

Plan Change G: Aokautere Growth Area

Structure Plans, Cross Sections, Zoning Maps

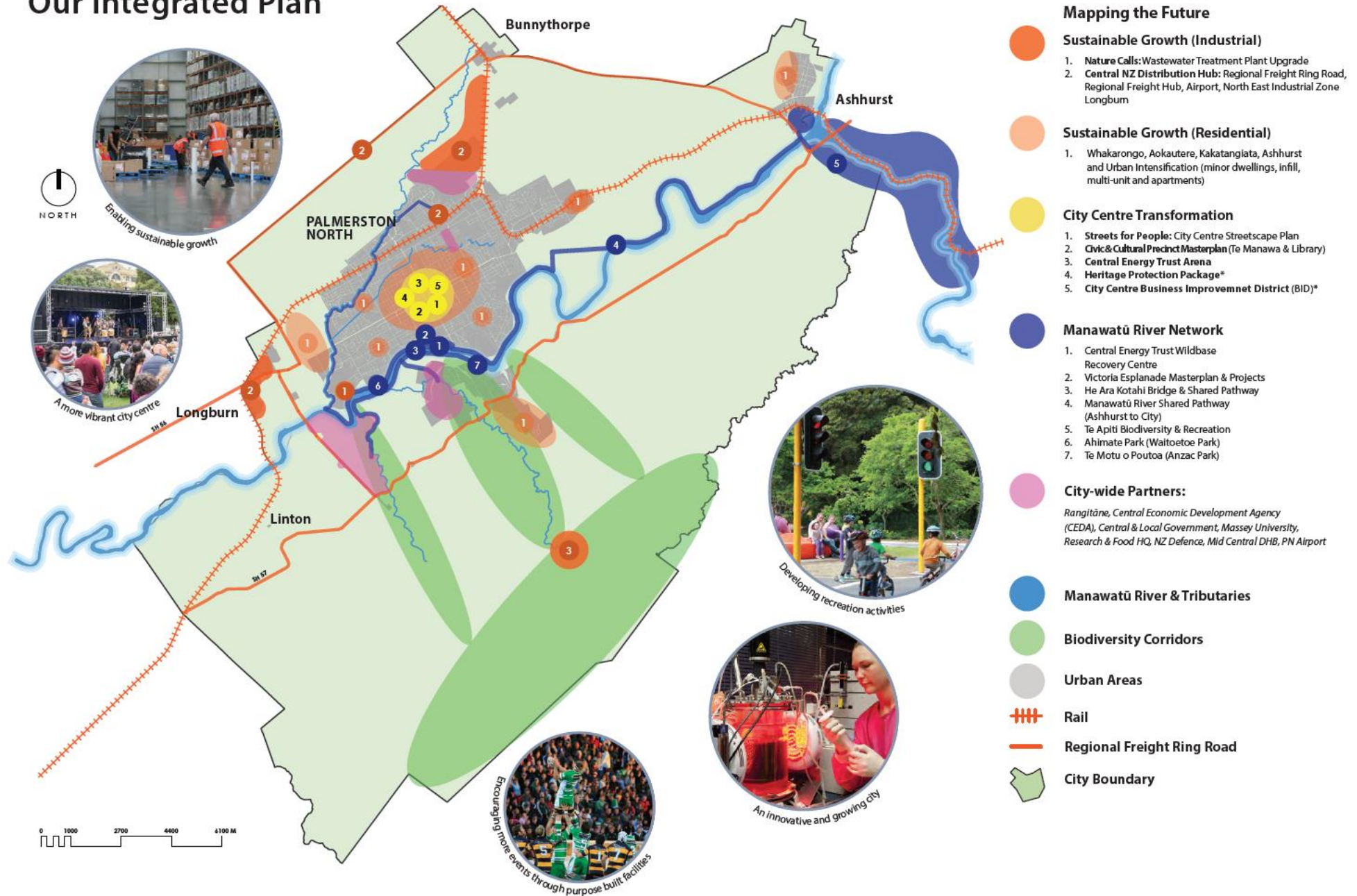
Hearing 4th December

Strategic Planning

David Murphy

City Plan

Our Integrated Plan



Mapping the Future

Sustainable Growth (Industrial)

1. **Nature Calls:** Wastewater Treatment Plant Upgrade
2. **Central NZ Distribution Hub:** Regional Freight Ring Road, Regional Freight Hub, Airport, North East Industrial Zone Longburn

Sustainable Growth (Residential)

1. Whakarongo, Aokautere, Kakatangiata, Ashhurst and Urban Intensification (minor dwellings, infill, multi-unit and apartments)

City Centre Transformation

1. **Streets for People:** City Centre Streetscape Plan
2. **Civic & Cultural Precinct Masterplan** (Te Manawa & Library)
3. **Central Energy Trust Arena**
4. **Heritage Protection Package***
5. **City Centre Business Improvement District (BID)***

Manawatū River Network

1. Central Energy Trust Wildbase Recovery Centre
2. Victoria Esplanade Masterplan & Projects
3. He Ara Kotahi Bridge & Shared Pathway
4. Manawatū River Shared Pathway (Ashhurst to City)
5. Te Aputi Biodiversity & Recreation
6. Ahimate Park (Wairotoe Park)
7. Te Motu o Poutoa (Anzac Park)

City-wide Partners:

Rangitāne, Central Economic Development Agency (CEDA), Central & Local Government, Massey University, Research & Food HQ, NZ Defence, Mid Central DHB, PN Airport

