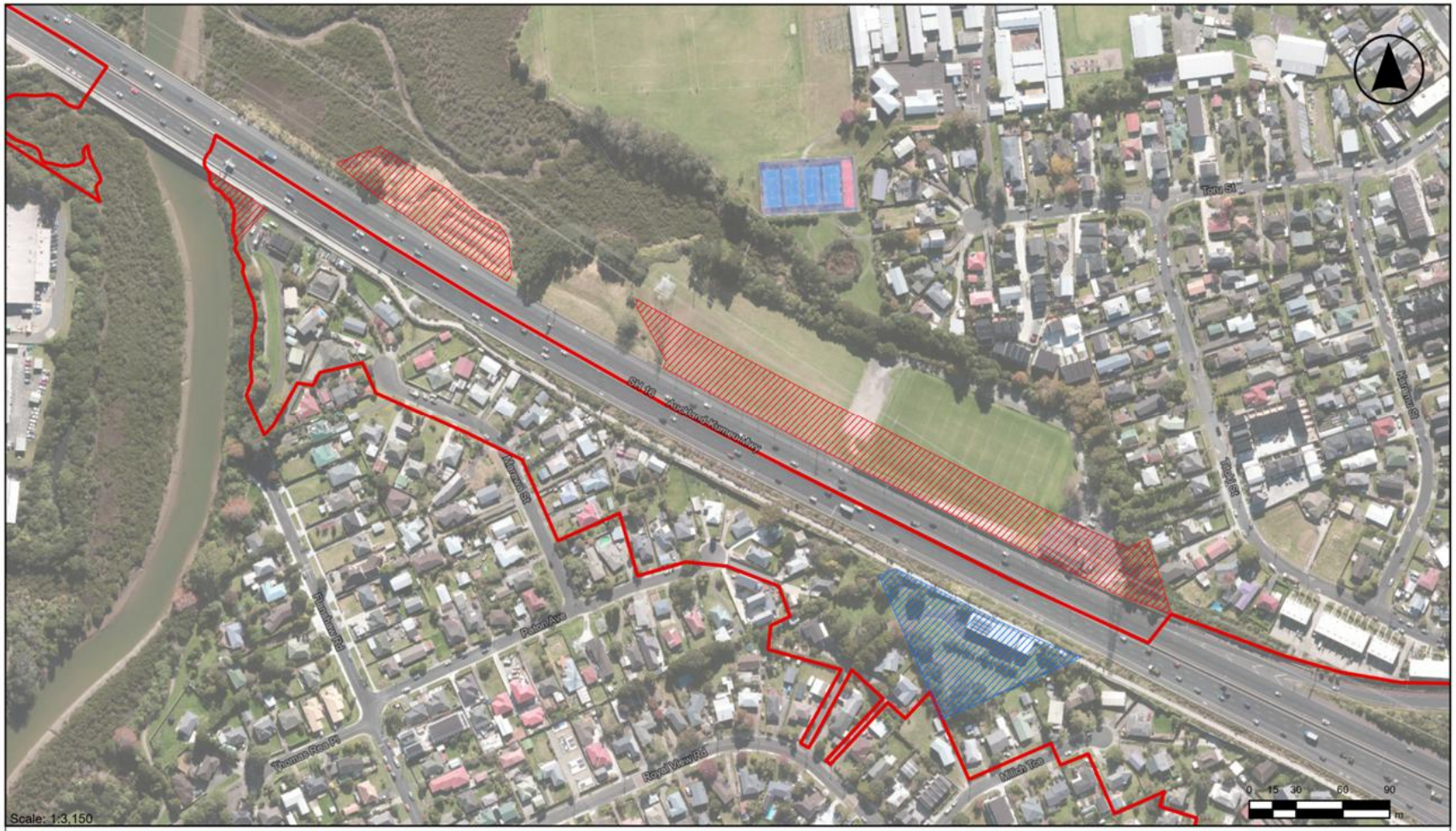
Designation - Busway between Royal Road Mānutewhau station and Te Whau River


Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Te Atatū Peninsula


Scale: 1:3,680
0 20 40 80 120
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Areas of Interest - Hail Sites
A10 - Persistent pesticide bulk storage or use
G3 - Landfill sites
Te Atatū Peninsula


Scale: 1:3,500
0 20 40 80 120
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Areas of Interest - Hail Sites
A10 - Persistent pesticide bulk storage or use
G3 - Landfill sites
Auckland


