
Ian McKinnon Drive Cycleway

The importance of continuity and standards

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Director and Principal Consultant

continuity

- **What is it?**
 - the maintenance of continuous action and self consistent detail
 - So people get what they expect
- **Why it's important?**
 - so that the people intuitively know they right
 - reaffirms they are on the correct route
 - easy to follow
 - feels and is safe

standards

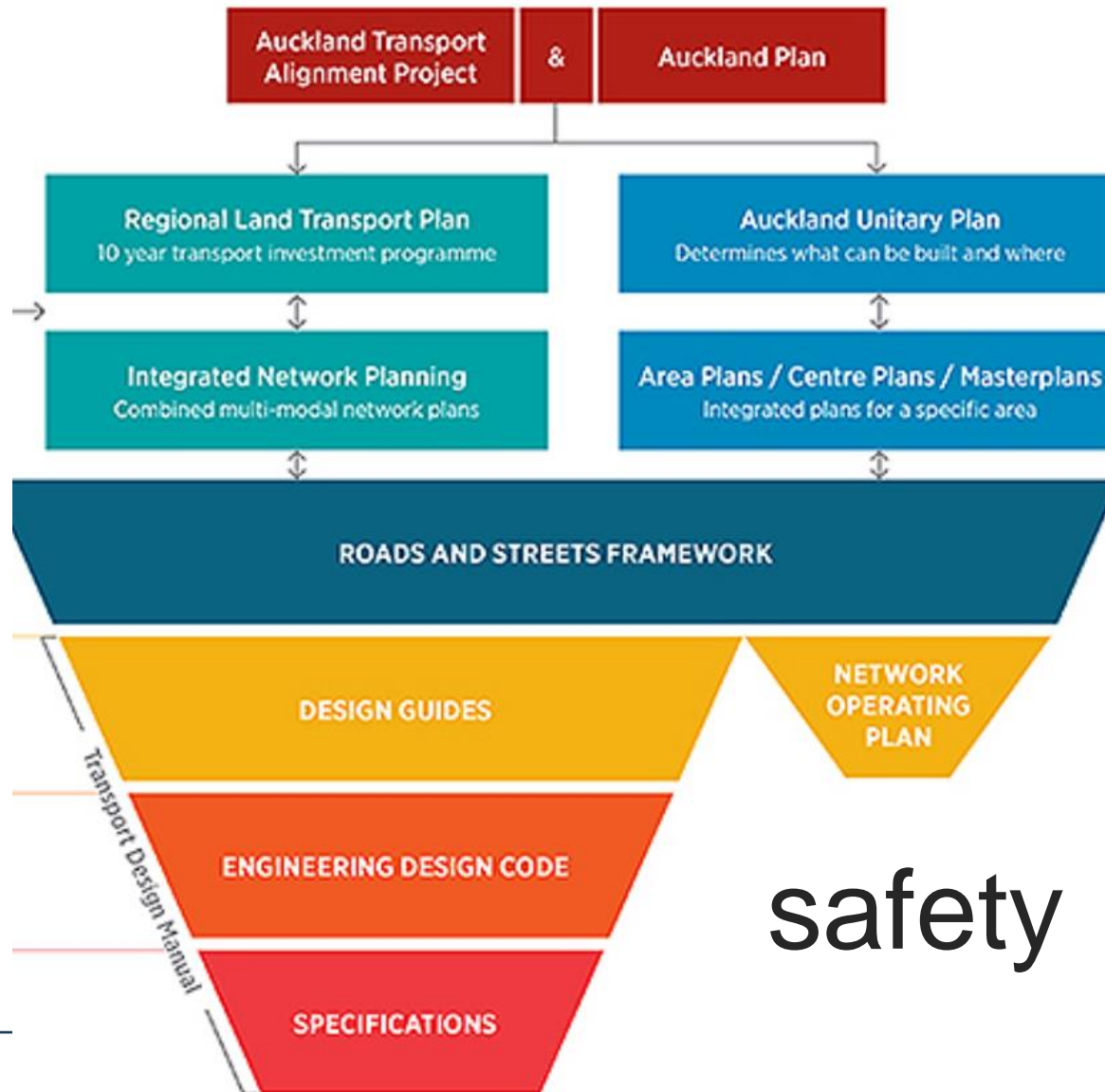
- **What are they?**
 - A required or agreed level of quality
- **Why it's important** in life (cycleways and shared paths)?
 - So that things that work are shared and repeated
 - So that people understand what is good and not good
- **Leads to:**
 - Consistency
 - Efficiencies
 - Better safety