Manawatū River & Tributaries

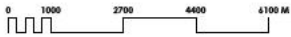
Biodiversity Corridors

Urban Areas

Rail

Regional Freight Ring Road

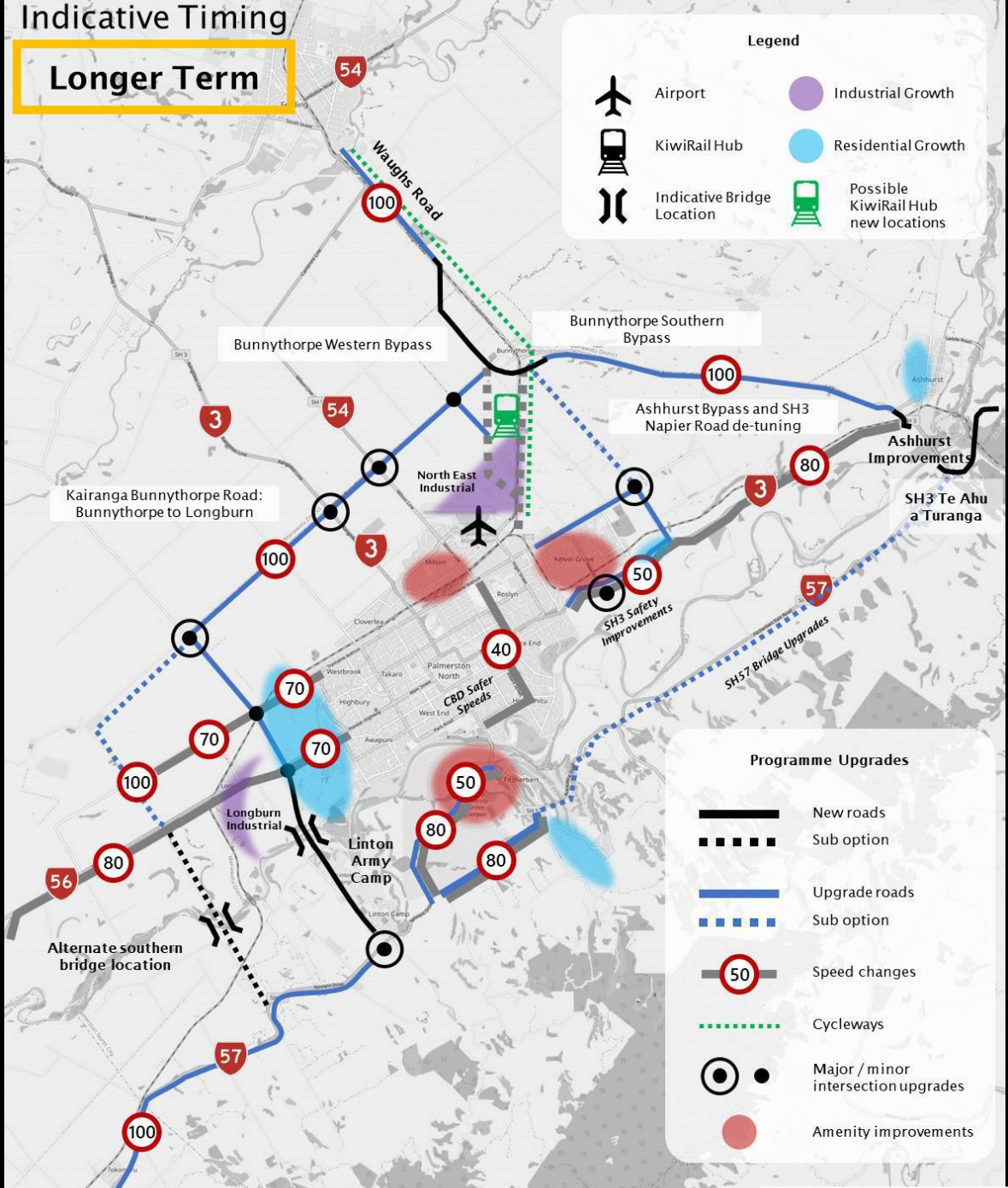
City Boundary



Palmerston North Integrated Transport Initiative

Indicative Timing

Longer Term



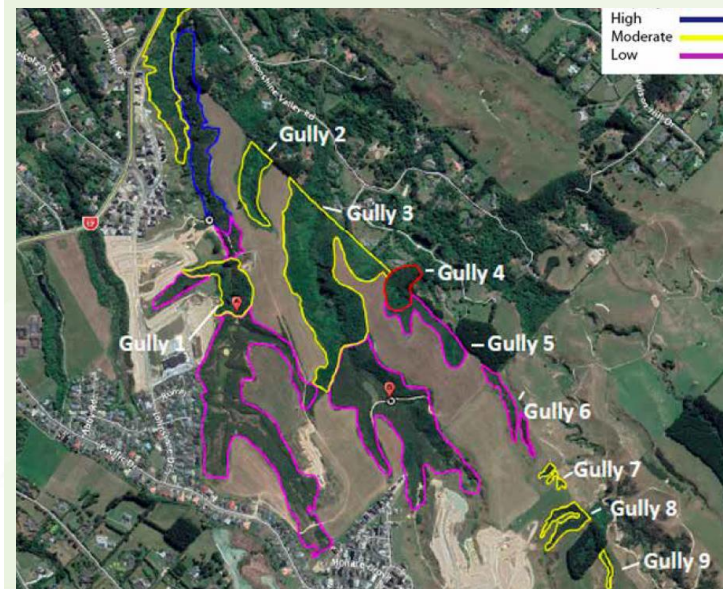
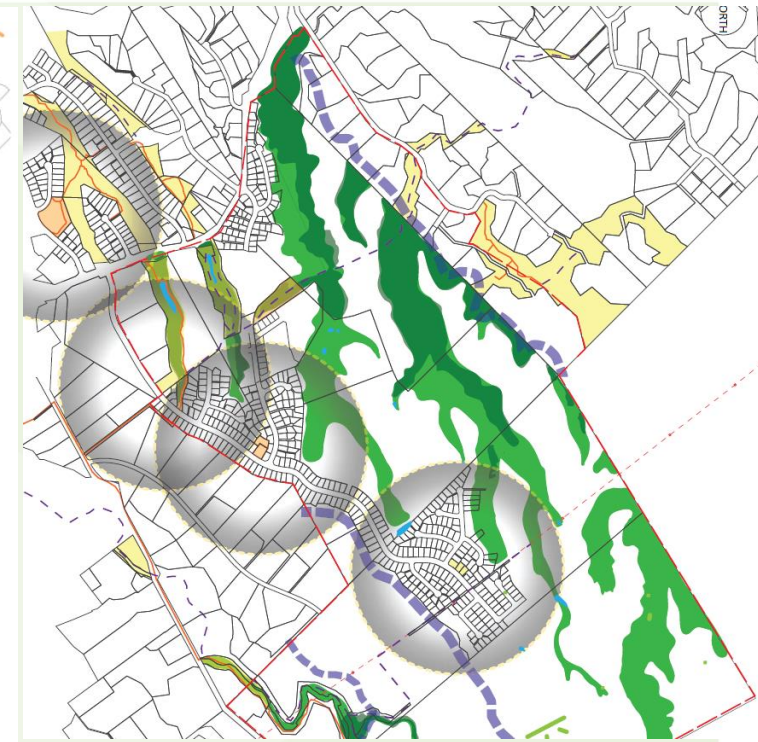
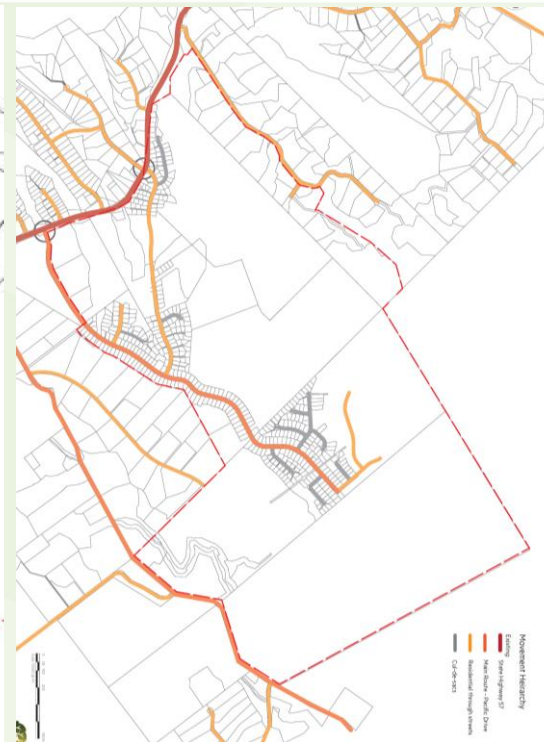
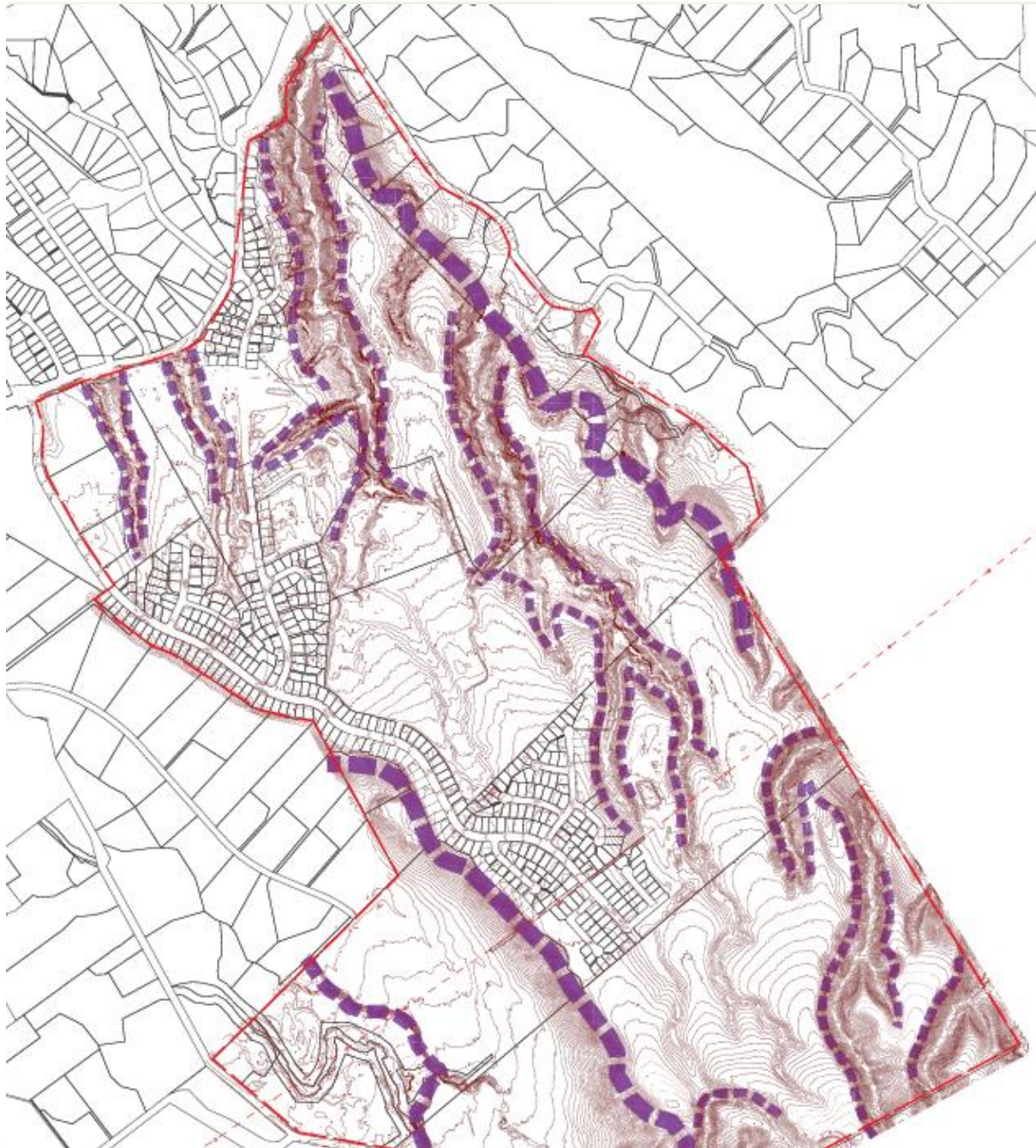
Aokautere Long Term Plan Capital Growth Programmes

	2023/24	Year 1 2024/25	Year 2 2025/26	Year 3 2026/27	Year 4 2027/28	Year 5 2028/29	Year 6 2029/30	Year 7 2030/31	Year 8 2031/32	Year 9 2032/33	Year 10 2033/34	10 Year Total
Capital Growth												
<u>Other</u>												
1833 - City Growth - Cemeteries - Extensions to burial and ashes areas to meet demand	\$118	\$216	\$194	\$225	\$115	\$235	\$292	\$244	\$124	\$253	\$200	\$2,097
1846 - City Reserves - Walkway Extensions - Capital New	\$213	\$184	\$189	\$211	\$321	\$327	\$206	\$476	\$485	\$218	\$222	\$2,840
1856 - City Reserves - Manawatu River Park - Roxburgh Entrance Development	-	-	\$128	-	-	-	-	-	-	-	-	\$128
1861 - Urban Growth - Matangi - Whiskey Creek - Reserves Purchase and Development	-	-	-	-	\$228	-	\$23	\$432	\$177	-	-	\$861
1882 - City Growth - Cemeteries - Expansion of Kelvin Grove Cemetery Roading network	-	\$50	\$61	\$465	-	-	-	-	-	-	-	\$577
2226 - Urban Growth - Terrace End Bore	\$200	-	-	-	-	-	-	-	-	-	-	-
2239 - BOF - Te Motu o Poutoa	\$250	-	-	-	-	-	-	-	-	-	-	-
2299 - Urban Growth - New Northern Water Supply Bore (Milson Line)	-	\$1,000	\$1,538	\$2,632	\$2,700	\$221	-	-	-	-	-	\$8,091
2324 - Urban Growth - Stormwater Roxborough Crescent Infill	-	\$293	\$140	-	\$1,813	\$801	-	-	-	-	-	\$3,046
697 - Clearview Reserve Development	\$41	-	-	-	-	-	-	-	-	-	-	-
<u>Aokautere</u>												
1704 - Urban Growth - Aokautere - Stormwater	-	\$1,052	\$3,053	\$3,198	\$801	\$2,215	\$4,771	\$5,020	-	-	-	\$20,109
1855 - Urban Growth - Aokautere - Reserves Purchase and Development	-	\$89	\$184	\$2,865	\$227	\$1,709	\$209	\$435	\$207	\$211	\$215	\$6,350
1880 - Urban Growth - Aokautere - Water Supply	-	-	-	-	\$224	\$1,719	-	-	\$95	\$605	-	\$2,642
2030 - Urban Growth - Aokautere - Wastewater	-	-	-	-	\$270	\$344	\$793	\$1,101	\$710	-	-	\$3,218
2389 - Urban Growth - Aokautere - Transport Improvements	-	\$1,000	\$4,080	\$4,174	\$4,270	\$4,364	\$4,456	\$4,545	\$4,636	\$4,728	\$4,818	\$41,071
708 - UG - Aokautere - Reserves Land Purchase	\$34	-	-	-	-	-	-	-	-	-	-	-
<u>Ashhurst</u>												
1412 - Urban Growth - Ashhurst - Wastewater	-	-	-	-	-	\$277	\$1,756	\$232	\$592	\$1,209	-	\$4,065
1841 - Urban Growth - Ashhurst - Water Supply	\$1,359	-	-	-	-	\$277	\$566	\$841	\$592	-	-	\$2,276
1860 - Urban Growth - Ashhurst - Reserves Purchase and Development	-	-	-	-	\$168	-	-	\$608	\$155	-	-	\$931

Urban Design/Masterplan

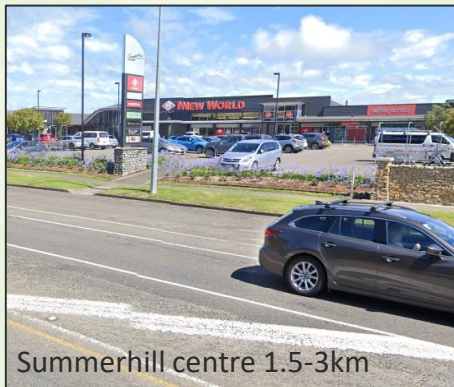
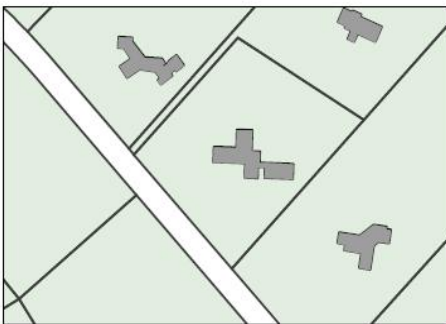
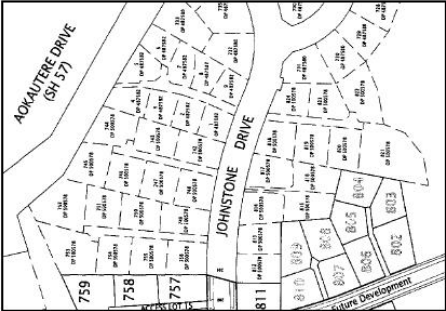
Andrew Burns

