

Mt Victoria Tunnel Duplication Project

Presentation to Kilbirnie School
November 2013

Stewart McKenzie – NZTA Project Manager



NZ TRANSPORT AGENCY
WAKA KOTAHĪ

New Zealand Government

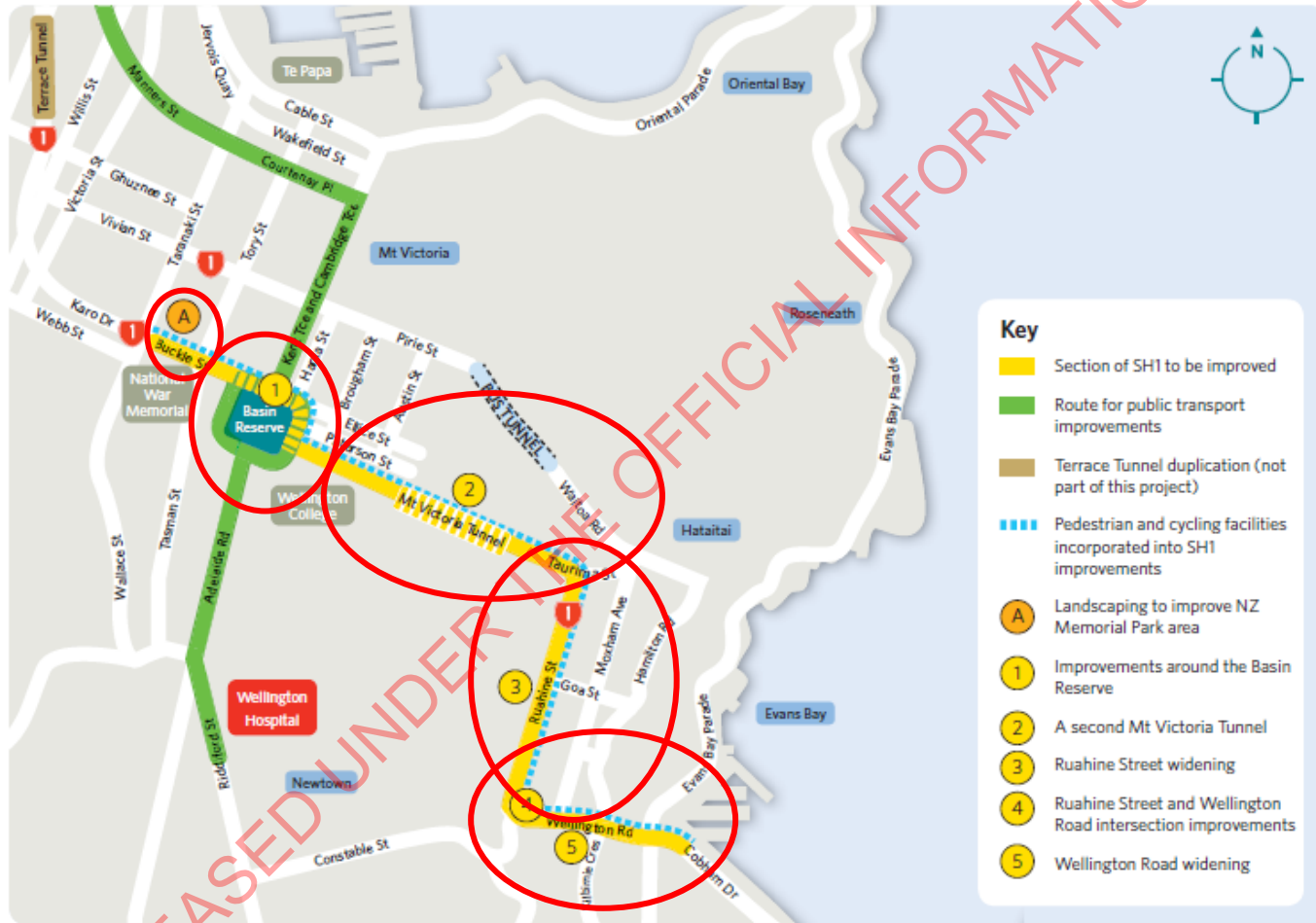
Mt Victoria Tunnel Duplication Project

Part of Wellington Northern Corridor Road of National Significance (RoNS)