Scale: 1:3,150
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Areas of Interest - Hail Sites
A10 - Persistent pesticide bulk storage or use
A17 - Storage tanks or drums for fuel, chemicals or liquid waste
Te Atatū Peninsula


Scale: 1:3,150
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Areas of Interest - Hail Sites
B4 - Substations or switchyards
G3 - Landfill sites
Te Atatū Peninsula


Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Te Atatū Peninsula


Scale: 1:3,150
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Areas of Interest - Hail Sites
A10 - Persistent pesticide bulk storage or use
Te Atatū Peninsula

Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Legend

Northwest Rapid Transit

Designation - Busway between Waterview Interchange and Western Springs

Legend

Northwest Rapid Transit

Designation - Busway between Waterview Interchange and Western Springs

Legend

Northwest Rapid Transit

Designation - Busway between Waterview Interchange and Western Springs

Areas of Interest - Hail Sites

A10 - Persistent pesticide bulk storage or use

Legend

Northwest Rapid Transit

Designation - Busway between Waterview Interchange and Western Springs

Areas of Interest - Hail Sites

A10 - Persistent pesticide bulk storage or use

Legend

Northwest Rapid Transit

Designation - Busway between Waterview Interchange and Western Springs

Areas of Interest - Hail Sites

A1 - Agrichemicals

F4 - Motor vehicle workshop

F7 - Service station


Great North Rd
SH 16 Auckland-Kumeu Hwy
Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Waterview Interchange and Western Springs
Te Atatū Peninsula

Legend

Northwest Rapid Transit

Designation - Busway between Waterview Interchange and Western Springs

Areas of Interest - Hail Sites

F7 - Service station

Legend

Northwest Rapid Transit

Designation - Busway between Western Springs and Ian McKinnon Drive

Areas of Interest - Hail Sites

A17 - Storage tanks or drums for fuel, chemicals or liquid waste

Legend

Northwest Rapid Transit

Designation - Busway between Western Springs and Ian McKinnon Drive


Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Western Springs and Ian McKinnon Drive
Te Atatū Peninsula

