

# A Fresh Look at Waitematā Harbour Connections

## Aims

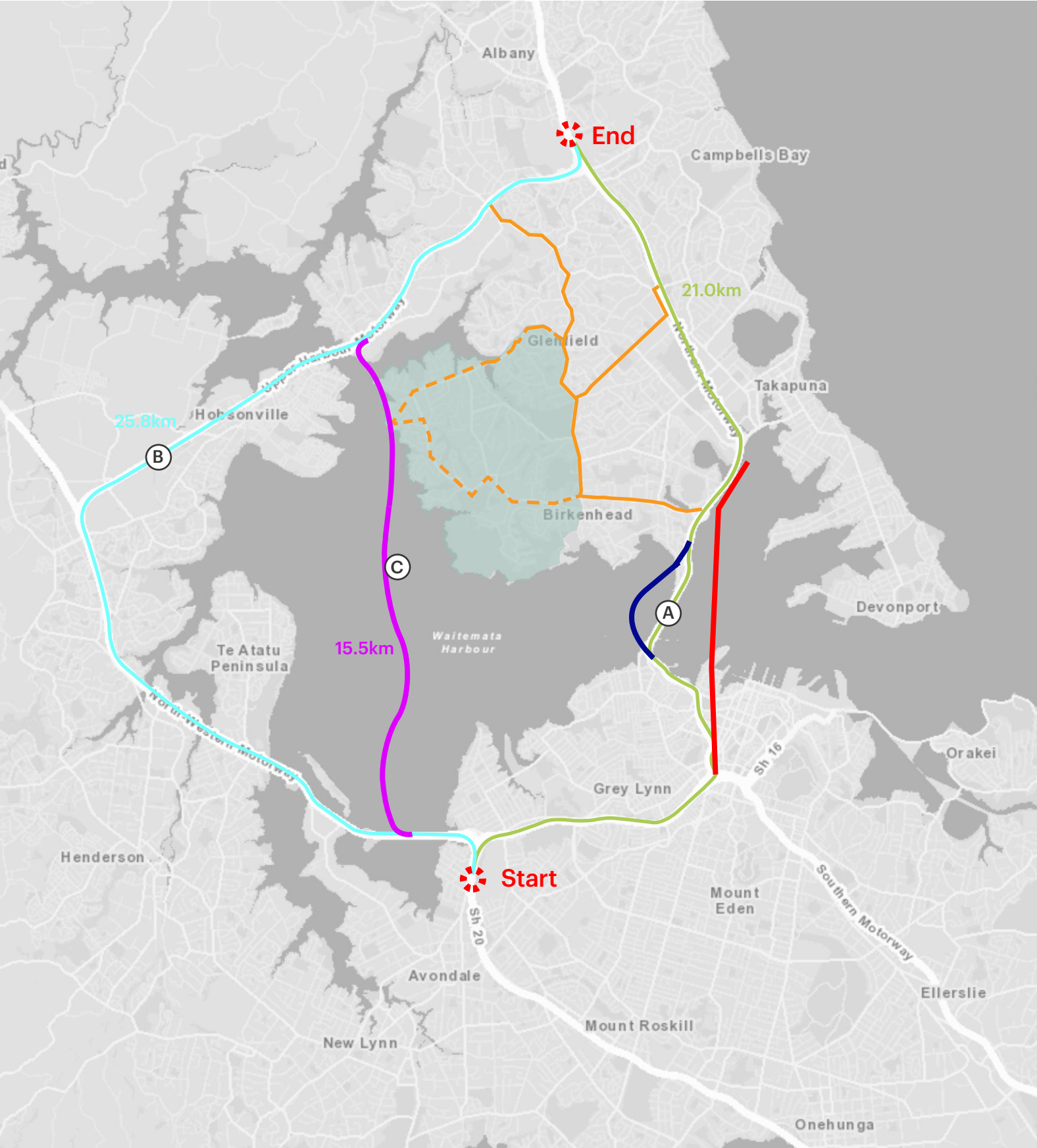
1. Connecting Communities
2. Decongesting Movement
3. Resilience
4. Economic Benefits

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# Waitematā Connections Options Considered