- Mt Victoria Tunnel Duplication
- Basin Reserve
- Terrace Tunnel Duplication
- Transmission Gully
- MacKays to Pekapeka
- Pekapeka to Otaki



RoNS Inner City Improvements



Project Development and Consenting Phase

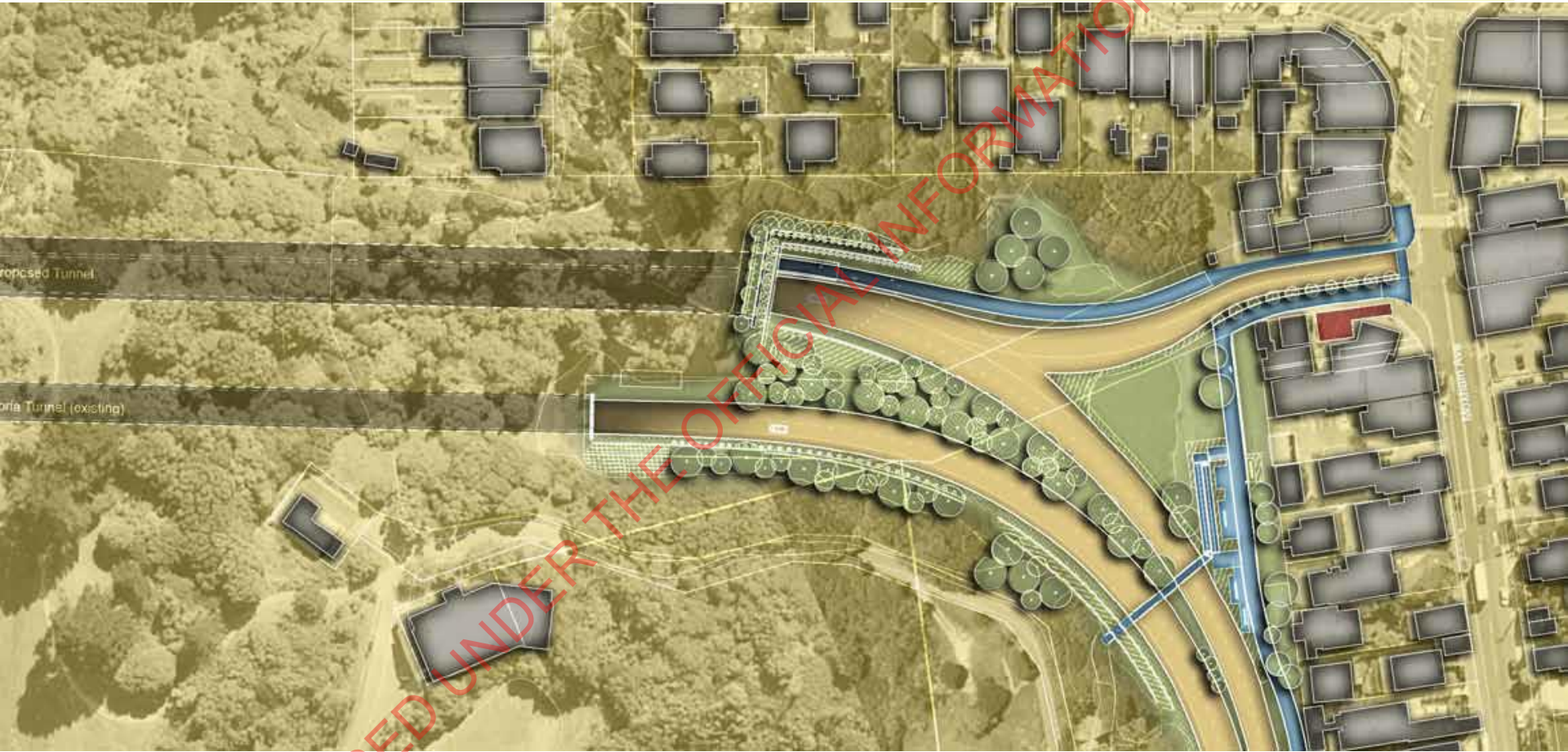
- Progressed through earlier feasibility and scheme assessment phases
- Project currently in consenting phase –
 - Detailed investigations involving 18 specialist teams
 - Ongoing refinement of design
 - Preparation of Assessment of Environmental Effects (AEE) report
- Ongoing stakeholder engagement
- Public consultation in June 2013 and early 2014
- Lodgment of RMA applications for NoR and consents with the EPA by July 2014
- Application heard by an independent Board of inquiry
- Full public participation in the RMA process