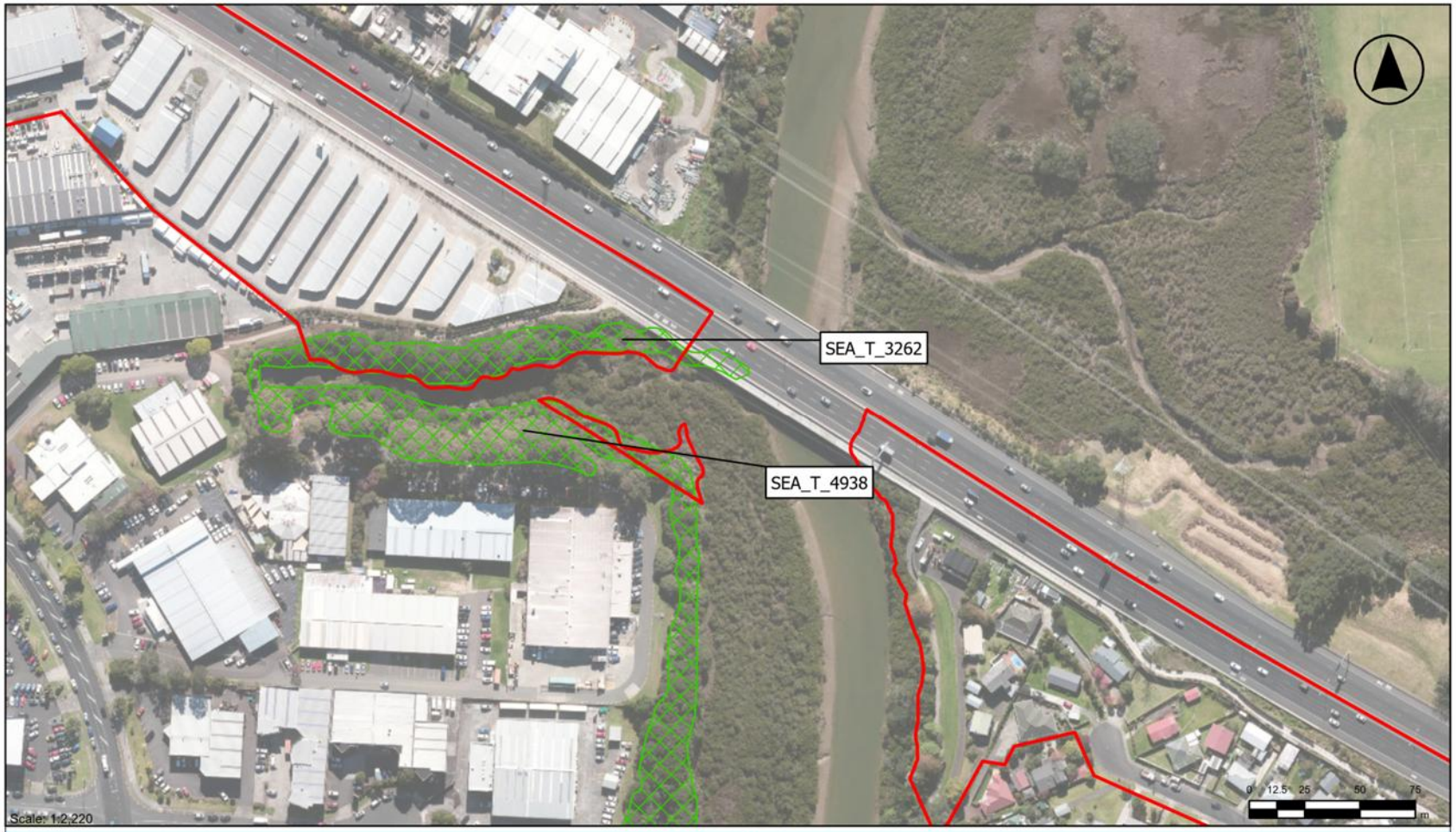

Scale: 1:2,500
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Western Springs and Ian McKinnon Drive
Te Atatū Peninsula


Scale: 1:2,500
0 15 30 60 90 m
Legend
Northwest Rapid Transit
Designation - Busway between Western Springs and Ian McKinnon Drive
Areas of Interest - Hail Sites
G3 - Landfill sites
Te Atatū Peninsula

Schedule C. Tōtara Creek


Scale: 1:3,398
0 20 40 80 120
m
Legend
Northwest Rapid Transit
Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station
Totara Creek

Schedule D. Significant Ecological Areas



Legend

Northwest Rapid Transit

Designation - Busway between Royal Road Mānutewhau station and Te Whau River

Significant Ecological Areas Overlay

Terrestrial


SEA_T_5124
Scale: 1:2,760
0 15 30 60 90
m
Legend
Northwest Rapid Transit
Designation - Busway between Royal Road Mānutewhau station and Te Whau River
Significant Ecological Areas Overlay
Terrestrial
Te Atatū Peninsula

Schedule E. Bats


Scale: 1:2,000
0 10 20 40 60
m
Legend
Northwest Rapid Transit
Designation - Busway between Westgate Te Waiarohia station and Royal Road Mānutewhau station
Ecology Surveys - Bats
Bat Habitat Areas

Schedule F. Kauri Die-back Management

Appendix C. Assessment of AUP rules and NES regulations

Note: NZTA seeks all necessary resource consents, except for the permanent diversion of streams in an overlay (SEAs) (rule E3.4.1 (A19) of the AUP) and works within 10m of natural inland wetlands (Regulation 45 of the National Environmental Standards for Freshwater), to authorise the Project, regardless of whether a rule/regulation is specifically identified in this table.

Section 9(1)

Rule	Provision	Activity Status	Assessment
National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NES:CS) Regulation 11	(1) This regulation applies to an activity described in regulation 5(2) to (6) on a piece of land described in regulation 5(7) or (8) that is not a permitted activity, controlled activity, or restricted discretionary activity. (2) The activity is a discretionary activity.	Discretionary	A Detailed Site Investigation has not been prepared, and therefore compliance with the standards of regulation 10 is not possible. Therefore, resource consent is sought under Regulation 11 of the NES:CS as a Discretionary Activity.

Section 9(2)