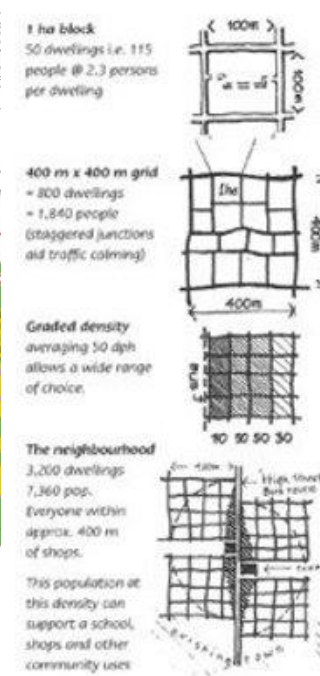
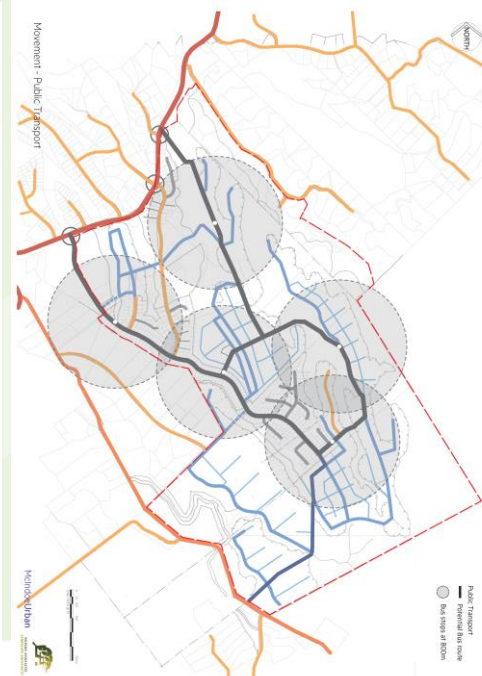
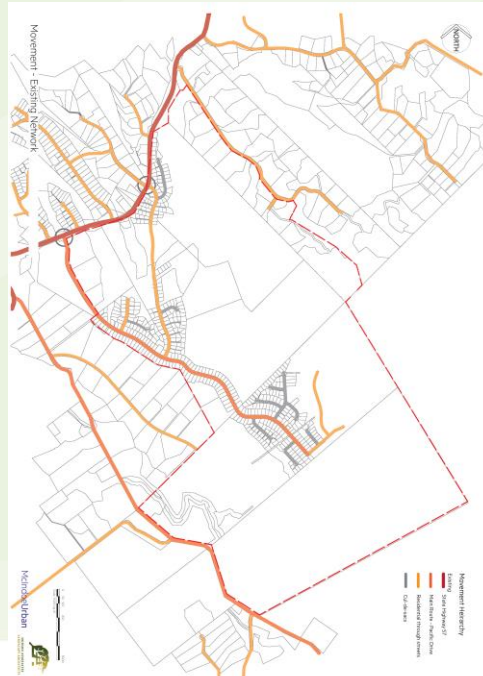
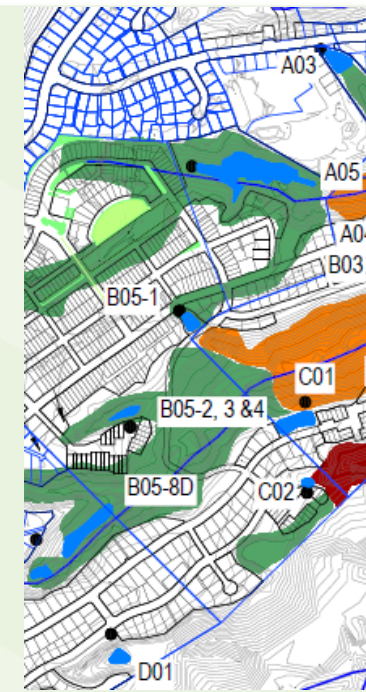
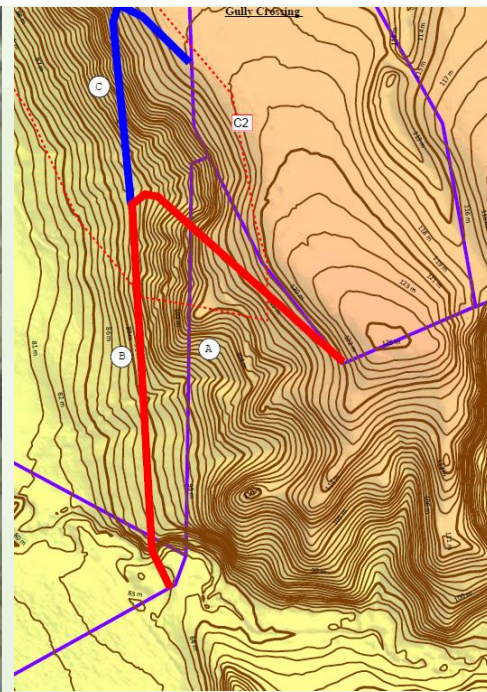
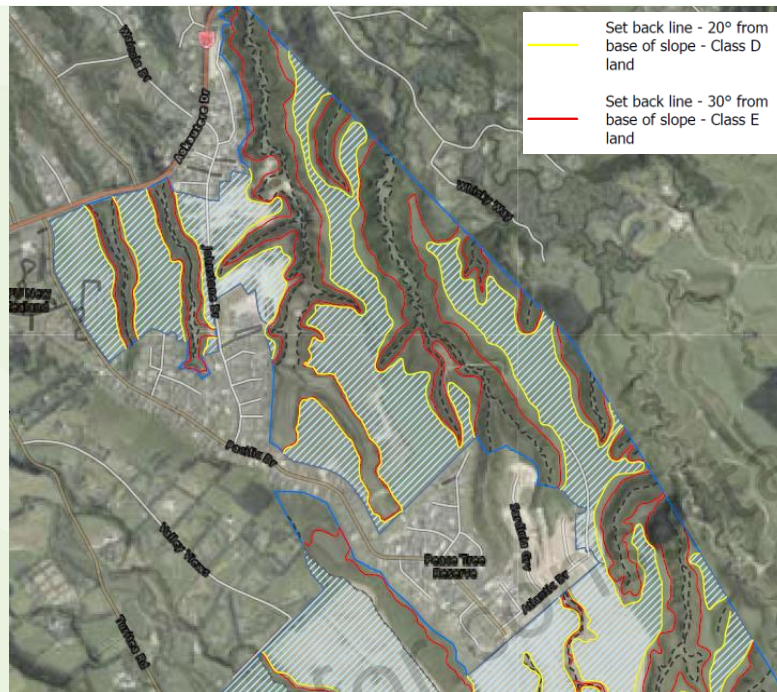
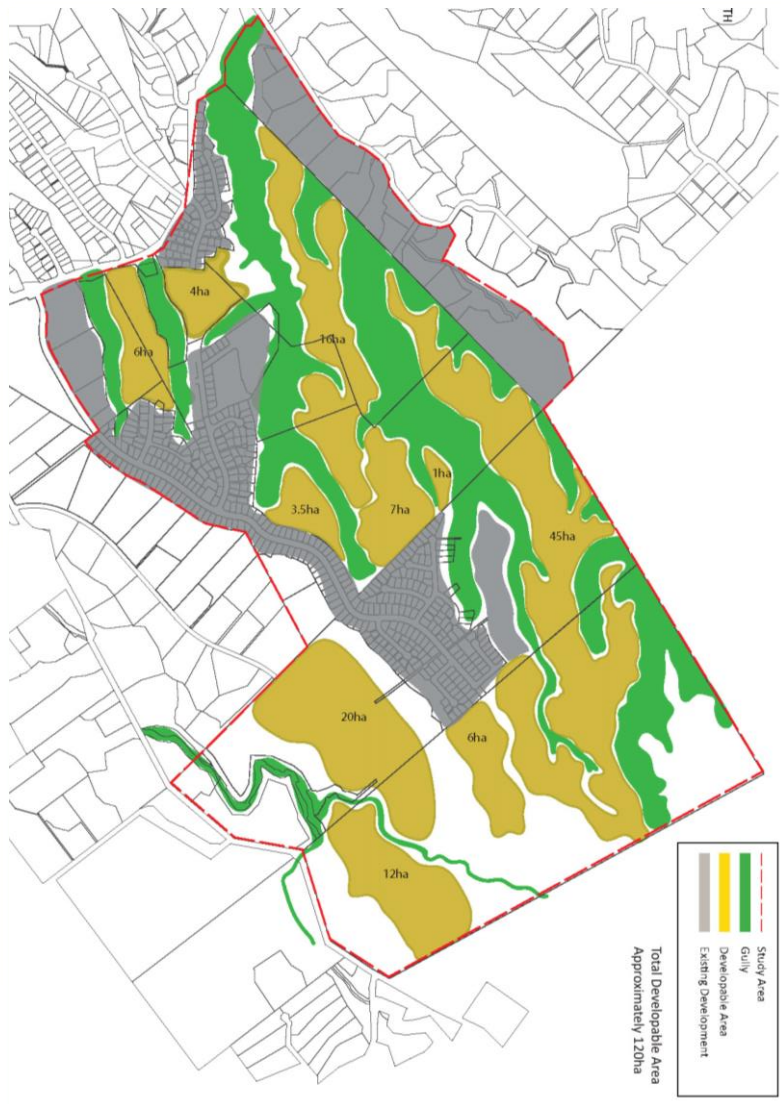
Structure Plan formation



Analysis
Landform
Ecology
Access
Settlement

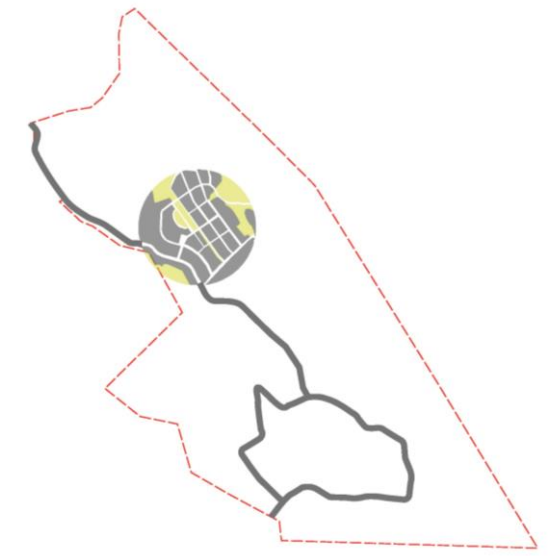
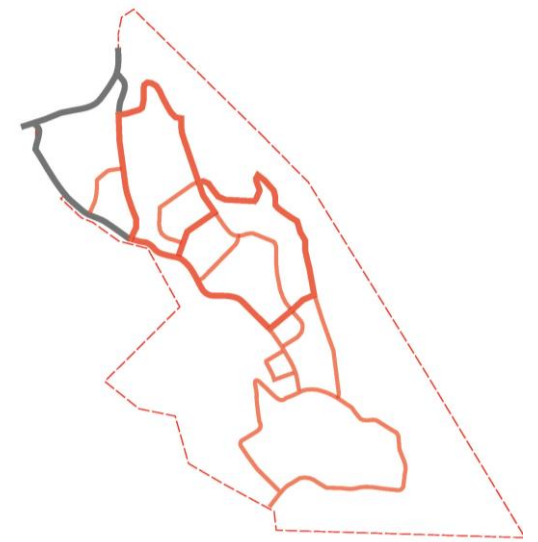
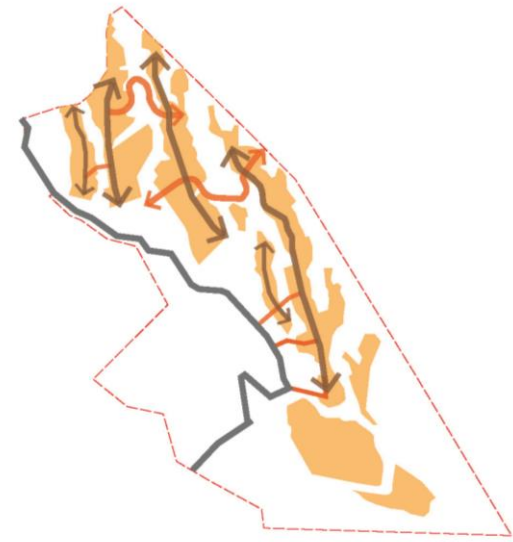
Local built patterns