Proposed Layout – Paterson Street



Proposed Layout – Taurima Street



Proposed Layout – Ruahine Street North



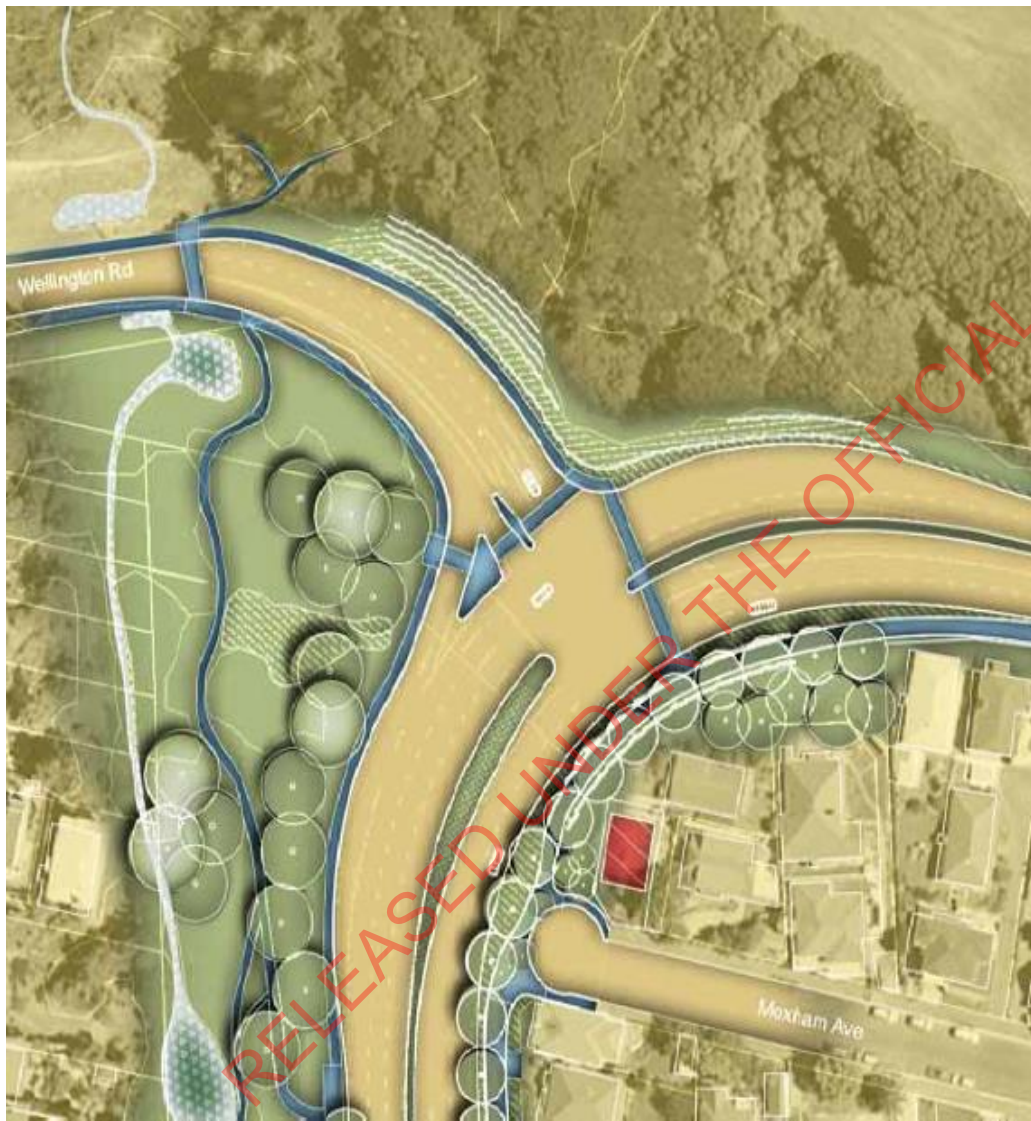
Proposed Layout – Ruahine Street South



NZ TRANSPORT AGENCY
WAKA KOTAHĪ

[New Zealand Government](https://www.nzta.govt.nz/)