Rule	Provision	Activity Status	Assessment
E26.5.3.2 (A103)	General Earthworks in all zones and roads greater than 50,000m2 where land has a slope less than 10 degrees outside the Sediment Control Protection Area (SCPA) other than for maintenance, repair, renewal, minor infrastructure upgrading	Restricted Discretionary	Earthworks will exceed 50,000m2. Resource consent as a restricted discretionary activity is required.
E26.5.3.2 (A107)	Earthworks within the Sediment Control Protection Area (SCPA) greater than 2,500m2 within the Sediment Control Protection Area1 other than for maintenance, repair, renewal, minor infrastructure upgrading	Restricted Discretionary	Earthworks are likely to exceed 2500m2 in the SPCA and therefore is a restricted discretionary activity.
E26.5.3.2 (118)	Earthworks within a Significant Ecological Area (SEA) Overlay greater than 2500m2 or 2500m3	Discretionary	Earthworks required in SEA overlay likely to exceed 2500m2 or 2500m3. Resource consent as a restricted discretionary activity is required.
E26.3.3.1 (A77)	Vegetation alteration or removal within rural zones, coastal areas, riparian areas and SEA Overlay for the operation, maintenance, renewal, repair, construction and removal of network utilities and electricity generation facilities and minor infrastructure upgrading that does not comply with Standards E26.3.5.1 to E26.3.5.4	Restricted Discretionary	Works are unlikely to comply with Standards E26.3.5.1 to E26.3.5.4. Resource consent is required as a restricted discretionary activity.

E10.4.1(A10)	Development of new or redevelopment of existing impervious areas greater than 5,000m2 for a road, motorway or state highway operated by a road controlling authority or rail corridor within Stormwater management area control – Flow 1 or Stormwater management area control – Flow 2 that does not comply with Standard E10.6.1 and Standard E10.6.4.2	Discretionary *Within SMAF-1 or SMAF-2 Overlay*	Works may not comply with Standard E10.6.1 and Standard E10.6.4.2. Resource consent is required as a discretionary activity.
E9.4.1(A8)	Development of a new, or redevelopment of an existing high contaminant generating car park that does not comply with the relevant permitted or controlled activity standards	Restricted Discretionary	Works may not comply with permitted activity Standards E9.6.1 or controlled activity Standards E9.6.2. Resource consent is required as a restricted discretionary activity.
E9.4.1(A9)	Development of a new or redevelopment of an existing, high use road that does not comply with the relevant permitted or controlled activity standards	Restricted Discretionary	Works may not comply with permitted activity Standards E9.6.1 or controlled activity Standards E9.6.2. Resource consent is required as a restricted discretionary activity.

Section 12 (Coastal permits)

Rule	Provision	Activity Status	Assessment
F.2.19.4 (A34)	Coastal marine area disturbance that is associated with movement of between 1500m3 and 10,000m3 of sediment per 12 month period within the same coastal cell	Restricted Discretionary *Within the CMA*	Resource consent is required as a Restricted Discretionary activity
F.2.19.4 (A42)	Native vegetation alteration or removal, not otherwise provided for	Restricted Discretionary *Within the CMA*	Resource consent is required as a Restricted Discretionary activity
F.2.19.4 (A50)	Mangrove removal, not otherwise provided for	Discretionary *Within the CMA including the associated area which is subject to the relevant Overlays (SEA-M2)*	Resource consent is required as a Discretionary activity for mangrove removal in SEA-M2 in relation to new structures in the CMA.
F2.19.8 (A84)	Use of the coastal marine area and/or occupation of the common marine and coastal area including any associated area subject to Overlays including SEA-M1, SEA-M2, HH, ONC, HNC, ONF and ONL Overlays by activities that are not otherwise provided for in this table or in table F2.19.10	Discretionary *Within the CMA including the associated area which is subject to the relevant Overlays (SEA-M1, ONC, ONL, SEA-M2, HNC, ONF, HH)*	Resource consent is required as a Discretionary activity for use and activity in the CMA

F2.19.8 (A114)	Underwater blasting, impact and vibratory piling, marine seismic surveys	Restricted Discretionary *Within the CMA including the associated area which is subject to the relevant Overlays (SEA-M1, ONC, ONL, SEA-M2, HNC, ONF, HH)*	Resource consent is required as a Restricted Dictionary activity for impact or vibratory piling in the CMA.
F2.19.10 (A121)	Construction of coastal marine area structures and buildings unless provided for elsewhere in this table (see table F2.19.8 for the use of the structure)	Discretionary *Within the CMA*	Structures are required in the CMA. Resource consent is required as a Discretionary activity
F2.19.10 (A128)	Temporary coastal marine area structures or buildings	Discretionary *Within the CMA including the associated area which is subject to the relevant Overlays (SEA-M1, ONC, SEA-M2, HNC, ONF, HH)*	Resource consent is required as a Discretionary activity for temporary structures in the CMA.
F2.19.10 (A133)	Infrastructure in the coastal marine area and structures not otherwise provided for	Discretionary *Within the CMA including the associated area which is subject to the relevant Overlays (SEA-M1, ONC, SEA-M2, HNC, ONF, HH)*	Resource consent is required as a Discretionary Activity for infrastructure structures not otherwise provided for.