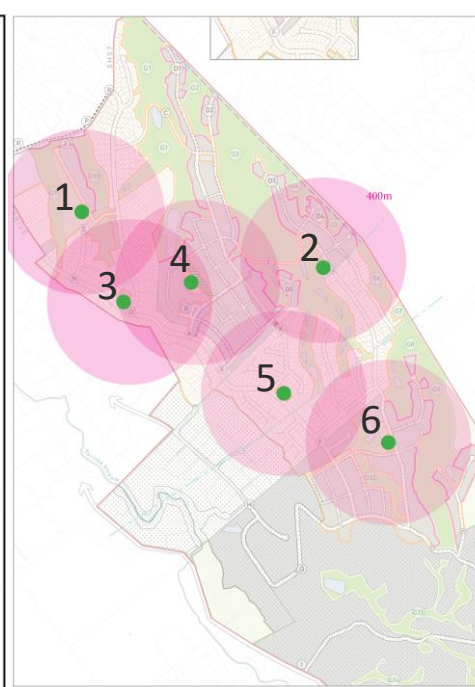
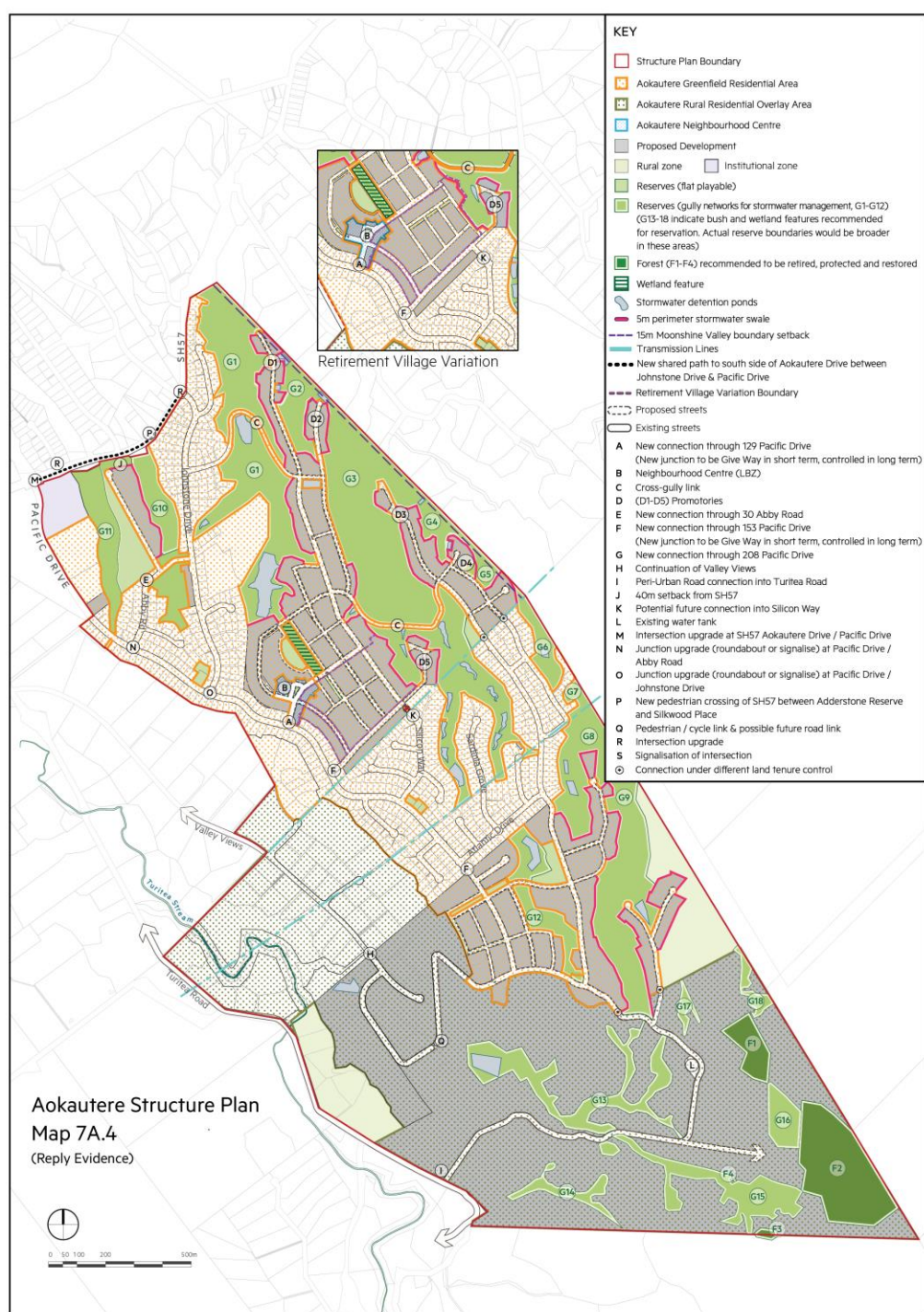




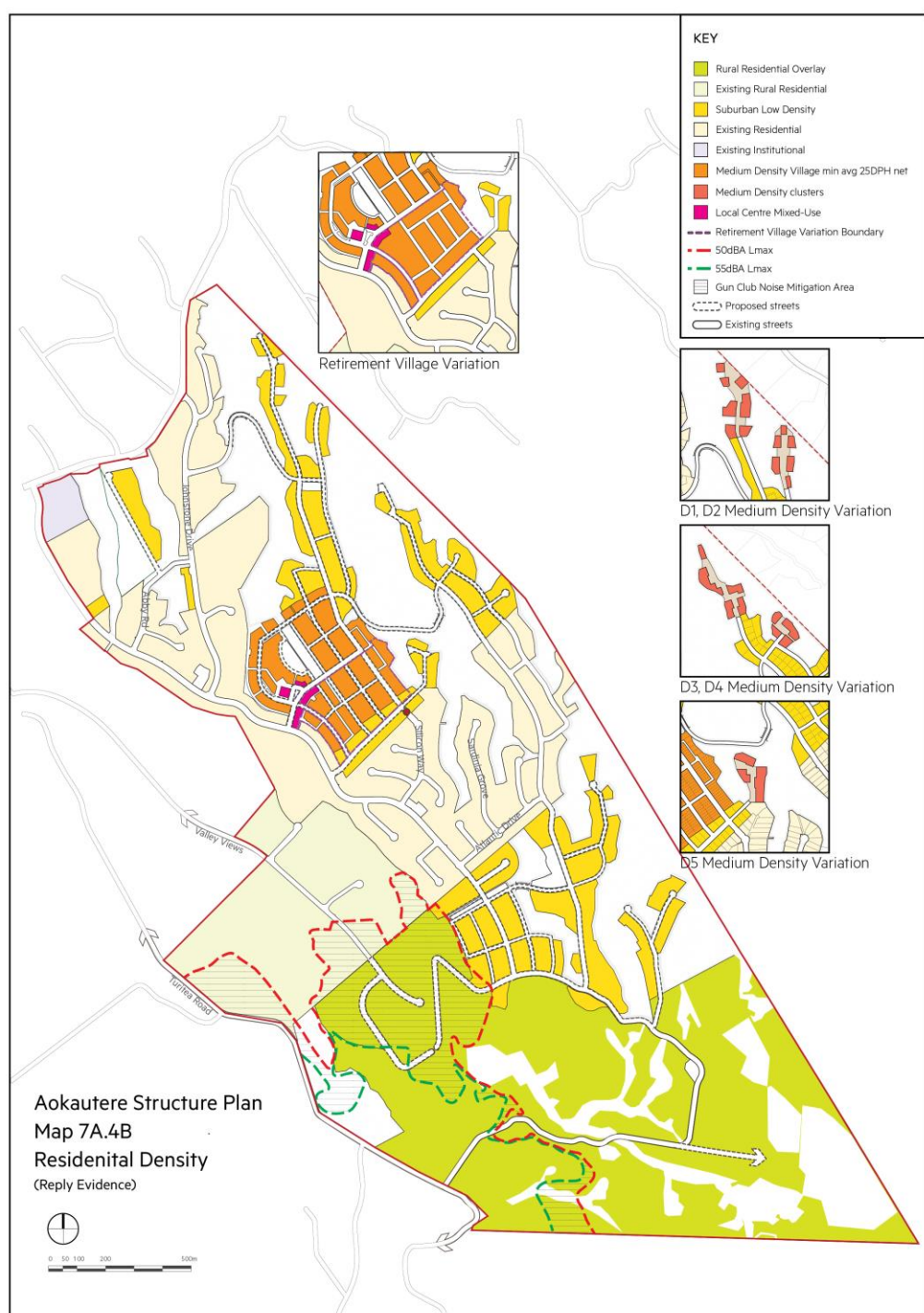
Development testing

Principles-based approach



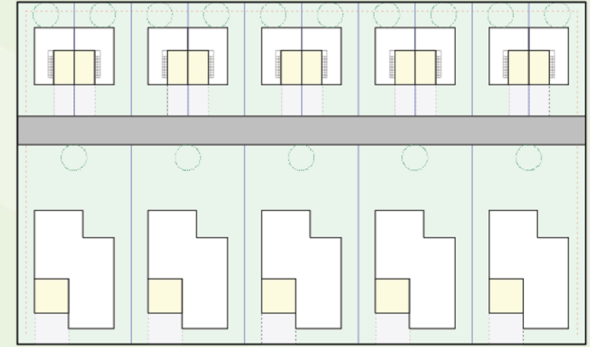


- Existing & Proposed areas / zones
- Residential, Retirement Village
- Rural Residential
- Local Centre (LBZ)
- Gullies G1 – G12 & G13 – G18
- Promontories (D1 – D5)
- Suburban & N'hood Reserves
- Blocks prioritise public streets
- Setbacks (5m & 15m)
- Detention Ponds

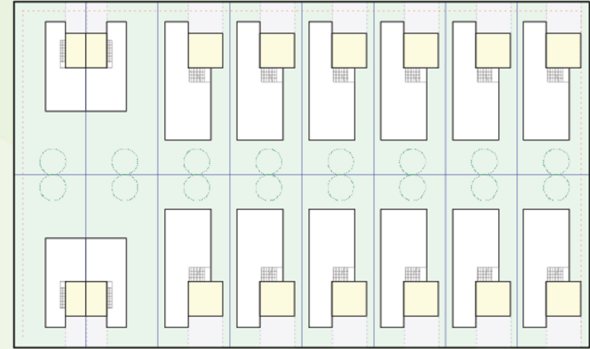


Density

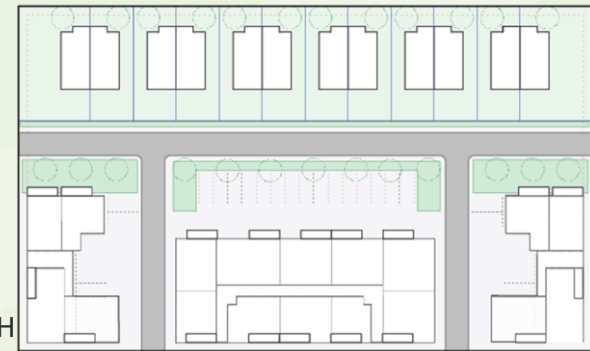
- Range in residential density
- Both requires & enables MD
- Integrates with existing areas
- Generates housing variety
- Supports centre catchment
- Promotes active modes
- Enables retirement village