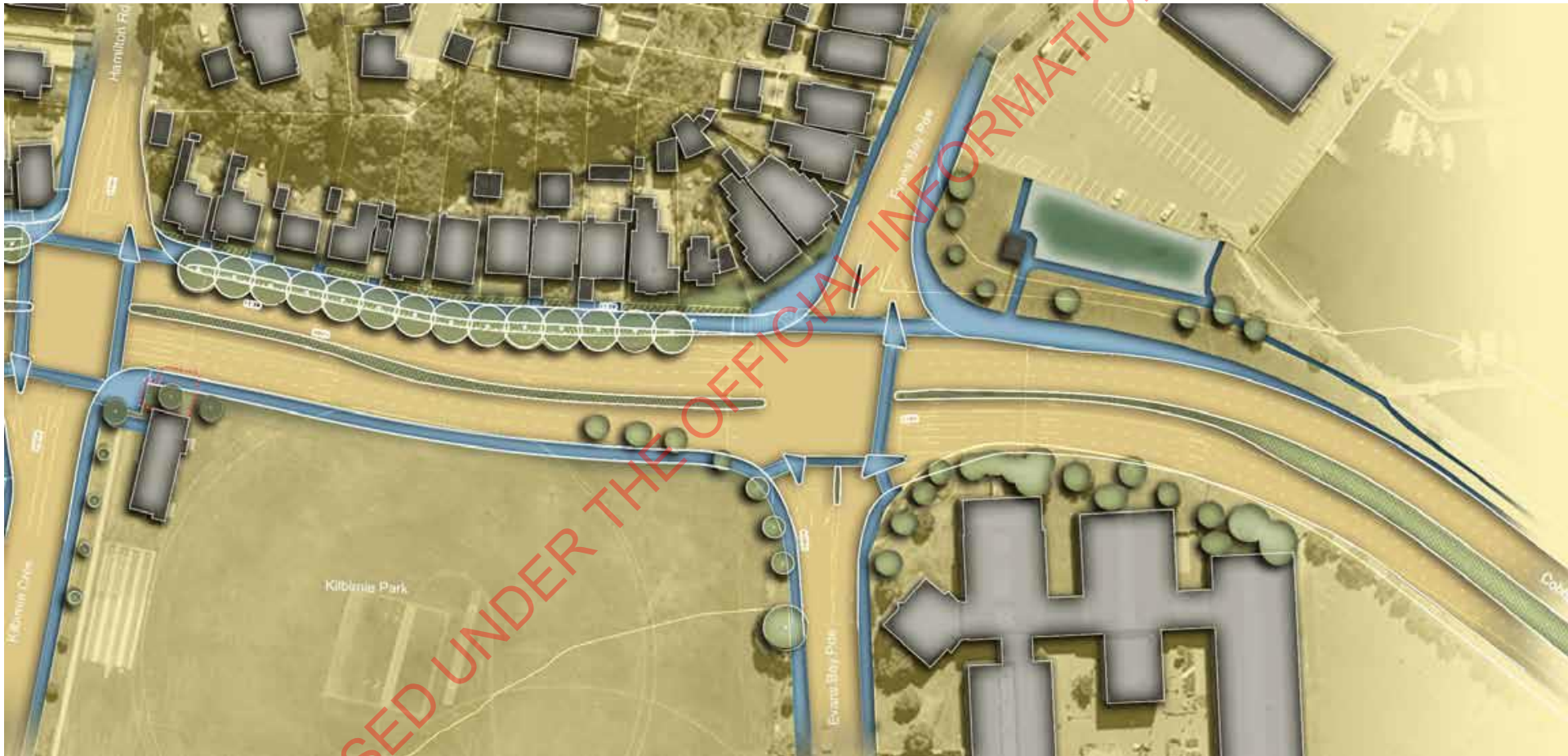
Proposed Layout – Ruahine Street / Wellington Road