don't reinvent the wheel

place
function

people

movement
function



safety

don't reinvent the wheel

place
function

people

movement
function

- Roads and Streets Framework (RASf)
- Transport Design Manual (TDM)
- Design guidance
 - Urban Street and Road Design Guide
 - Engineering Design Code
 - Walking
 - Cycling
 - ...and eight others
 - Specifications

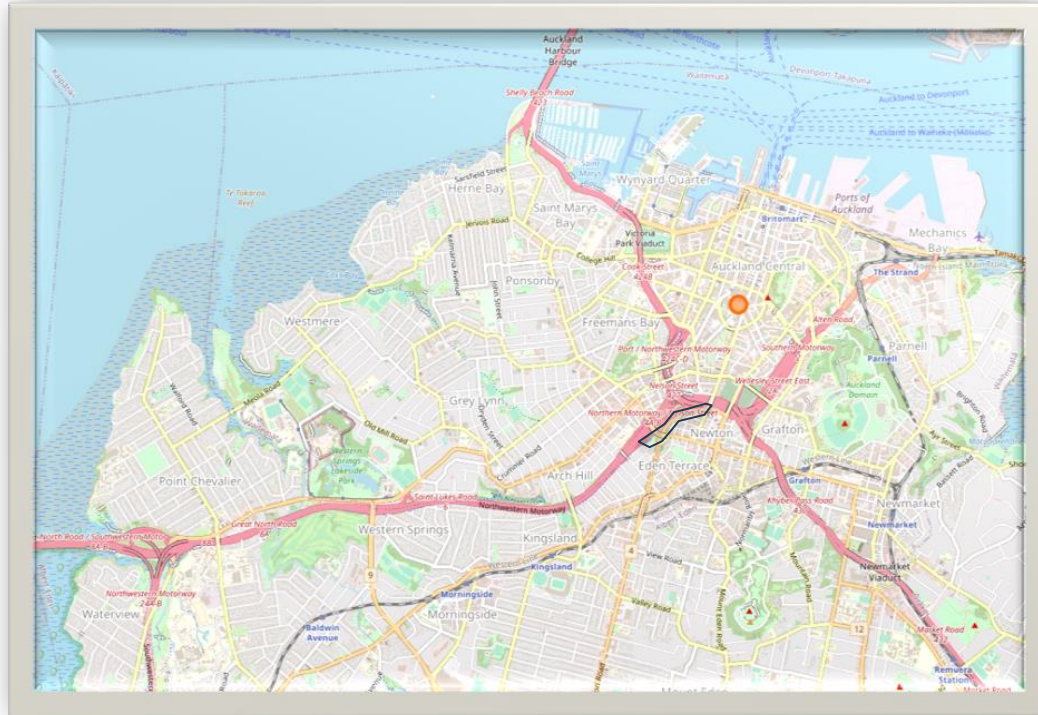
Case Study

Ian McKinnon Drive Cycleway

.....if you make it easy and safe then people will use it.....

Where is Ian McKinnon Drive?

