


Tamaki Drive Cycle Route

“Shaping Tamaki Drive for the Future”

**make
everyday
better.**

Transportation Group Conference 2021

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Tamaki Drive – the Problem

- Inadequate cycling facility to cater for 1,500 cyclist trips per day (on average) plus pedestrians
- Corridor unable to meet demand to meet safety, amenity, and performance needs of users
- Lower level of service compared to other cycleways nearby
- Arterial road carrying over 30,000 vehicles per day



Tamaki Drive – the Solution

- Deliver a high quality, safe and attractive cycle facility that existing cyclists while attractive new and potentially less confident cyclists
- Create a better cycle connection between Quay Street and the proposed GI – Tamaki shared path





2.4km long cycleway
(extension of the existing
cycleway from Quay Street
to Ngapipi Bridge)

Intersection
Improvements

New Pt
Resolution
Footbridge

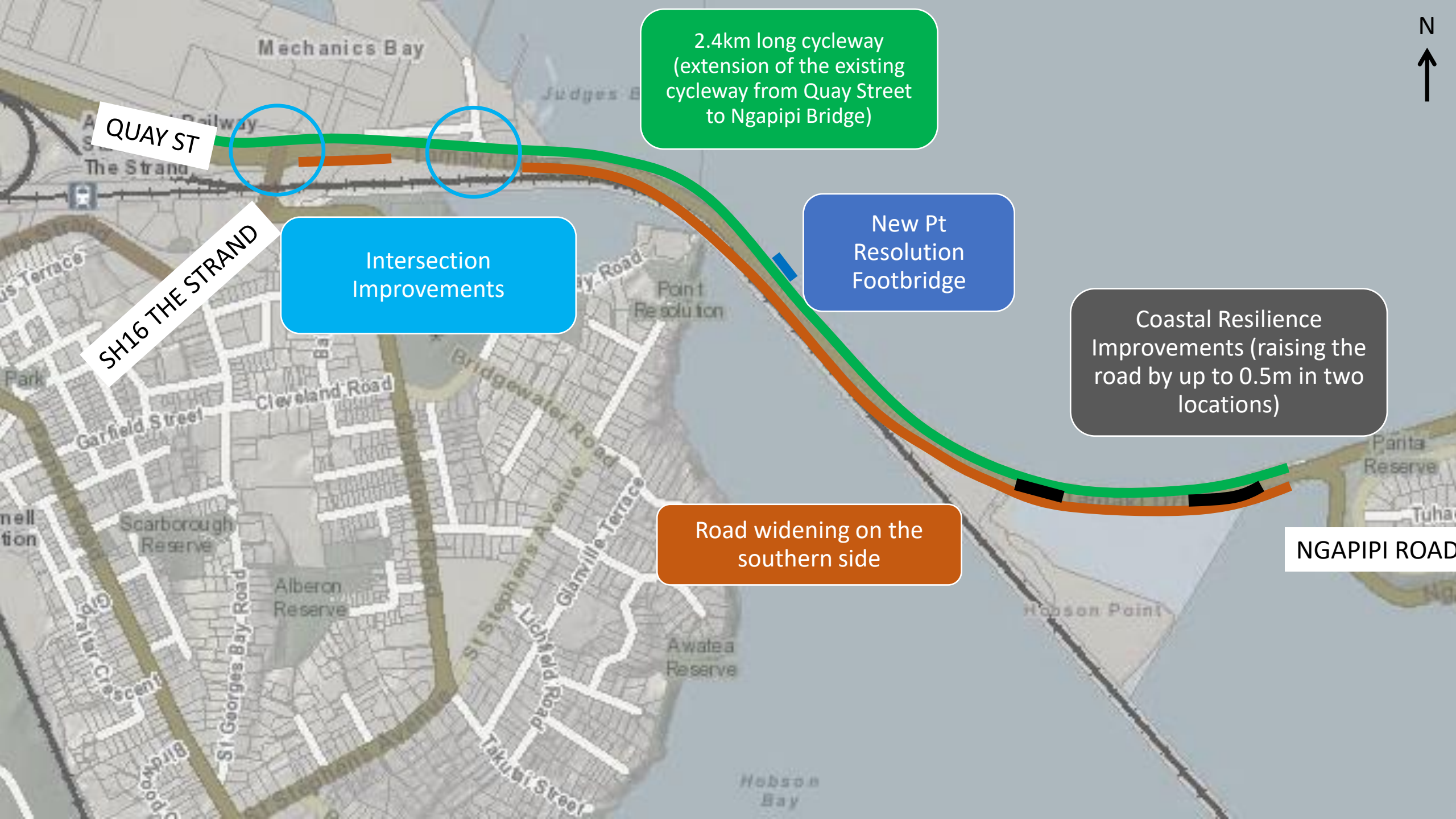
Coastal Resilience
Improvements (raising the
road by up to 0.5m in two
locations)