Proposed Layout – Wellington Road West



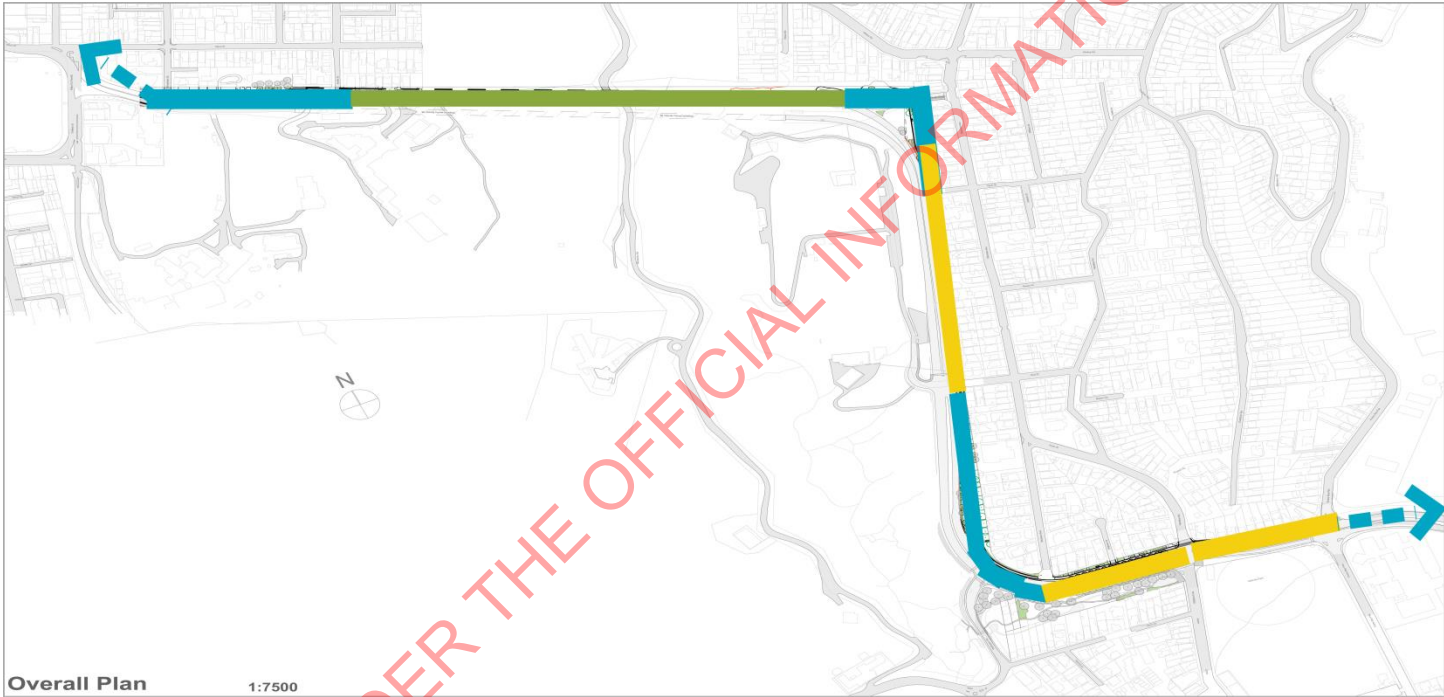
Proposed Layout – Wellington Road East



NZ TRANSPORT AGENCY
WAKA KOTAHĪ

[New Zealand Government](https://www.nzta.govt.nz/)