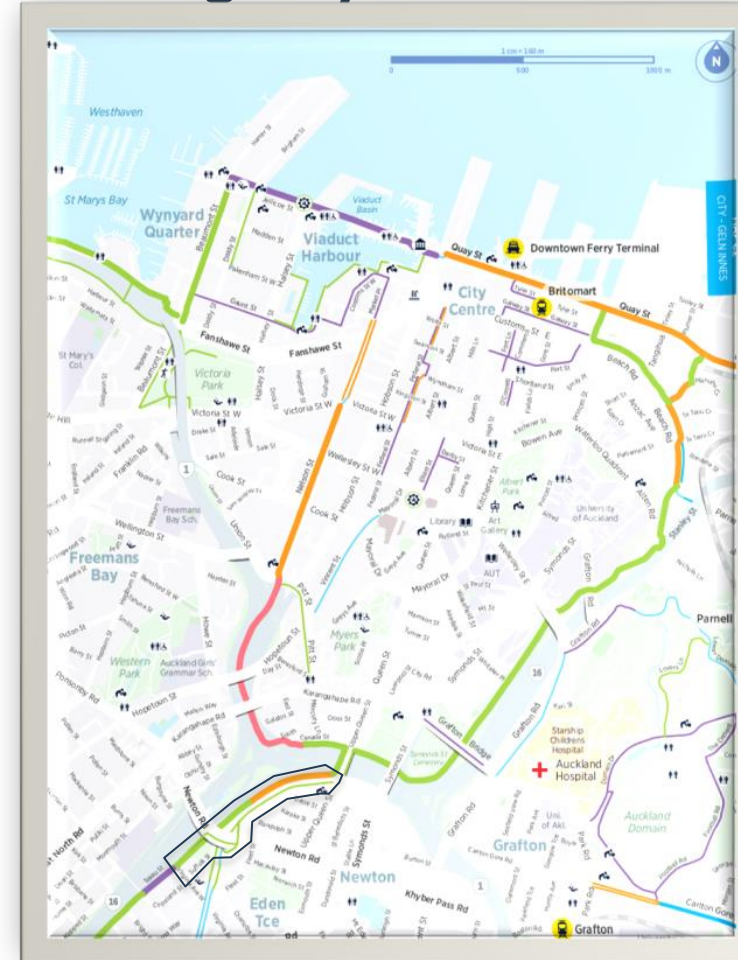
Auckland Central



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Auckland Transport

Strategic Cycle network



route continuity

4 x major cycle and
walking routes

Nelson Street
Grafton Gully
North Western
Dominion Road



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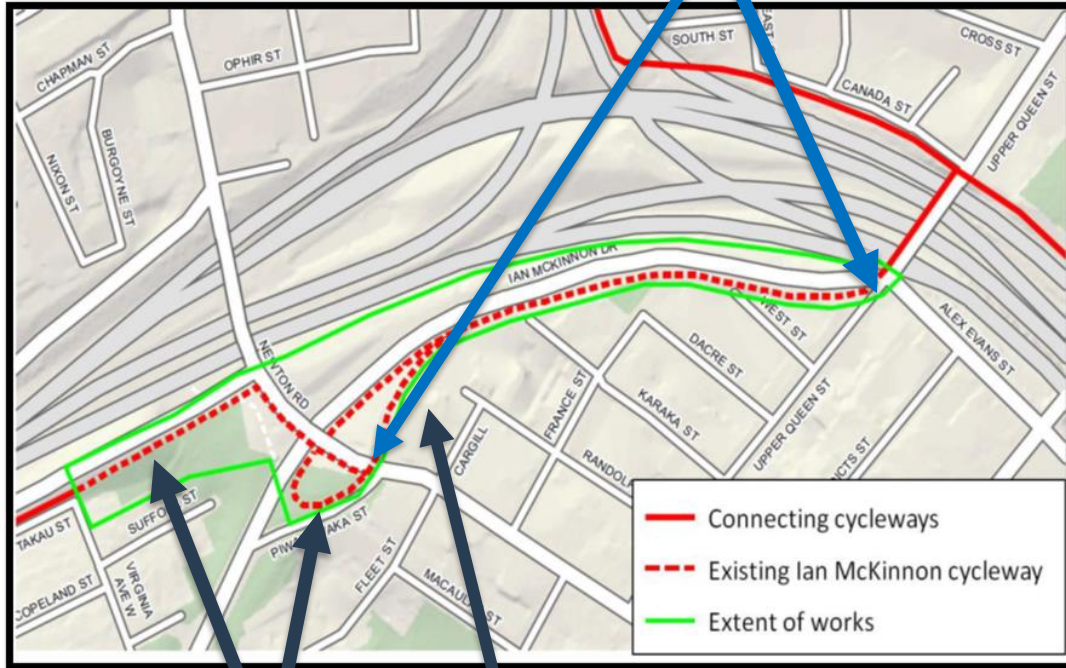
route continuity challenges