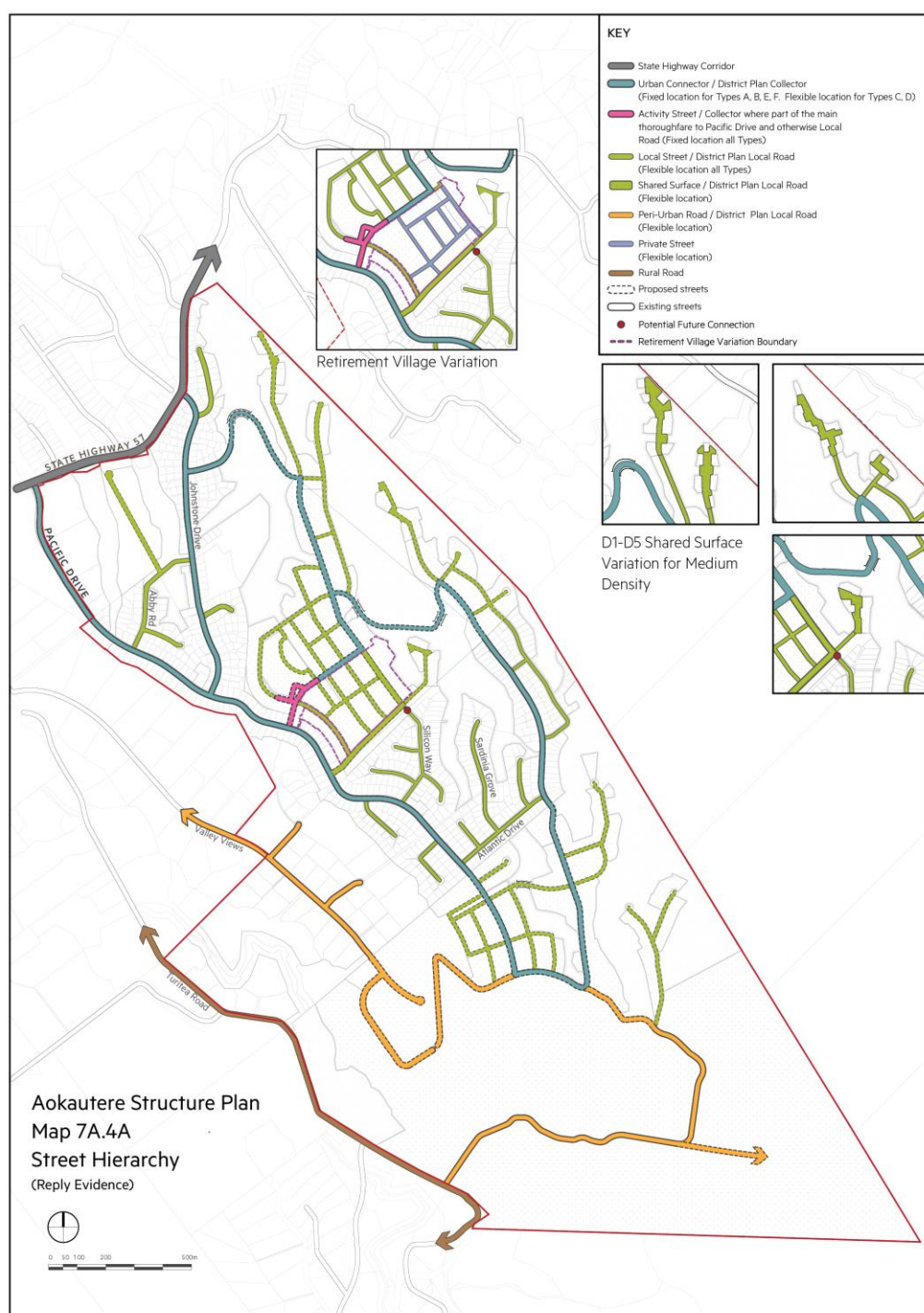
25DPH



51DPH



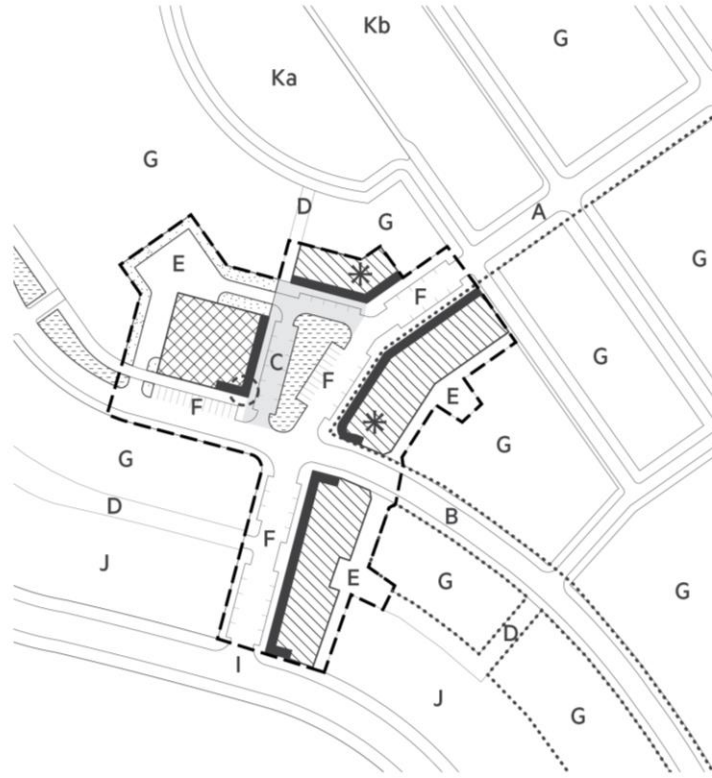
63DPH



Street Network

- Hierarchy of types / ONF
- Fixed and Flexible locations
- Provides a connected system, loops, all streets lead to streets
- Minimises cul-de-sacs
- Permeable, walkable blocks
- Gully access & cross-gully links
- Curvilinear & orthogonal

- Urban Connector
- Activity Street
- Local Street
- Peri-Urban Road



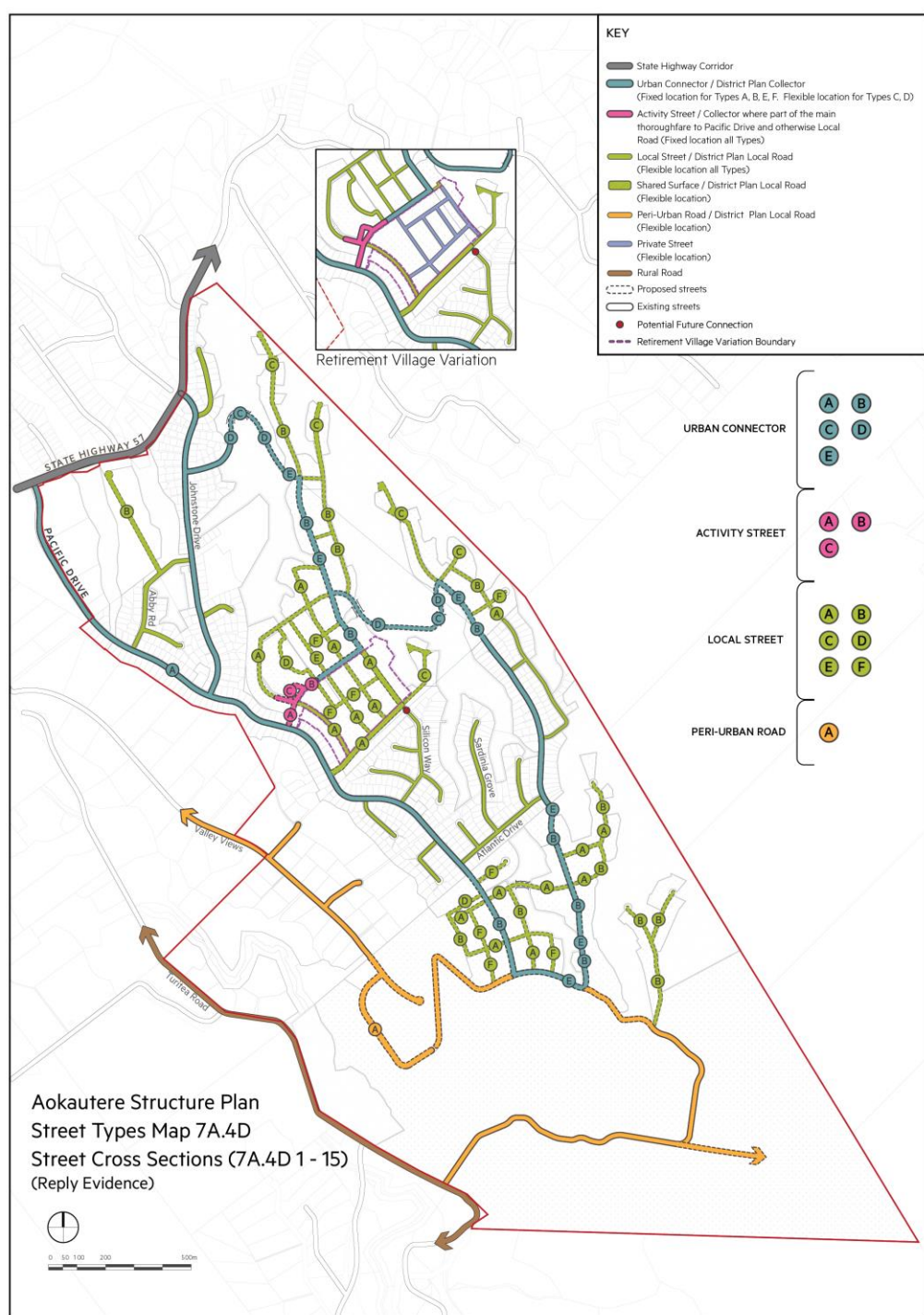
- Local Centre Boundary
 - Ground Floor Retail, Commercial or Retirement Village Communal Facilities
 - Anchor Store
 - Landscaped Open Space (Public)
 - Landscaped Perimeter (Private)
 - Retail Frontage
 - Anchor Store Main Entrance
 - Local Landmark Opportunity
 - Possible Retirement Village
 - Shared Street
- A** Urban Connector
 - B** Local Street
 - C** One Way Shared Street, parking
 - D** Lane (Shared Surface)
 - E** Service Access
 - F** Activity Street with On-Street Parking / Bus Stops
 - G** Medium-Density Housing
 - I** Connection to Pacific Drive
 - J** Existing housing
 - Ka/b** Reserve (& Wetland Feature)

Local Centre

- Large n'hood centre with anchor tenant
- Well located, connected to movement
- Integrated with housing, promotes walking
- Street-fronting commercial, parking/servicing
- Focal space, shared street



Structure Plan Street Types & Cross Sections



Street Types

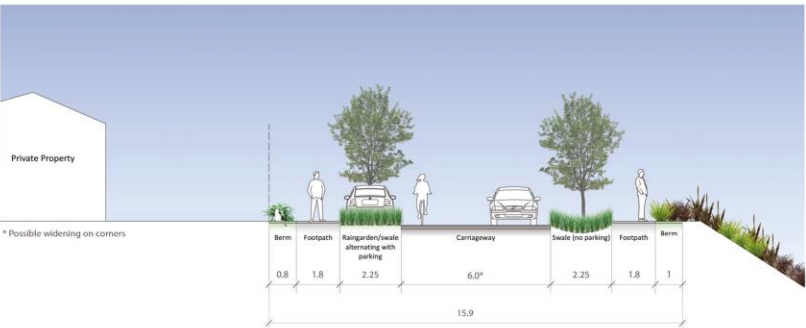
- Meet the requirements of PNCC traffic advice (note updates)
- Consistent public realm
- Respond to varying conditions
- A range of streetscapes
- Integrated amenity outcomes