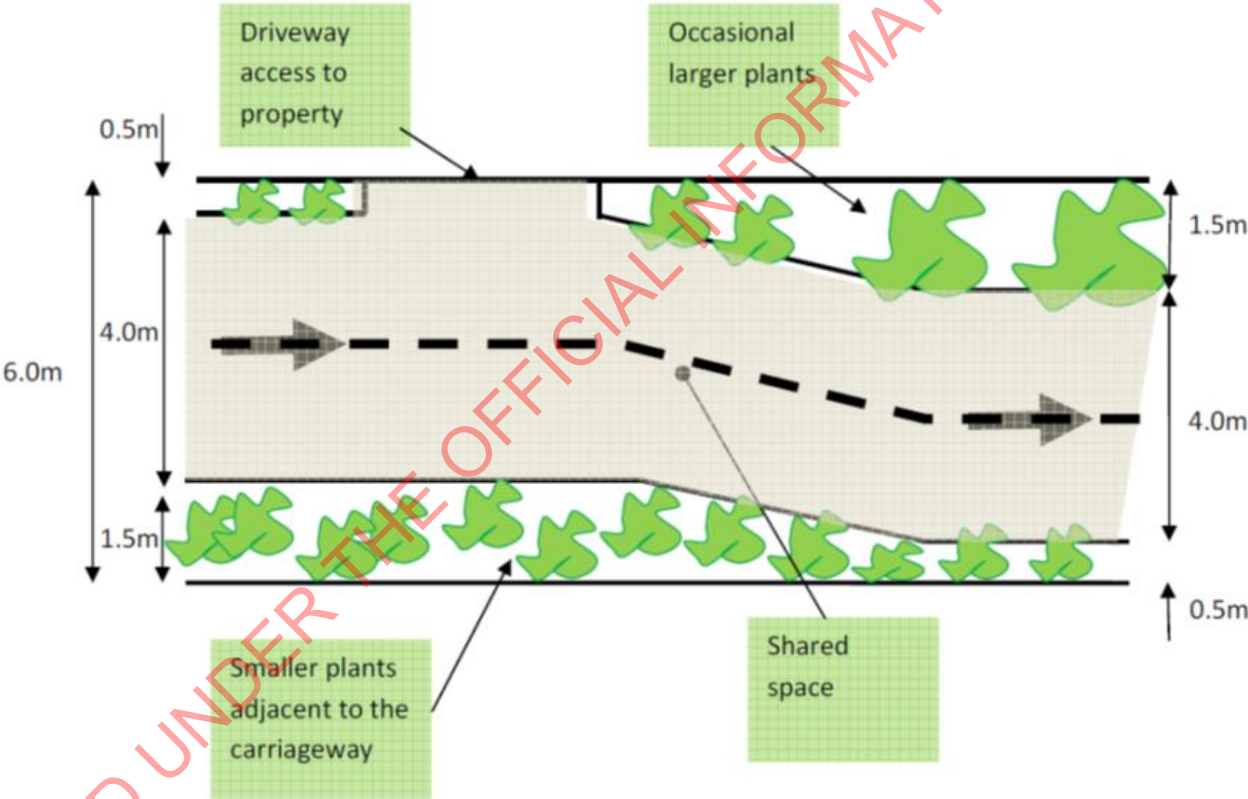
Shared Path Connectivity



LEGEND

-  SHARED PATH - PEDESTRIAN/CYCLE 3m wide carriageway
-  SHARED PATH IN TUNNEL - PEDESTRIAN/CYCLE 3m wide carriageway
-  SHARED ZONE - PEDESTRIAN/CYCLE/VEHICLE 4m wide carriageway

Shared Zone Proposed Layout



Construction Programme

Duplicate Tunnel Construction

- Scheduled to commence October 2018, completed by November 2020 (2 years, 1 month)
- Excavated from both Mt Victoria (Western Portal) and Hataitai (Eastern Portal)
- Closure of Taurima Street and signals at Goa St /Ruahine St and Goa St/Moxham Ave by December 2018
- Refurbishment of existing tunnel and commissioning of Duplicate Tunnel by July 2021

Widening of Ruahine Street and Wellington Road

- Wellington Rd south properties removed October 2018
- Widening to commence January 2019, completed by November 2020 (1 year, 10 months)



Pedestrian Safety and Connectivity

- Segregated shared path for length of the Project Area
- A fully protected, signalised pedestrian phase integrated with traffic signals at all key intersections including:
 - Taurima Street and Moxham Ave
 - Goa Street and Moxham Ave
 - Goa Street and Ruahine Street
 - Wellington Road and Ruahine Street
- New pedestrian overbridge from Hataitai Village to Hataitai Park with interim construction phase at-grade alternative
- Transport and urban design improvements in Hataitai Village
- Reduction in traffic speed along Moxham Ave