Off-road cycleway

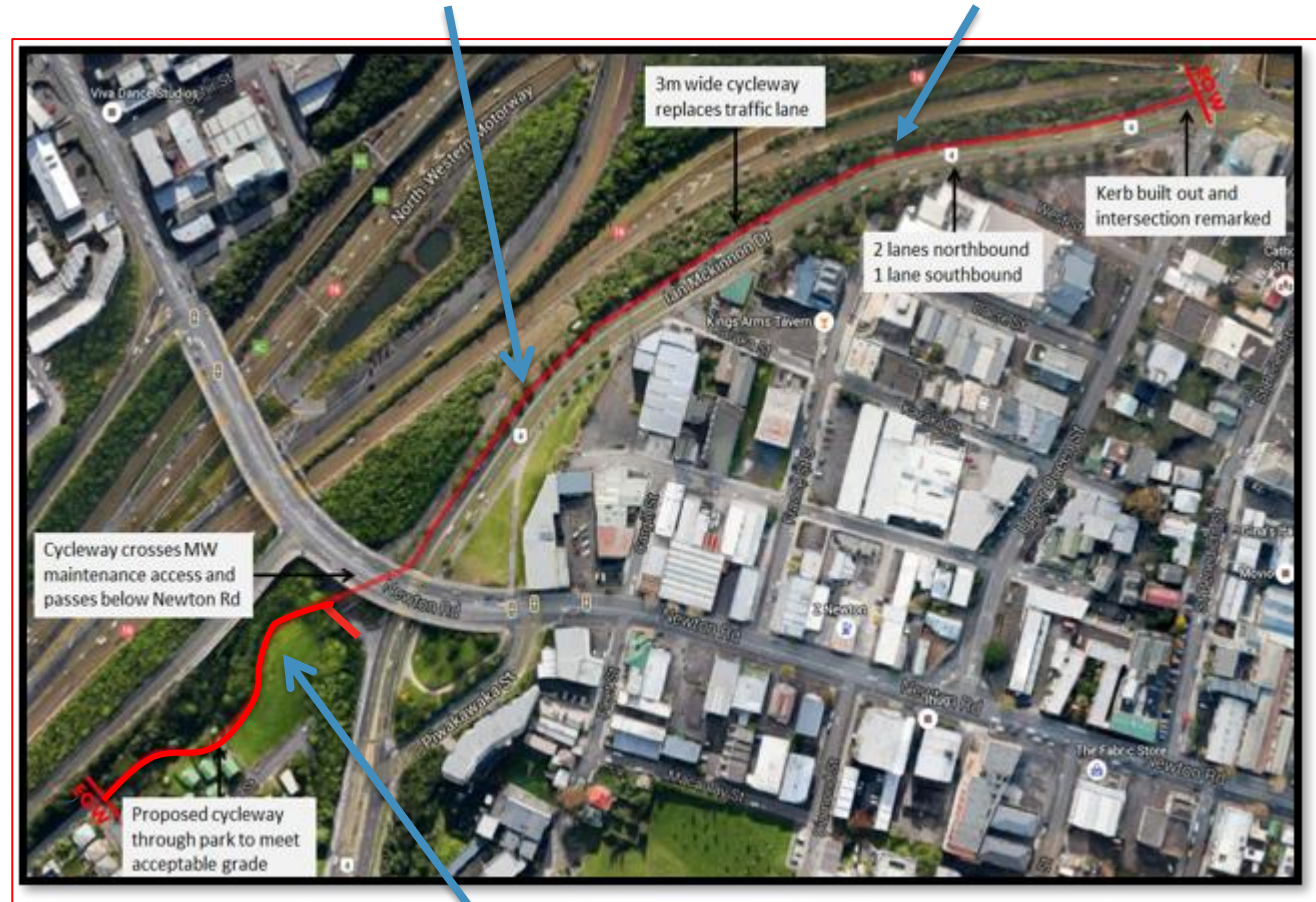
On-road separated cycleway

Before

Road Crossings



Steep sections



Shared path through reserve to Dominion Road

Proposed

challenges and planning



Wet land and flooding



Dense Bush



construction challenges



Large trees next to property and getting large machinery in

Scoria creating piling issues



Large existing bridge foundations to work around

A key standard

Path width

- older standard (North-Western shared path)
 - 2.5 to 3m width
- current best practice standard