Road widening on the
southern side

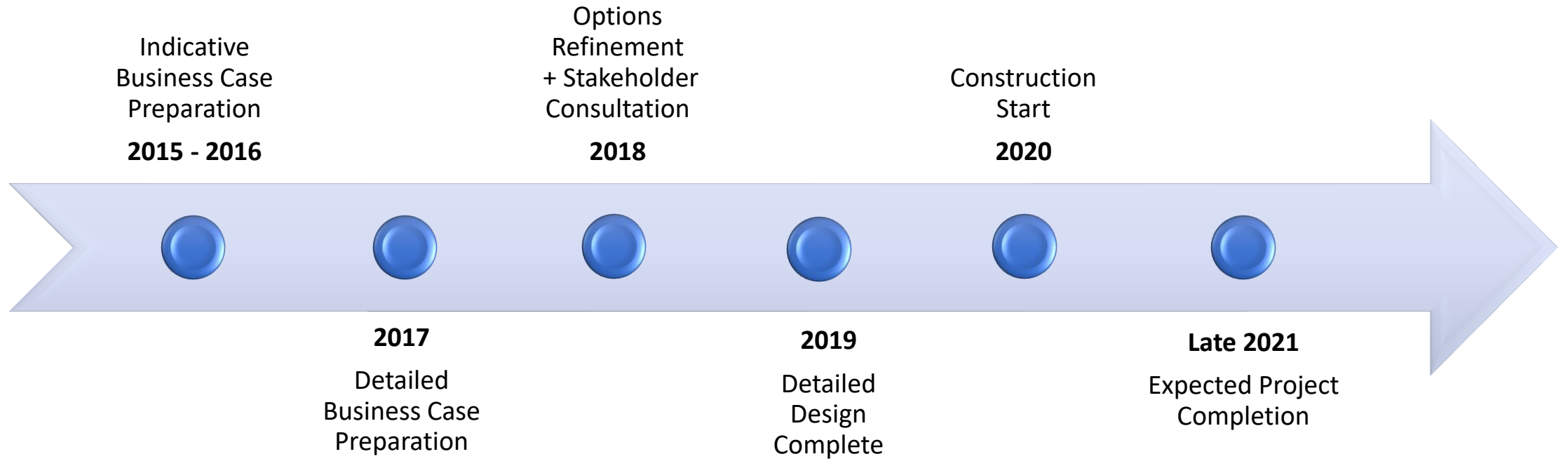
QUAY ST

SH16 THE STRAND

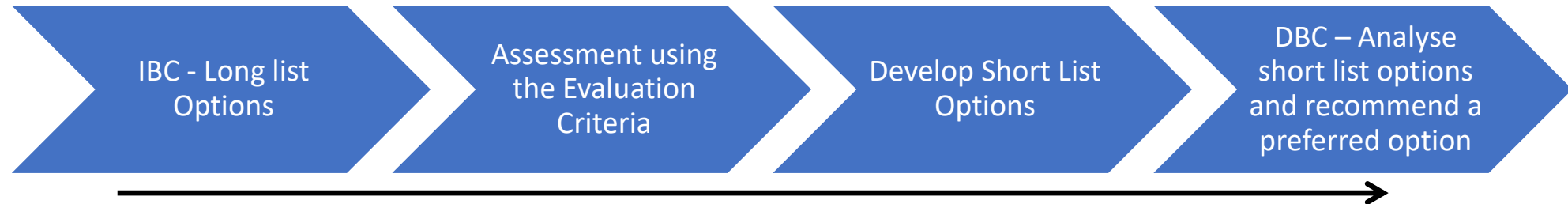
NGAPIPI ROAD



Indicative Timeline



Options Development and Assessment

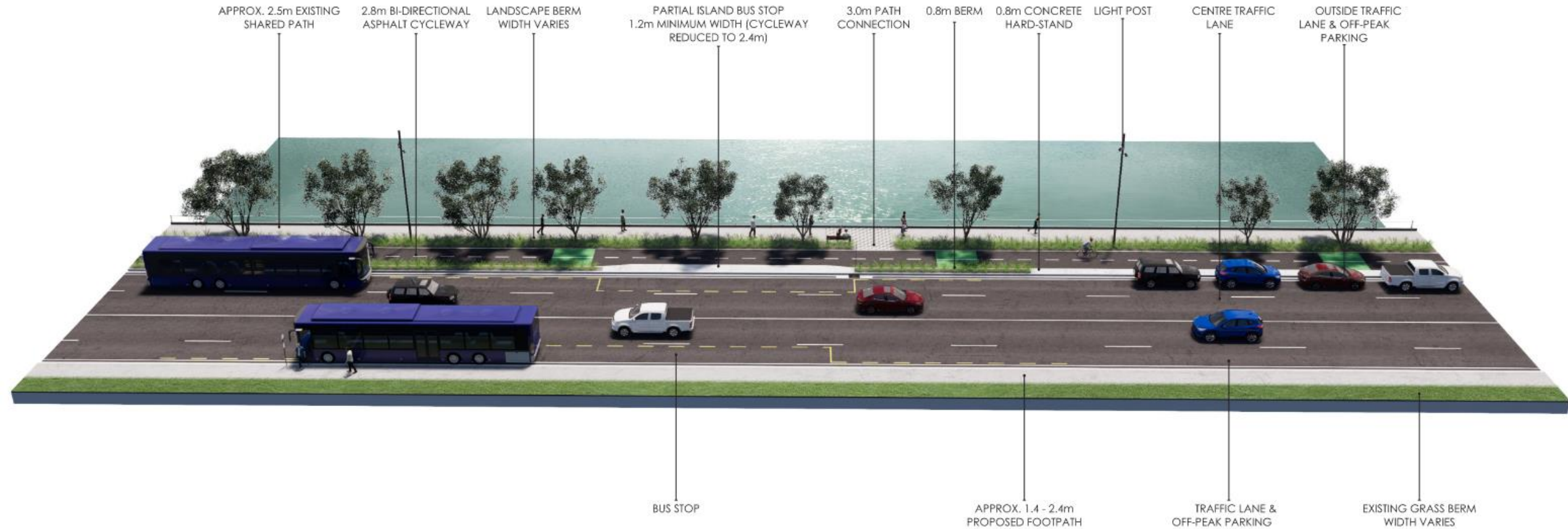


Stakeholders Review and Inputs maintained during both IBC and DBC

Table 6-2: Summary of Long List Option Assessment

Evaluation Criteria	Option 1		Option 2		Option 3		Option 4		Option 5		Option 6		Option 7		Option 8	
	N/S	S/S	N/S	S/S	N/S	S/S	N/S	S/S	N/S	S/S	N/S	S/S	N/S	S/S	N/S	S/S
Connectivity	-2	-2	-2	-2	-1	0	-1	1	0	2	2	1	2	2	2	2
Optimisation	-2	-2	-2	-2	-2	0	-2	-1	-2	0	-2	-1	2	2	2	2
Amenity / Character	-1	-1	-1	-1	-1	0	0	0	1	1	1	1	-2	-2	2	-2
Cost Effectiveness	-2	-2	-2	-2	-1	0	-1	-1	0	1	-1	-1	-2	-2	-2	-2
Total Score	-7	-7	-7	-7	-5	0	-4	-1	-1	4	0	0	0	0	4	0
Rough Order Cost																
Indicative Timeframe																
Shortlisted (Ranking)	No	No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No	No