Mitigation of Construction Effects

Assessment of Construction Effects

- Eight-stage construction methodology being developed
- Detailed assessment of construction effects including traffic flow, noise, vibration, air quality, public health, access, erosion and sediment control

Detailed Mitigation Measures

- Conditions and a suite of management plans to be developed and submitted with application
- Subject to a rigorous assessment process and change through the BOI process
- Stakeholder and resident liaison group formed with direct feedback to NZTA and the contractor



Traffic and Transport Effects

Construction Traffic

- Traffic management plan for all stages of construction to keep traffic flowing and road users safe

Operational traffic (when completed)

- Detailed assessment of traffic effects including modelling of likely traffic flows
- Consideration of wider area including traffic flows on the local road network in Hataitai and Kilbirnie



Moxham Ave Corridor Flows

Location	Period	2011	2031	
		Existing (from model)	Base Case	Hybrid Option
Moxham Ave north of Taurima Street ¹	AM	607	640	730
	IP	423	410	480
	PM	694	720	700
	AADT	7424	7390	8330
Moxham Ave north of Goa Street ²	AM	499	810	750
	IP	284	350	460
	PM	501	670	580
	AADT	5237	6950	7904
Hamilton Road ³	AM	637	840	670
	IP	437	520	470
	PM	661	770	670
	AADT	7578	9150	8040



- North of Goa Street traffic flows increase by approx 1000 vehicles per day (Vpd), south of Goa Street traffic flows decrease by approx 1000 Vpd