 - 3.0 to 4.0m width preferable at 4.0m

standards achieved

As envisaged – Upper Ian McKinnon



**On road 3.7m width
with 0.6m median separation**



As built – looking downhill

standards achieved

As envisaged through reserve



As-built



4 m width

safety improvements included

Additional definition to horizontal curve



Guidance for walking and cycling separation



improvements during construction



Kerb edging to retaining wall



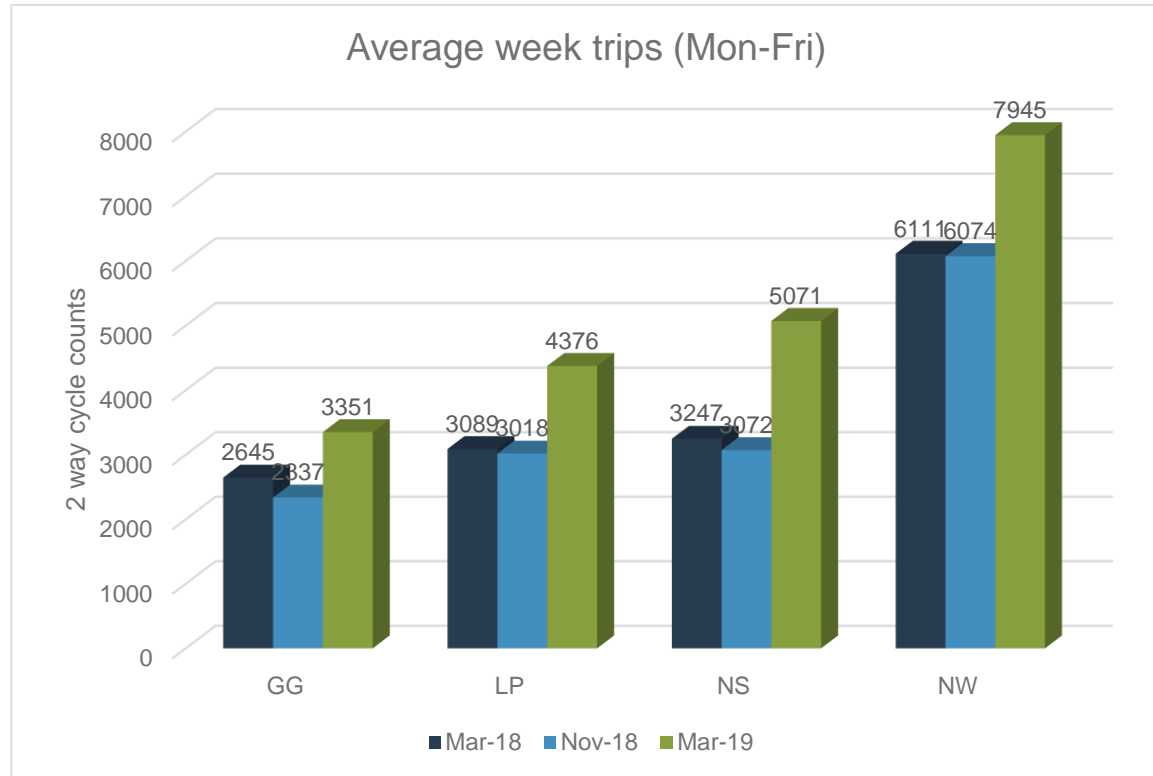
Corner splay

.....if you make it easy and safe then people will use it.....