Local Street

B

Notes

- Target operating speed 30km/h
- No stormwater to drain towards the gully edge



Aokautere Structure Plan Street Cross Section 7A.4D 11

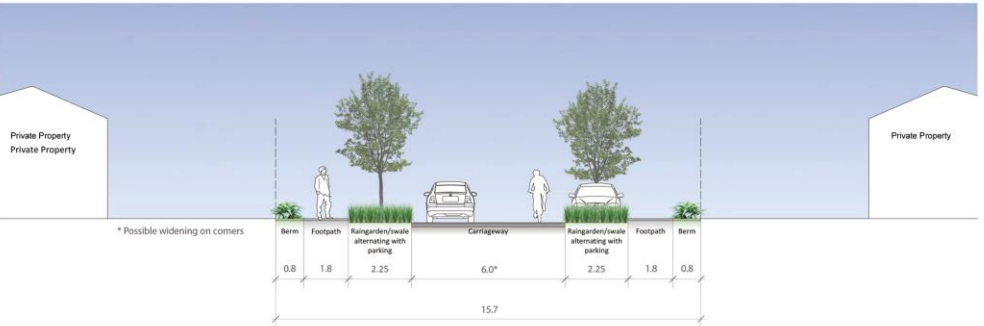
PALMERSTON NORTH

Local Street

A

Notes

- Target operating speed 30km/h
- No stormwater to drain towards the gully edge



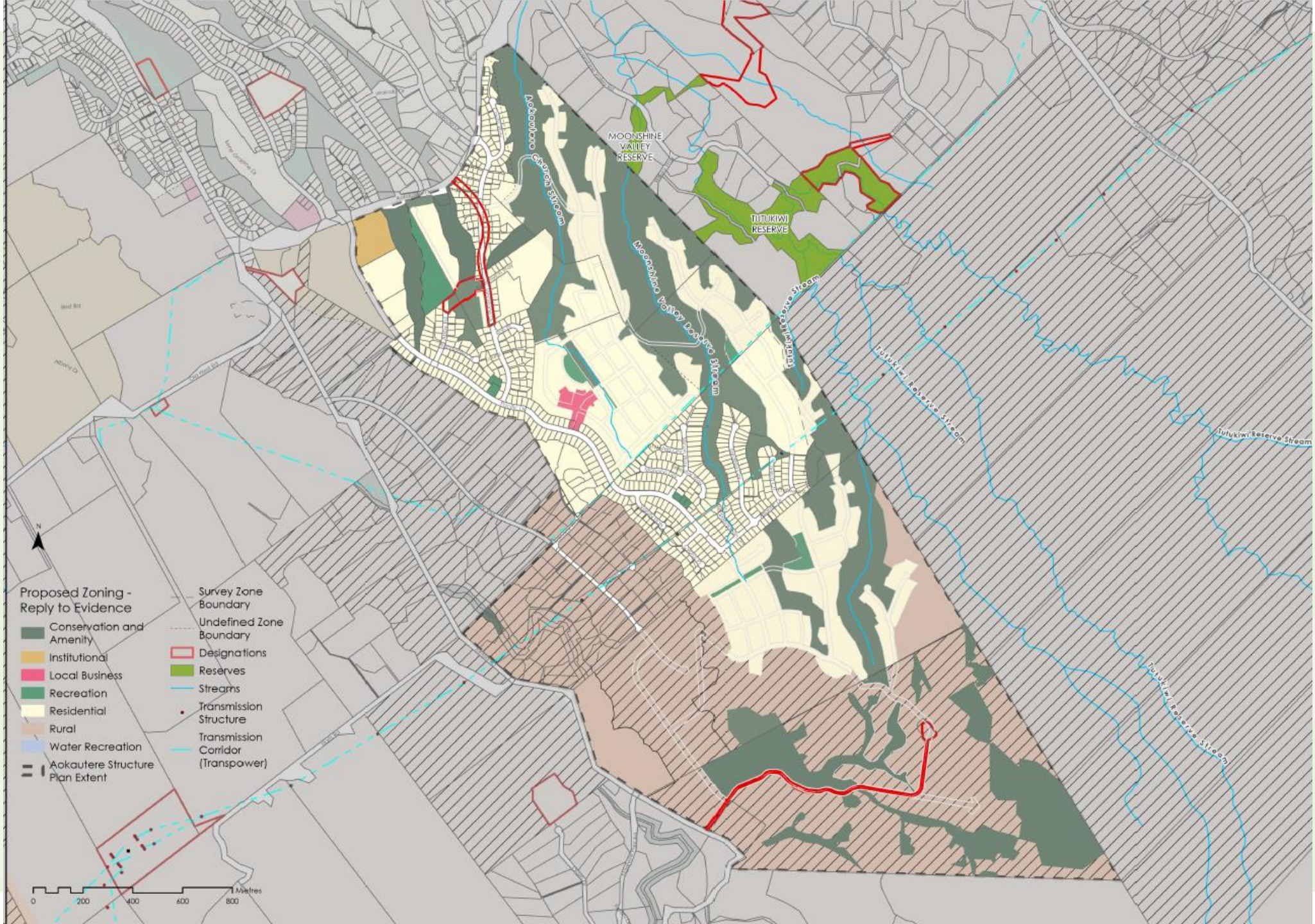
Aokautere Structure Plan Street Cross Section 7A.4D 10

PALMERSTON NORTH

Planning (Introduction Plan Framework)

Anita Copplestone

Zoning Maps



Proposed Zoning - Reply to Evidence

- Conservation and Amenity
- Institutional
- Local Business
- Recreation
- Residential
- Rural
- Water Recreation
- Aokautere Structure Plan Extent

- Survey Zone Boundary
- Undefined Zone Boundary
- Designations
- Reserves
- Streams
- Transmission Structure
- Transmission Corridor (Transpower)



Landscape

John Hudson



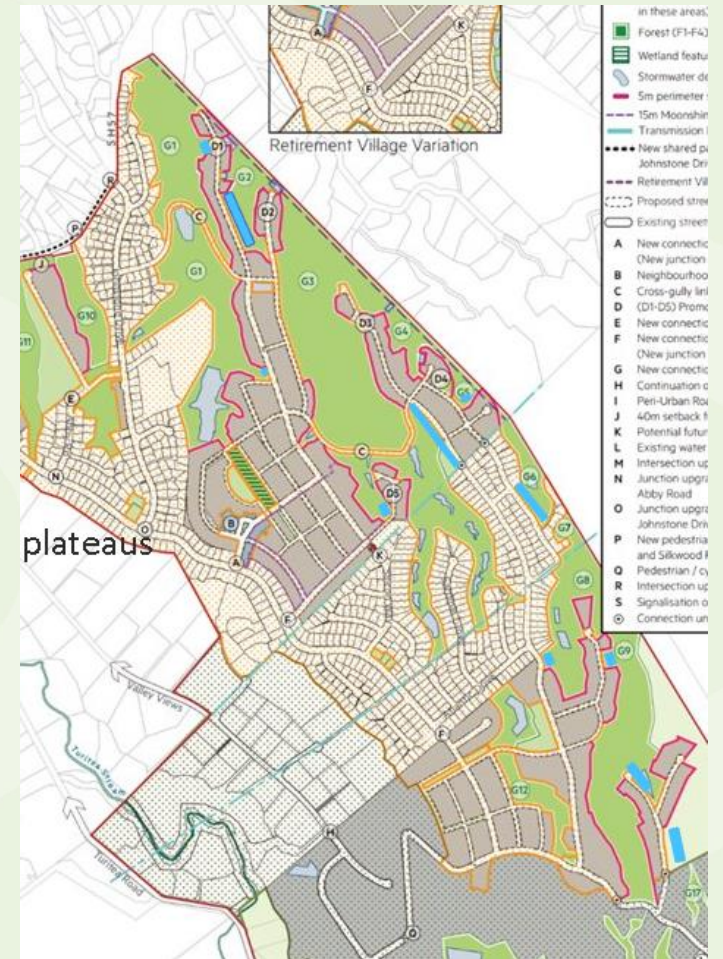
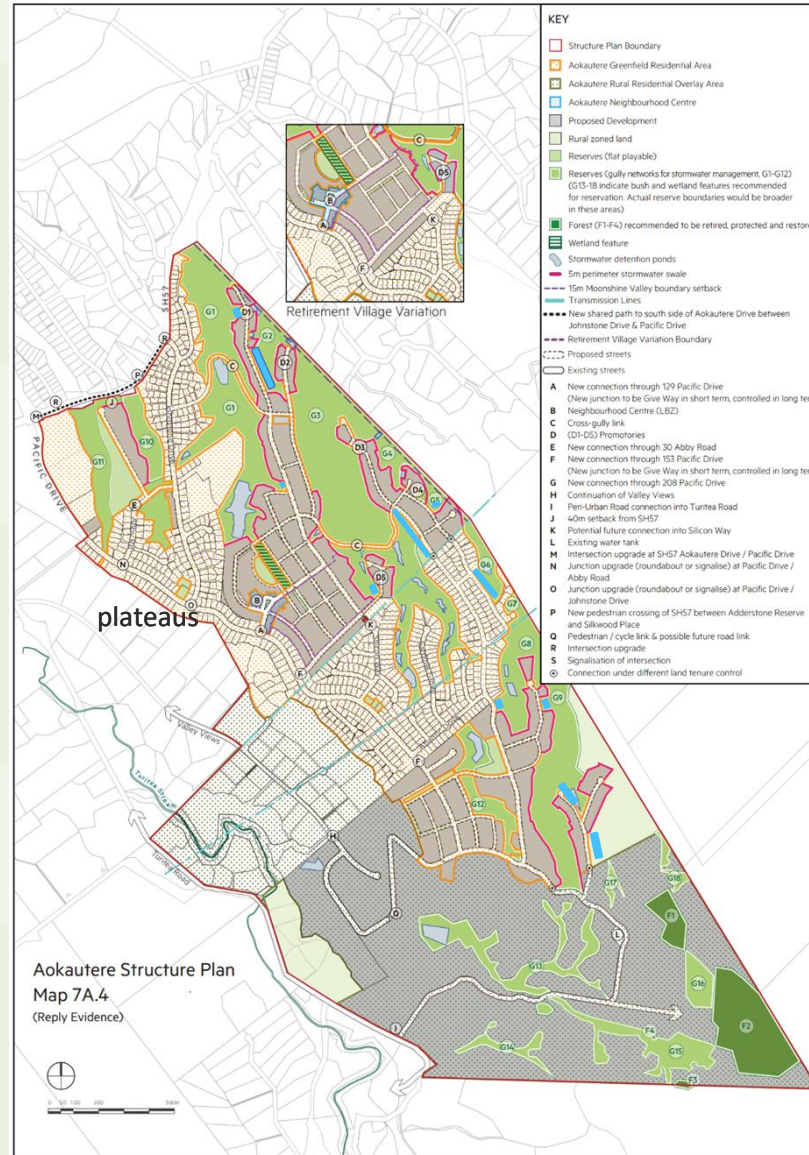
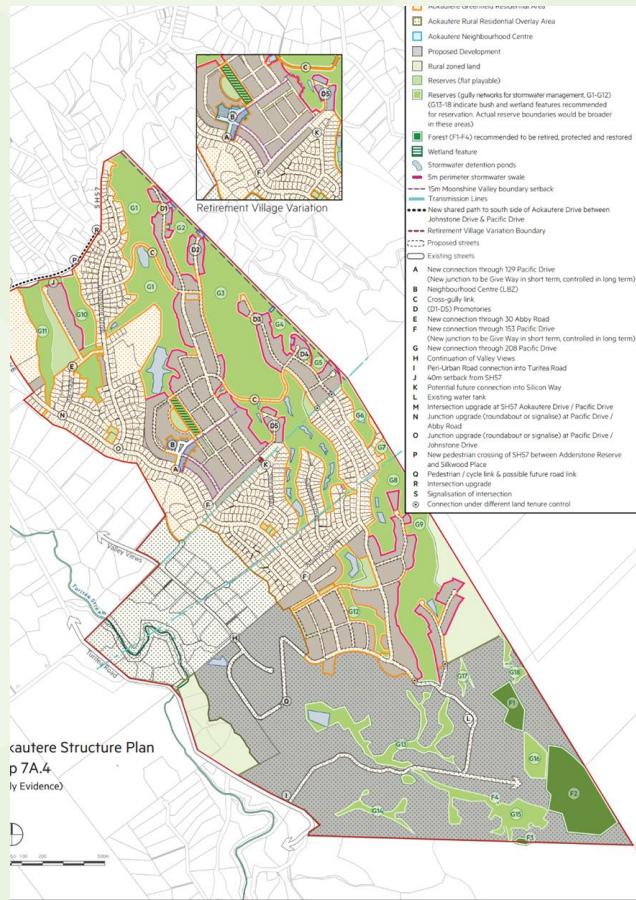
Road crossings dipped across gullies