Queues in the Vicinity of Goa Street

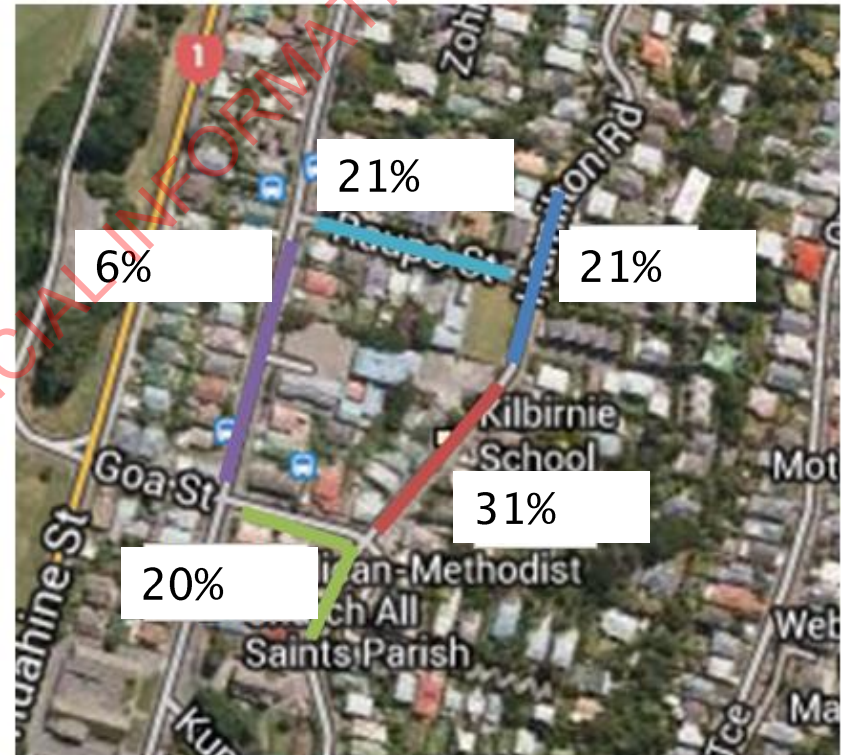


Kilbirnie School Parking Survey

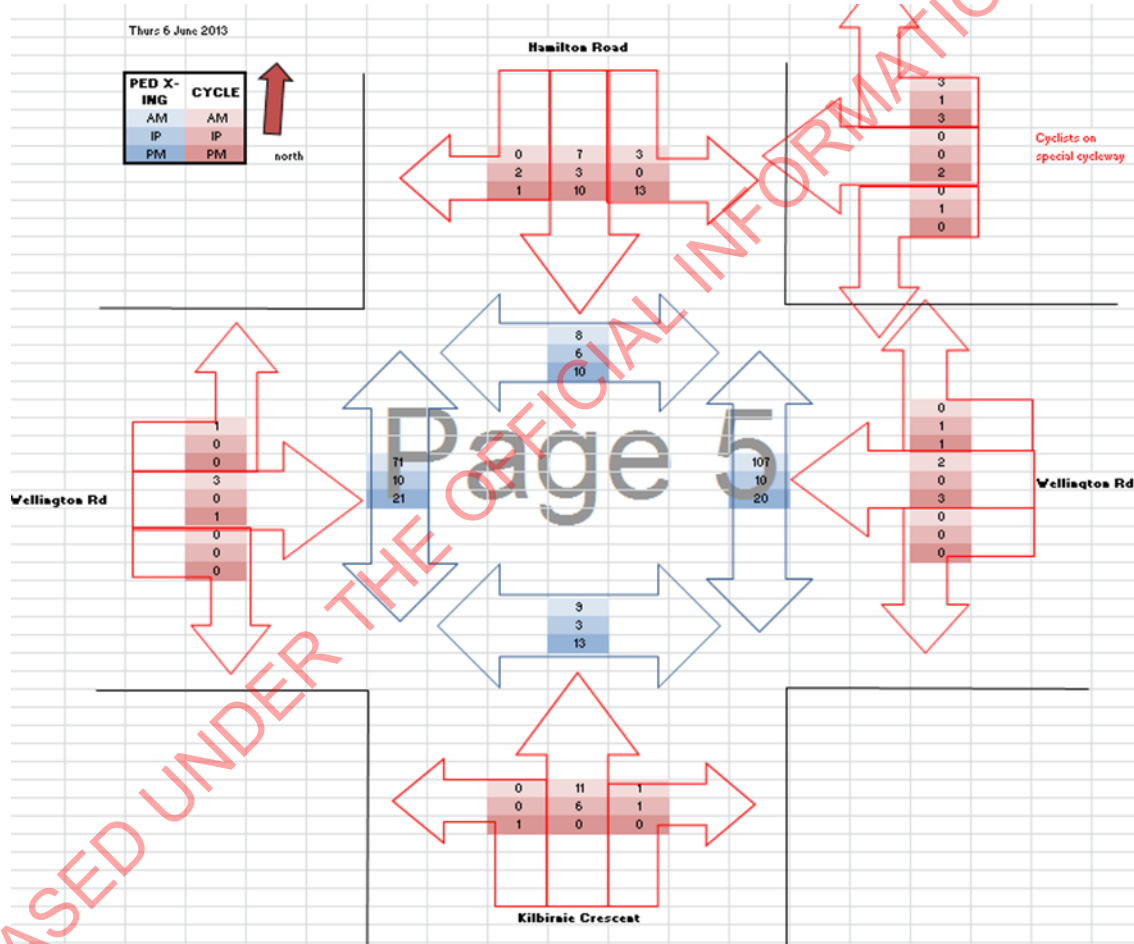


Kilbirnie School Parking Survey – pick ups

- 57 Vehicles recorded as arriving between 2:30pm and 4:00pm
- Average parking duration was 12 minutes
- Max number parked at any one time was 31 (at 3:00pm)



Wellington Rd/Kilbirnie Cres Intersection – midweek pedestrian and cycle movements



Pedestrian Safety and Connectivity

- Segregated shared path for length of the Project Area
- Signalised pedestrian phase integrated with traffic signals at four key intersections:
 - Taurima Street and Moxham Ave
 - Goa Street and Moxham Ave
 - Goa Street and Ruahine Street
 - Wellington Road and Ruahine Street
- New pedestrian overbridge from Hataitai Village to Hataitai Park
- Safer access into Hataitai Park
- Longer, fully protected pedestrian phase at intersections
- Reduction in traffic speed along Moxham Ave



Public Transport Spine Study

PT Enhanced Option

- Subject to recommendation of the Regional Transport Committee on the Public Transport Spine Study (PTSS) in February
- Wider footprint to potentially accommodate Bus Rapid Transit (BRT)
- Further widening into the Town Belt along Ruahine Street
- Combination of dedicated bus lanes and bus priority