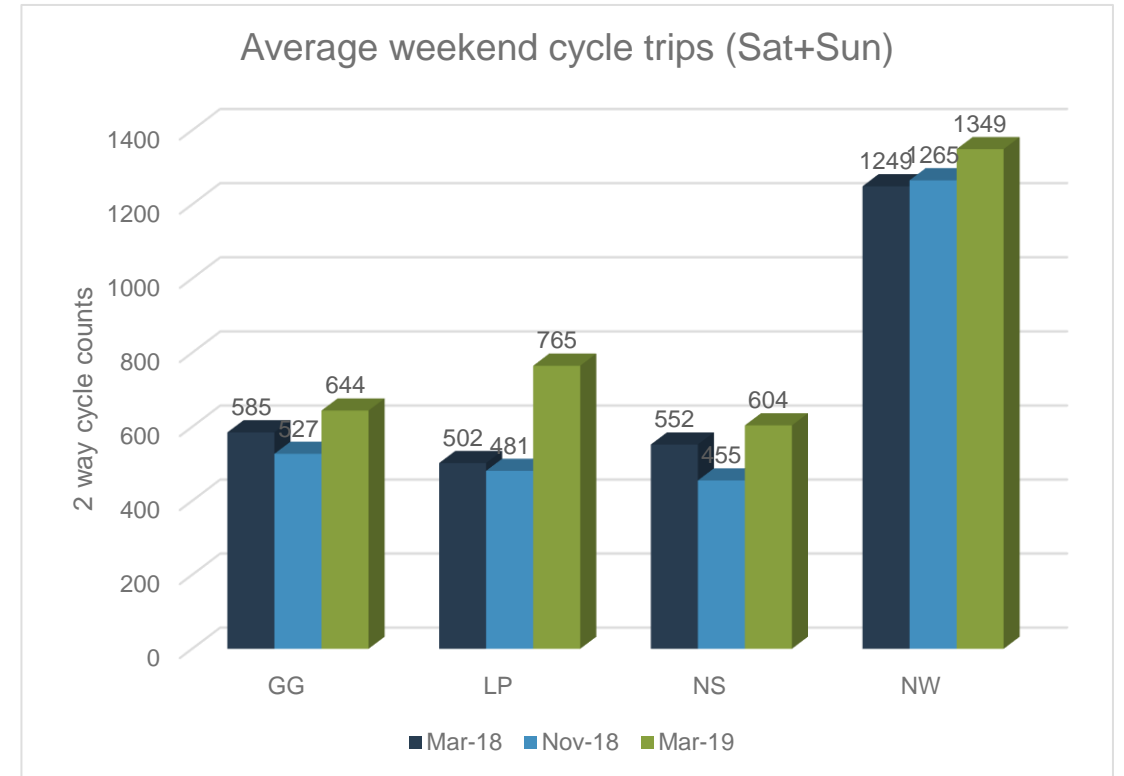
Growth between March 2018 and March 2019

	Counting stations	Week Monday to Friday	Weekend Saturday and Sunday
GG	Grafton Gully	26%	10%
LP	Light-path	42%	52%
NS	Nelson Street	56%	9%
NW	Northwestern (Kingsland)	31%	8%

But really the growth occurred between November 2018 when it opened and March 2019



Grafton Light Path Nelson Street North Western



Grafton Light Path Nelson Street North Western

This project showed that

- **Continuity and consistent standards** are important to success
- **Safety** can be improved throughout the design and construction
- Consider:
 - **all weather and light conditions** – dry, wet, daytime, dark, busy, windy
 - **all users** – commuters, sports cyclists, recreational cyclists younger and older cyclists, walkers, scooters, skateboards, mobility challenged ...
- **get rid of the tricky, challenging bits that cause people anxiety**
- Make it easy and safe and the usage of routes will increase substantially

.....if you make it easy and safe people will use it.....

It's a team effort!