Legend		
	Start / End Point	Arterial Road
	Unlocked Catchment Population ( 25k )	Local Road to become Arterial Road
Routes Length Comparison - SH20 Waterview Tunnel to Constellation Drive		
(A)	Northern Motorway (SH1)	21km
(B)	Northern-Western Motorway (SH18)	25.8km
(C)	New Causeway Bridge	15.5km
Bridge Length Options		Cost
	Option 1: <b>CAUSEWAY BRIDGE</b> - SH16 to Upper Harbour Highway (11.0km) <ul style="list-style-type: none"><li>- Motorway connection that bypasses central city</li><li>- On/Off Ramp Connections to communities</li><li>- Minimal disruption</li></ul>	3.0 B
	Option 2: <b>WAITEMATĀ BRIDGE</b> - SH1 to SH1 (2.5km) <ul style="list-style-type: none"><li>- Provides for active modes</li><li>- Takes traffic load off Auckland Harbour Bridge</li><li>- Unlocks additional functions for the Auckland Harbour Bridge</li><li>- Expands existing SH1 Highway and infrastructure resilience</li></ul>	2.5 B
	Option 3: <b>NZTA TUNNEL</b> - SH16 to SH1 (5.0km) <ul style="list-style-type: none"><li>- Bypasses the Auckland Harbour Bridge</li><li>- Infrastructure has low visual impact</li><li>- Direct connection to North Shore</li></ul>	17.0 B



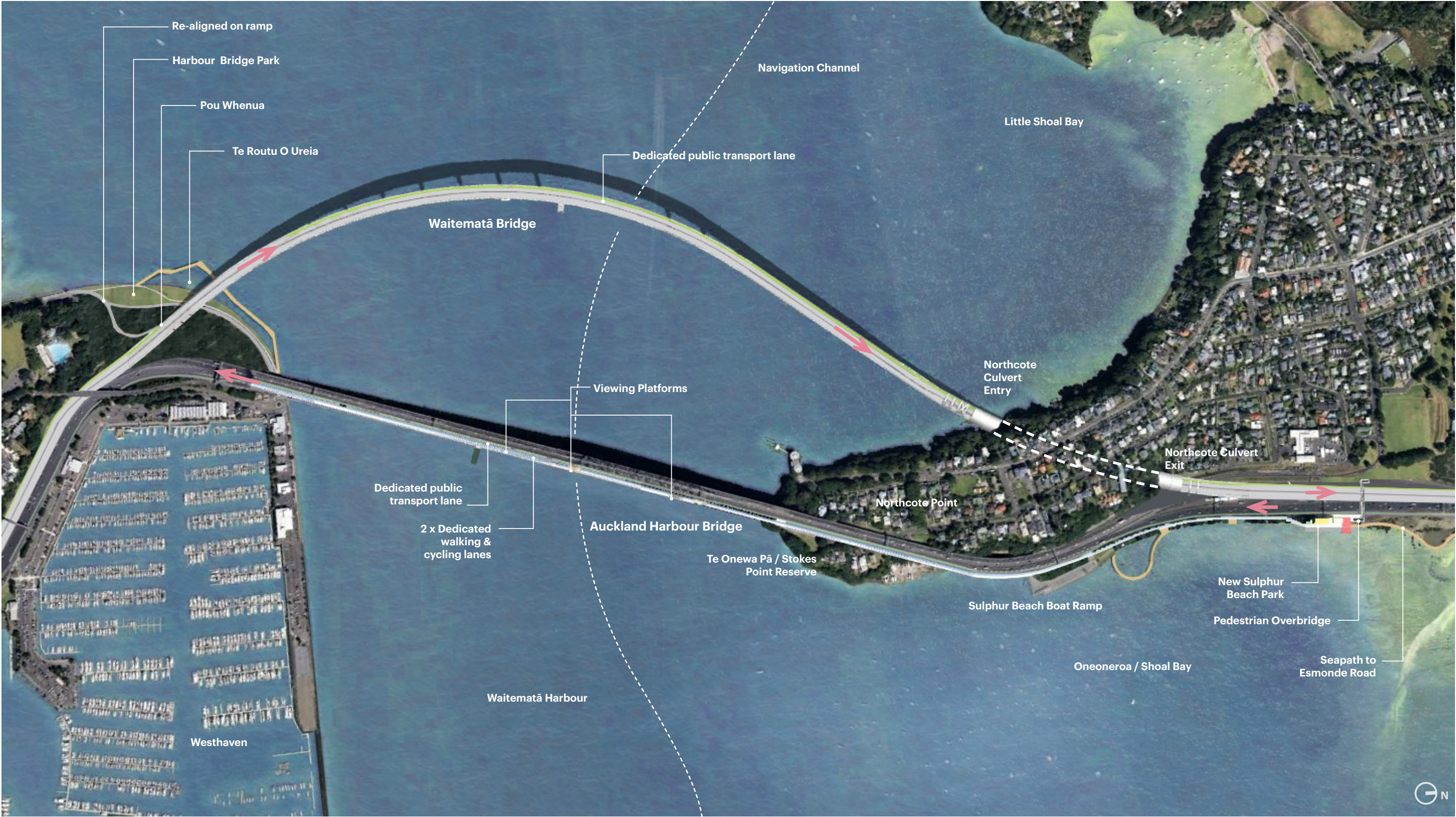
Waitematā Harbour Crossing **Aerial View 01**