Landscape characterised by flat plateaus and contrasting gullies



Example of housing on both sides of the road privatising views



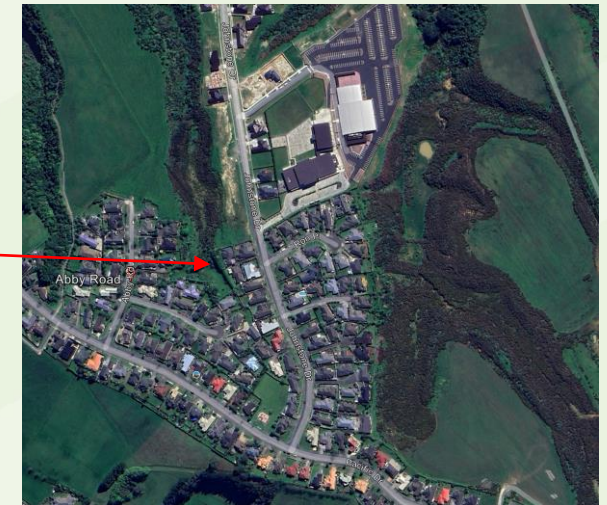
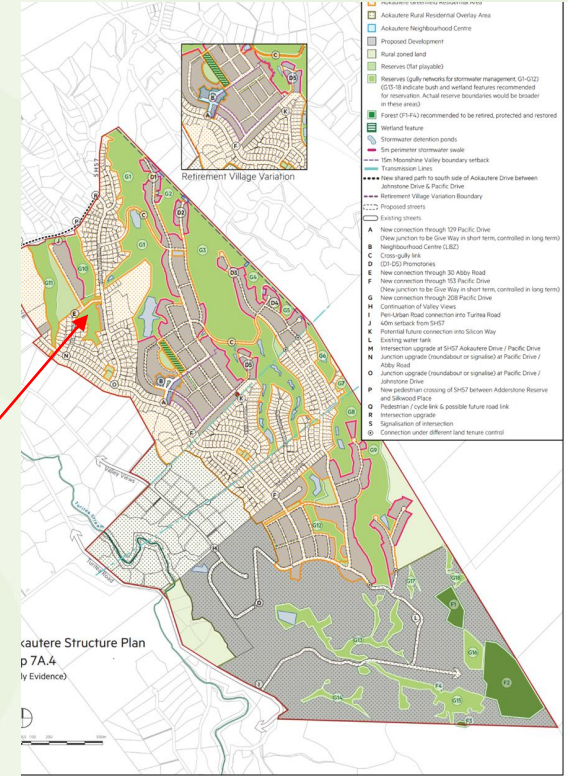
Single sided road lengths in blue



*Gullies along Moonshine Valley
boundary prevent hard edge for houses*



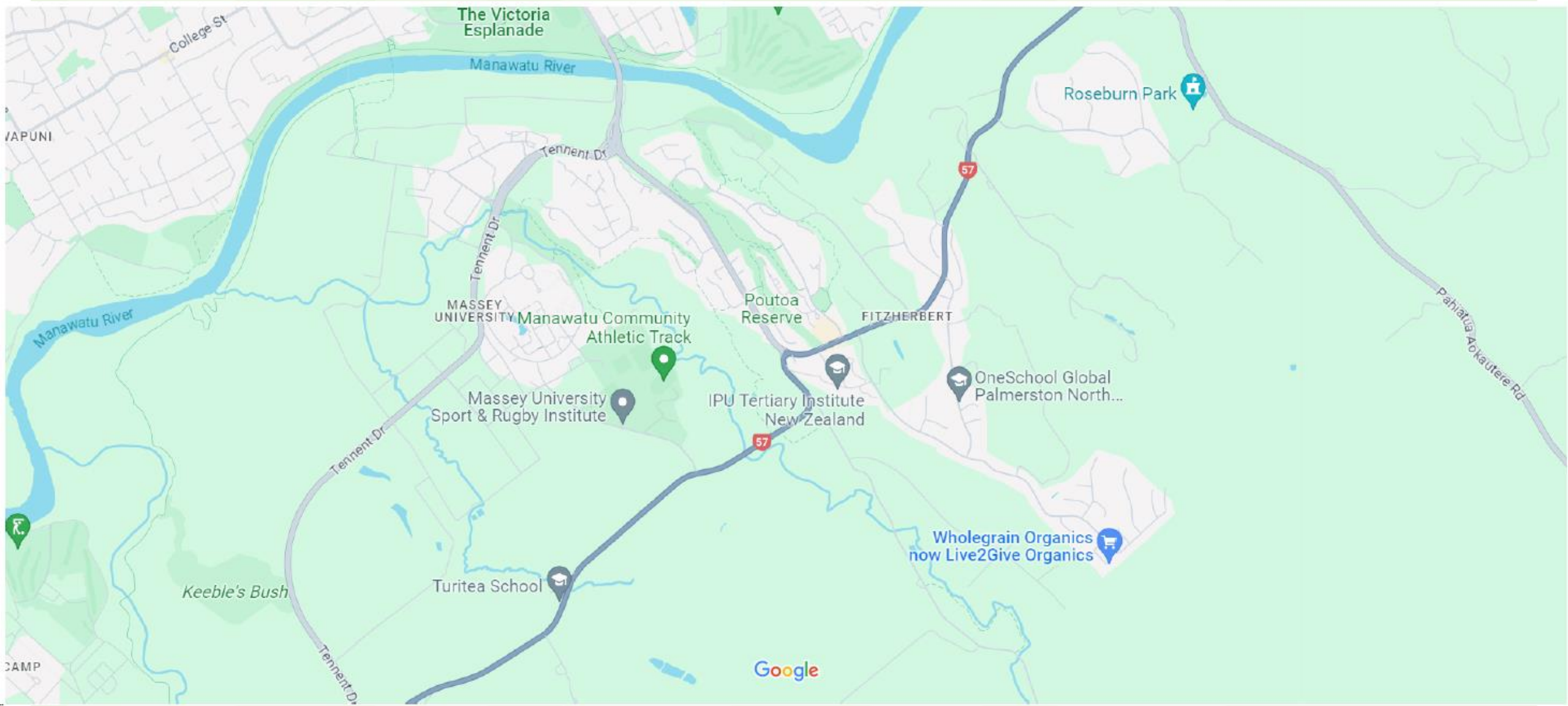
Abby Road Gully



Transport

Harriet Fraser

Aokautere Area



College St

The Victoria Esplanade

Manawatu River

Roseburn Park

Tennent Dr

Tennent Dr

MASSEY UNIVERSITY
Manawatu Community Athletic Track

Poutoa Reserve

FITZHERBERT

Massey University Sport & Rugby Institute

IPU Tertiary Institute New Zealand

OneSchool Global Palmerston North...