General Road Layout

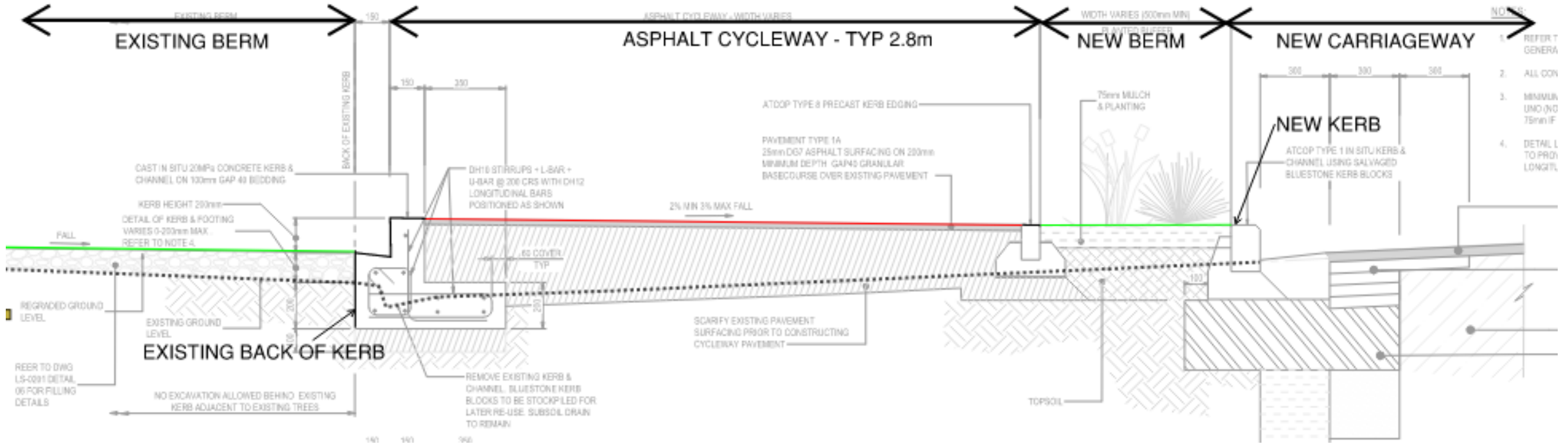




Key Design Constraints

- No encroachment into the berm
- Tree roots sticking above ground - design to avoid localised ponding near tree roots
- Limited room to undertake widening on the southern side (due to the requirement to maintain the min. footpath width)
- Utilise existing outfall pipes