Section 13 (Rivers and lake beds)

Rule	Provision	Activity Status	Assessment
E3.4.1 (A19)	Diversion of a river or stream to a new course and associated disturbance and sediment discharge	Discretionary	Discretionary - outside of overlays
E3.4.1 (A27)	Temporary structures complying with standards in E3.6.1.15	Discretionary *Within overlays including SEA*	Activity for temporary structures complying with standards E3.6.1.15. Resource consent is required as a discretionary activity.
E3.4.1 (A29)	Bridges or pipe bridges complying with the standards in E3.6.1.16	Discretionary *Within overlays including SEA*	Resource consent is required as a Discretionary activity for bridges complying with the standards E3.6.1.16.
E3.4.1 (A32)	Culverts or fords less than 30m in length when measured parallel to the direction of water flow complying with the standards in E3.6.1.18	Discretionary *Within overlays including SEA*	Activity for culverts or fords less than 30m in length complying with the standards. Resource consent is required as a Discretionary Activity.
E3.4.1 (A33)	Culverts or fords more than 30m in length when measured parallel to the direction of water flow	Discretionary	Culverts may be more than 30m in length outside of overlays. Resource consent is required as a Discretionary Activity.
E3.4.1 (A34)	Erosion control structure less than 30m in length when measured parallel to the direction of water flow complying with the standards in E3.6.1.14	Discretionary *Within overlays including SEA*	Activity for erosion control structures less than 30m in length. Resource consent is required as a Discretionary Activity.
E3.4.1 (A39)	Stormwater or wastewater outfall complying with the standards in E3.6.1.14	Discretionary *Within overlays including SEA*	Activity for new stormwater outfalls complying with standards E3.6.1.14. Resource consent is required as a Discretionary Activity.
E3.4.1 (A44)	Any activities not complying with the general permitted activity standards in E3.6.1.1 or the specific activity standards in E3.6.1.14 to E3.6.1.23	Discretionary *Outside of overlays*	Works may not comply with the standards. Resource consent is required as a Discretionary Activity.

NES-F Regulation 71	(1) The placement, use, alteration, extension, or reconstruction of a culvert in, on, over, or under the bed of a river is a discretionary activity if it does not comply with any of the conditions in regulation 70(2). *Conditions required in resource consent* (2) A resource consent granted for the discretionary activity must impose the conditions required by— (a) regulations 62 and 63 (information about structures and passage of fish and about culverts), unless the activity is use; and (b) regulation 69 (monitoring and maintenance).	Discretionary Activity	Resource consent is required under Regulation 71 of the NES-F as works may not comply with Regulation 70(2).

Section 14 (Water permits)

Rule	Provision	Activity Status	Assessment
E8.4.1 (A2)	Diversion of stormwater runoff from lawfully established impervious areas directed into an authorised stormwater network or a combined sewer network that does not comply with Standard E8.6.2.1	Restricted Discretionary	As the works do not comply with Standard E8.6.2.1, resource consent as a restricted discretionary activity is required.
E8.4.1 (A5)	Diversion and discharge of stormwater runoff from additional impervious areas greater than 5,000m2 of road (which include road ancillary areas that are part of a road, motorway or state highway operated by a road controlling authority) or rail corridor that complies with Standard E8.6.1 and Standard E8.6.4.1	Restricted Discretionary	Works will comply with Standard E8.6.1 and Standard E8.6.4.1. Resource consent as a restricted discretionary activity is required.
E8.4.1 (A11)	Diversion and discharge of stormwater runoff from an existing or a new stormwater network onto land or into water or to the coastal marine area	Discretionary	Resource consent is required as a Discretionary Activity

Section 15 – Discharges

Rule	Provision	Activity Status	Assessment
E30.4.1 (A7)	Discharges of contaminants into air, or into water, or onto or into land not meeting controlled activity Standard E30.6.2.1.	Discretionary	As no DSI has been prepared, at this stage of the project, resource consent is required as a Discretionary Activity for discharge into water or into or onto land (does not meet controlled activity standard E30.6.2.1).
E4.4.1 (A15)	Discharge of water or contaminants (including washwater) onto or into land and/or into water not complying with the relevant standards or not otherwise provided for by a rule in the Plan.	Discretionary	Activity may not comply with relevant standards, therefore seeking consent as a Discretionary Activity.