Pahiata Aokautere Rd

Keeble's Bush

Turitea School

Wholegrain Organics
now Live2Give Organics

Google



Palmerston North Integrated Transport Initiative

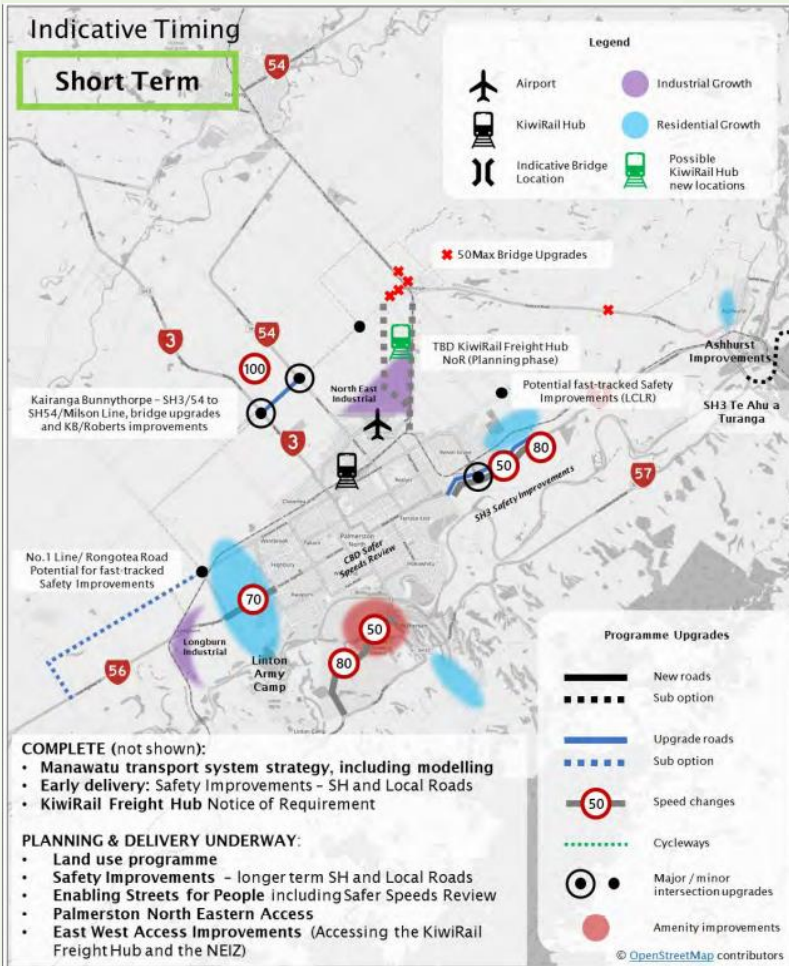


Figure 0-1: Short Term Programme

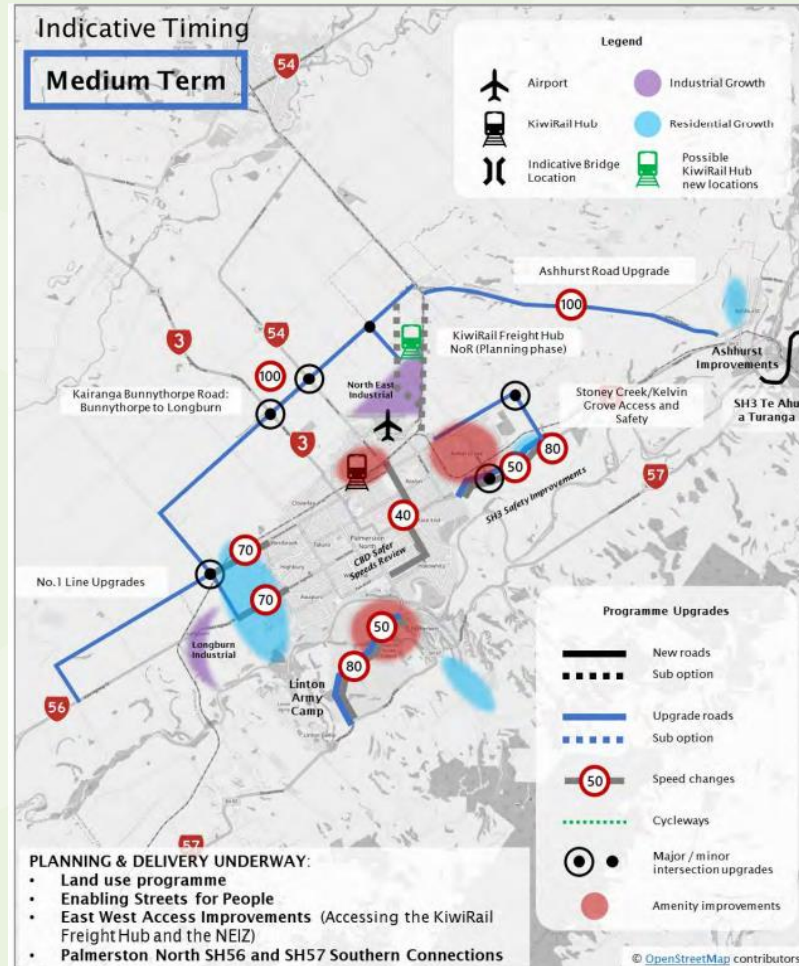


Figure 0-2: Medium Term Programme

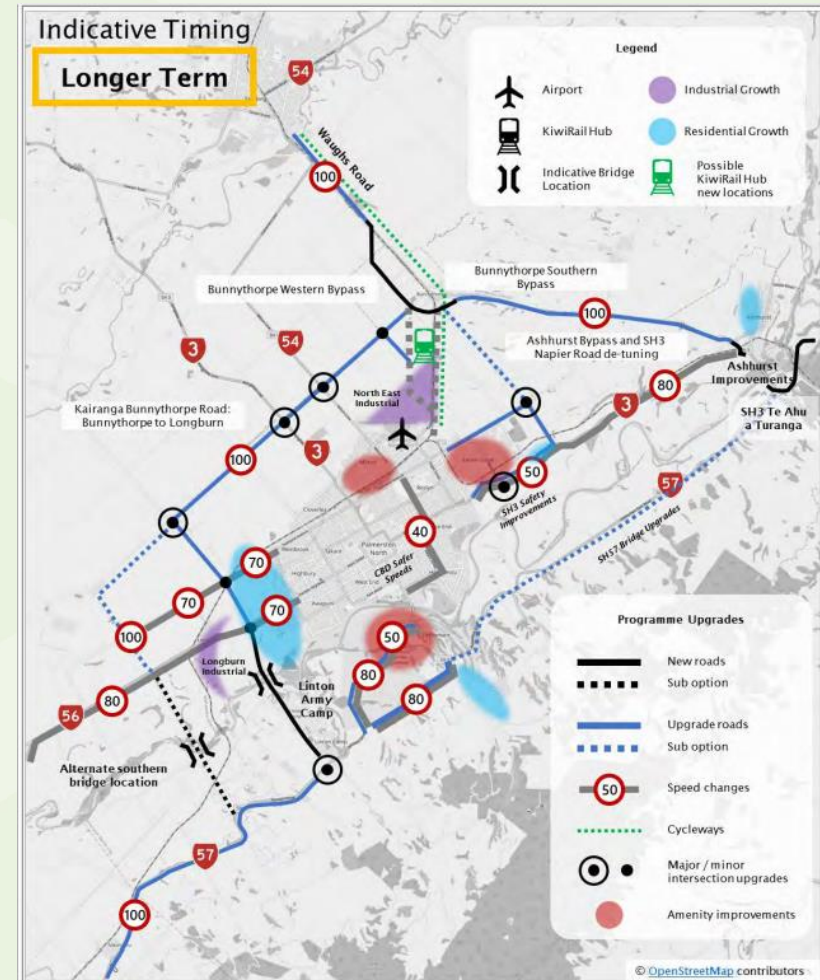
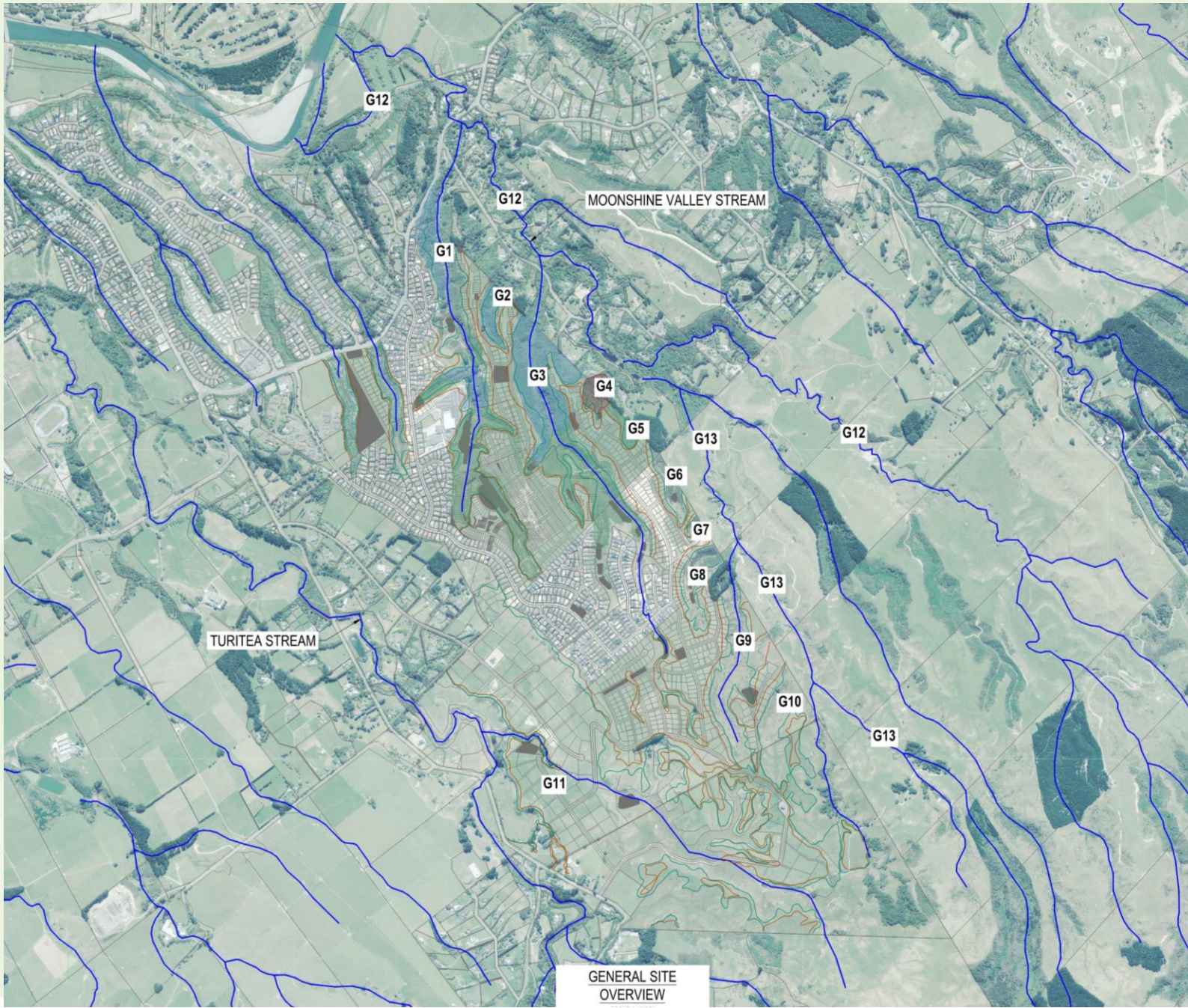


Figure 0-3: Longer Term Programme

Stormwater

Reiko Baughman and Tony Miller

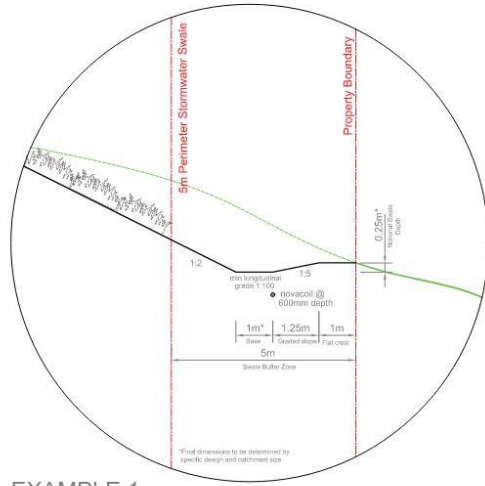
Catchment Overview



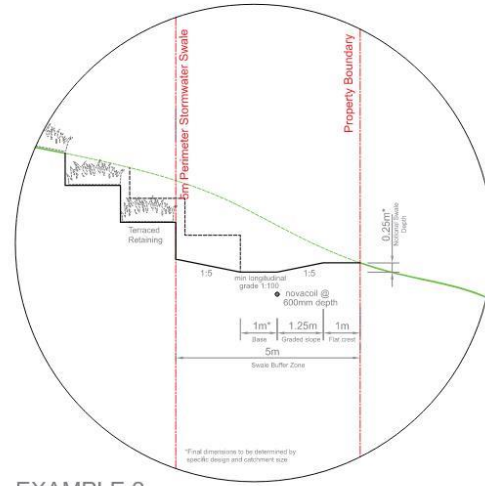
GENERAL SITE
OVERVIEW

Revised Perimeter Swale

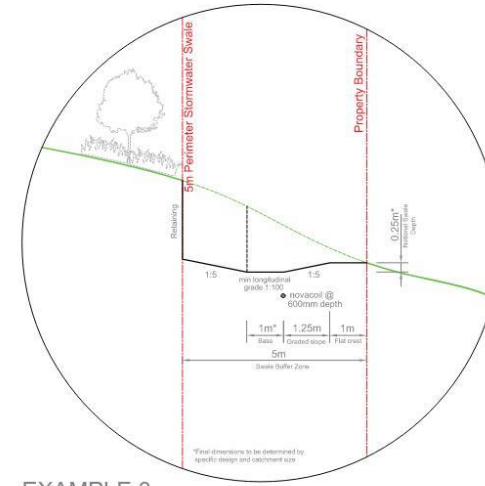
CROSS-SECTION EXAMPLES - STORM WATER SWALE



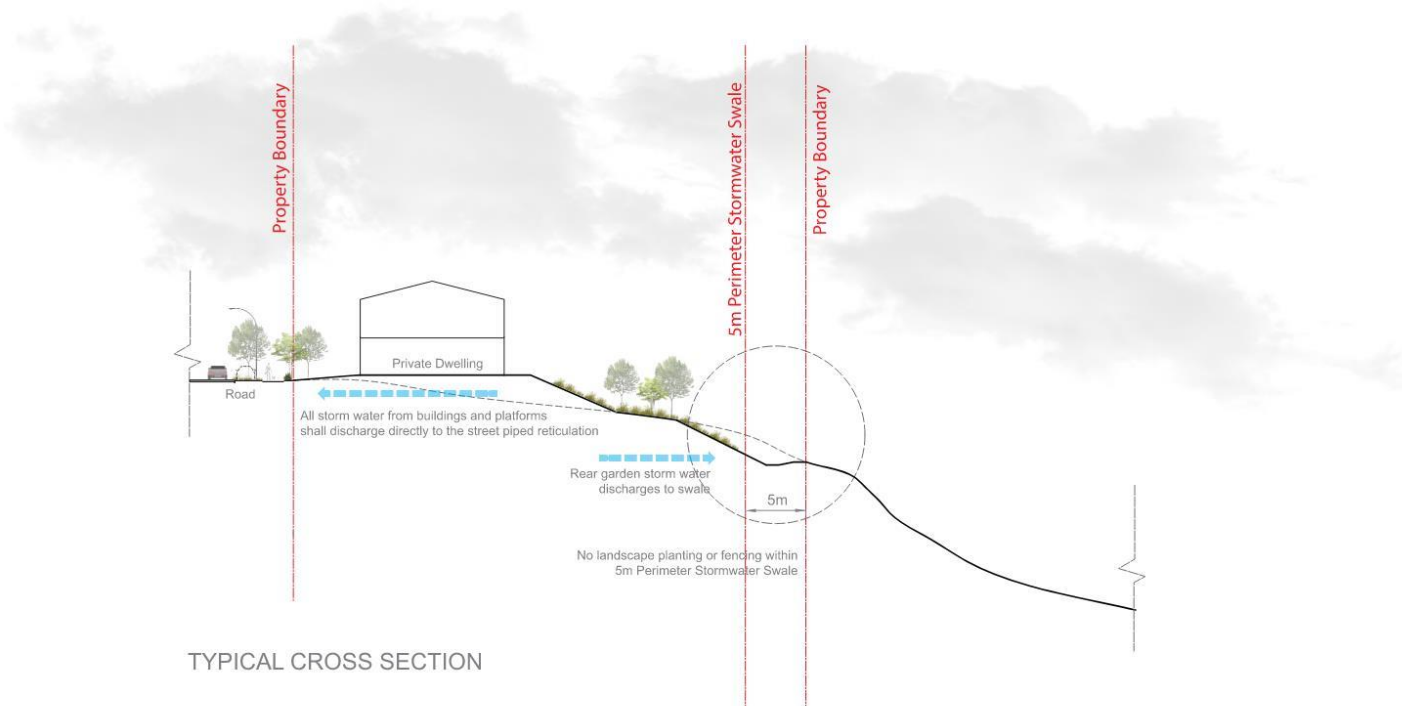
EXAMPLE 1



EXAMPLE 2



EXAMPLE 3



TYPICAL CROSS SECTION