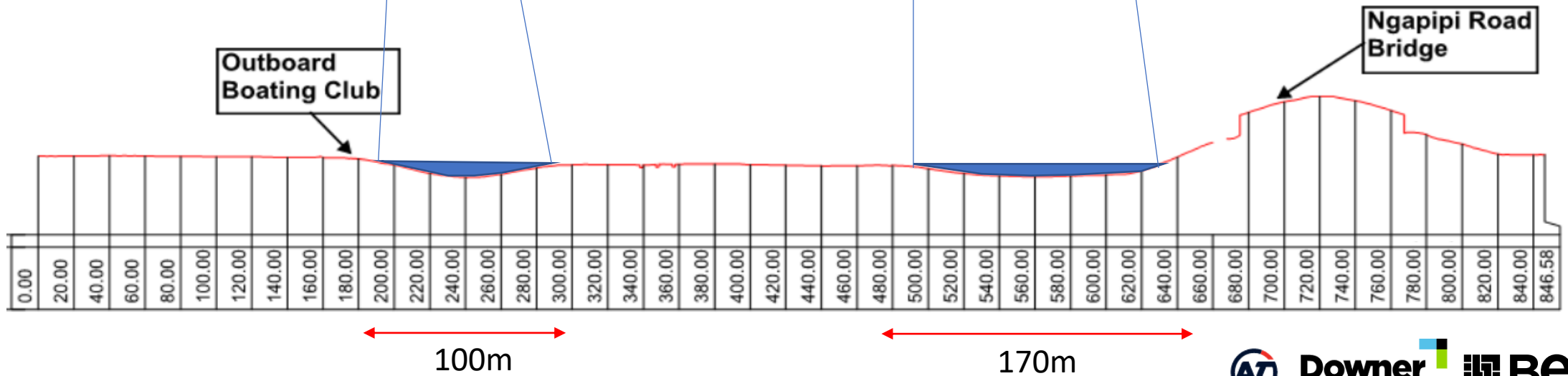
Typical Section



Coastal Resilience – the Problem



- Partially closed approximately 6 times per year
- Fully closed once per year due to tides
- Fully closed every second year in a storm event
- Duration of closures is between 1.5-3.0 hours



The Options

Raise the road to meet current design standards

Construct a low or recurve seawall on the northern side of Tamaki Drive

Catchpit and pipe modifications

Raise road as far as practical

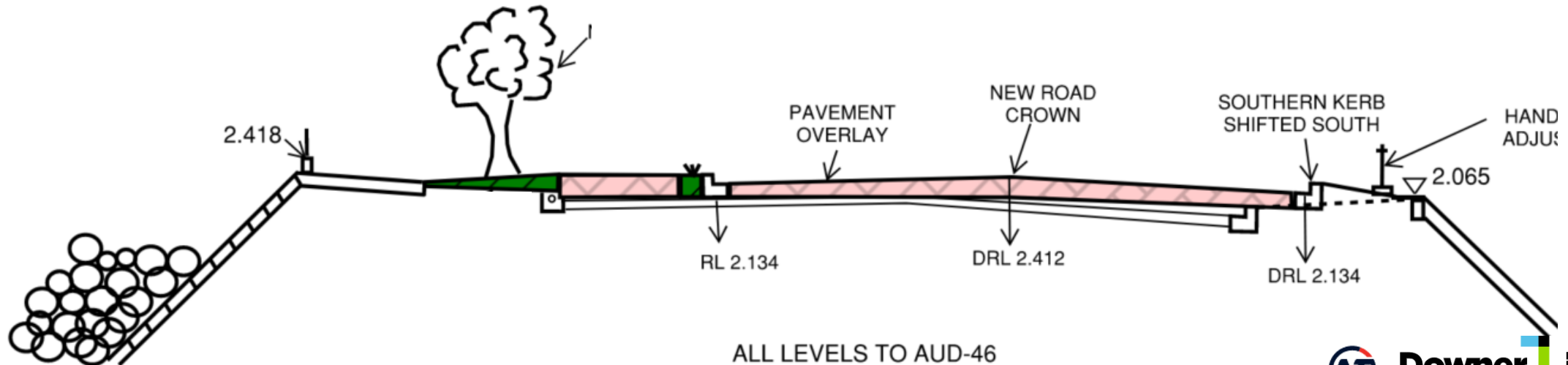
Preferred Solution - Raise road as far as practical