More detail, acknowledgements and references are in the paper



Some photos from Sunday



Thanks and questions



Ken Lee-Jones

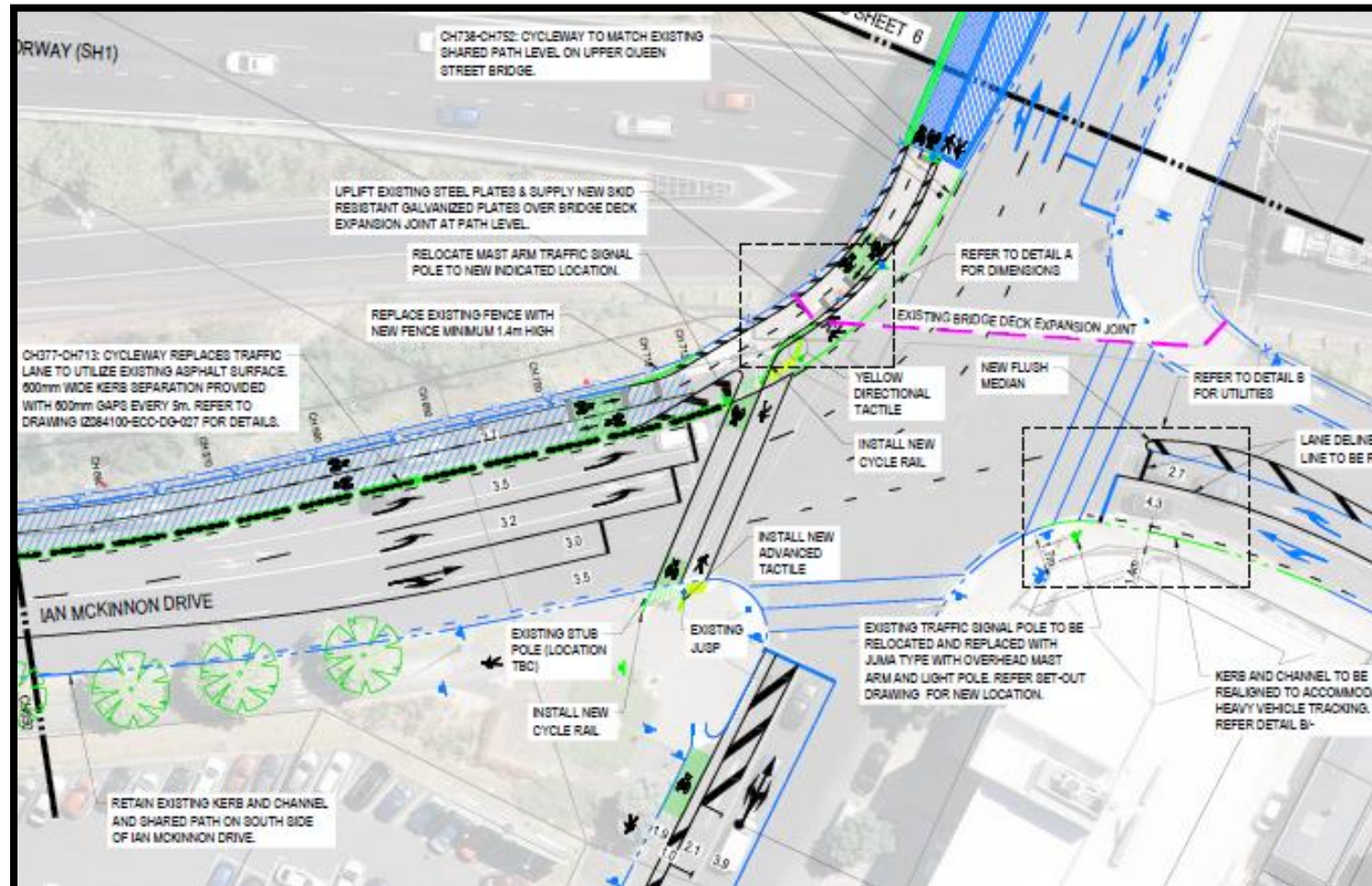
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Technical detail



Some standards considered

- path width
- materials for construction
- steepness
- ease of cornering
- Legibility
 - Surface markings
 - Signage
- Lighting
- Treatment of difficult areas

Design standards

- Cross-section Upper Ian McKinnon