Lift the road within the existing kerbs lines

Catchpit levels will be raised

Existing seawalls and Pohutukawa Trees remain

Reduce the impact of the still water sea level inundation the road



ALL LEVELS TO AUD-46



Downer
Relationships creating success

BECA

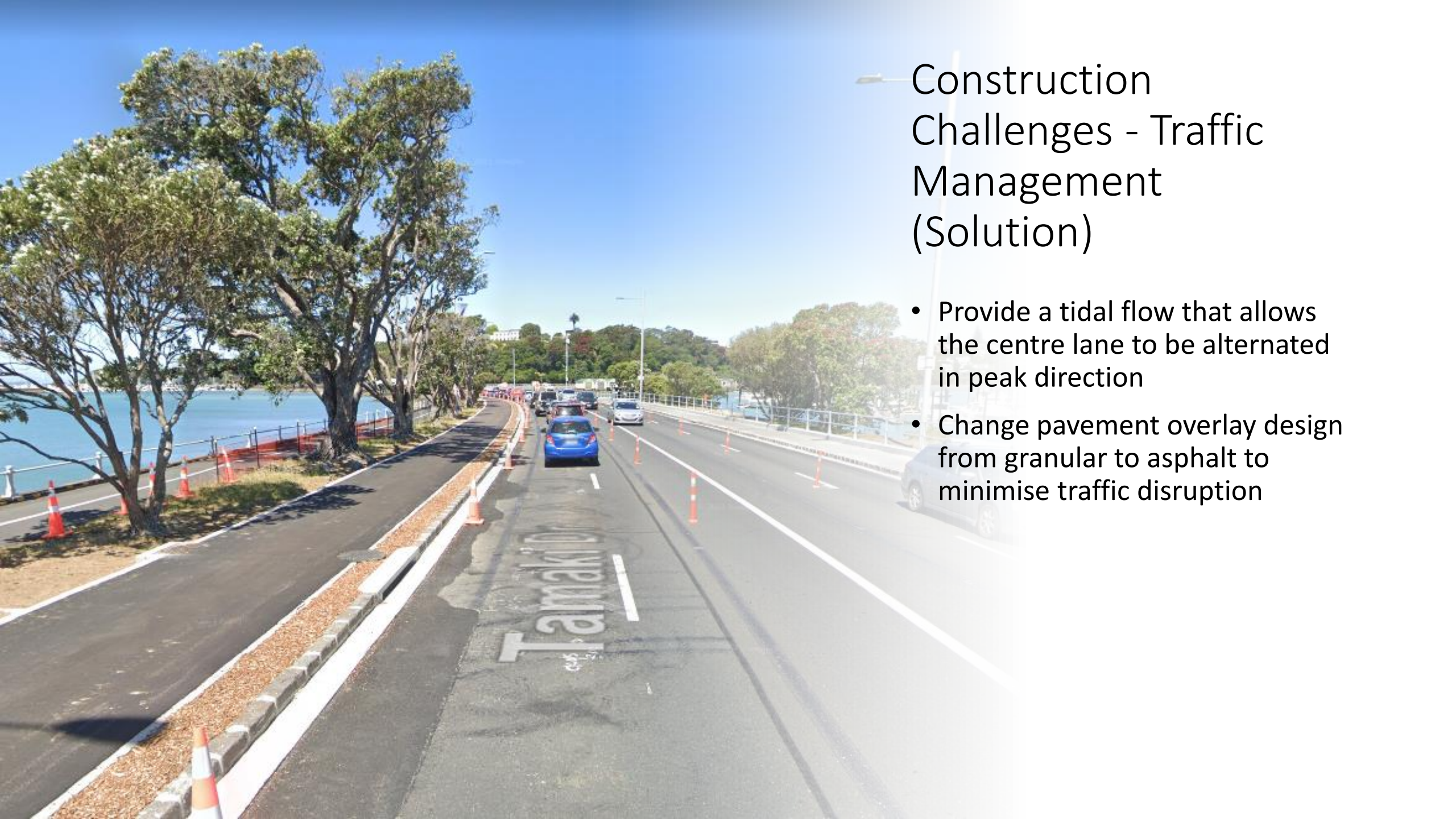




Construction Challenges - Traffic Management

- Tamaki Drive is an arterial route carrying over 30,000 vehicles per day
- 3 lanes therefore must be maintained open during peak periods
- Long-disruption to traffic anticipated at the start
- Heavy freight route





Construction Challenges - Traffic Management (Solution)

- Provide a tidal flow that allows the centre lane to be alternated in peak direction
- Change pavement overlay design from granular to asphalt to minimise traffic disruption



Construction Challenges – Physical Constraint (e.g. tree roots)

- Pohutukawa trees extend along the whole project on both sides of the road
- Stringent consenting for working near tree roots - works undertaken with heavy supervision of the project arborist
- Tree roots encountered in unexpected locations, requiring a lot of adjustments to infrastructure on-site

Construction Challenges – Working near the Coastal Environment





Final Layout (near completion)

Health & Safety Standards

- Delivered the Project with high H&S standards as summarised in the examples below:
 - 1) No Lost Time Injuries
 - 2) No Medical Treatment Injuries
 - 3) Successful management of vehicles, pedestrians, and cyclist detours during the Level 4 Lockdown period to provide social distancing

Pt Resolution Bridge Timelapse Video



THE END – THANK YOU