Short Term - Waitematā Bridge  
Medium Term - Causeway Bridge



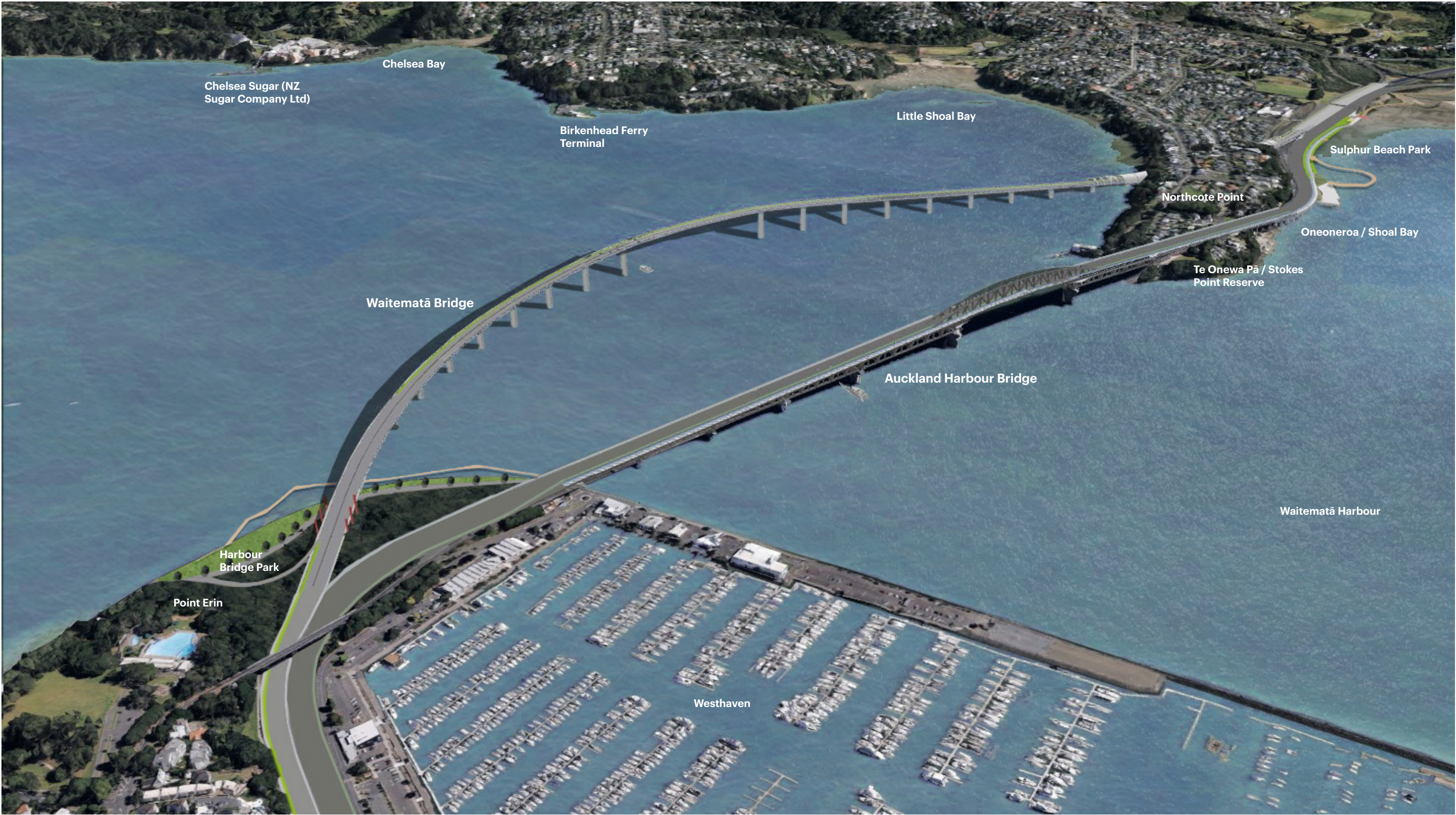
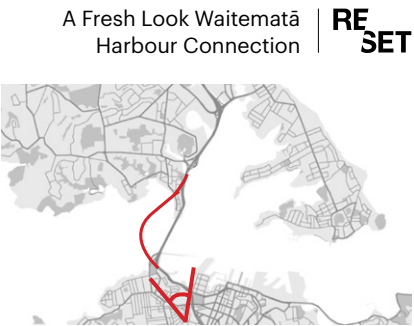


# Waitematā Bridge Study **Plan View**





# Waitematā Harbour Crossing Perspective





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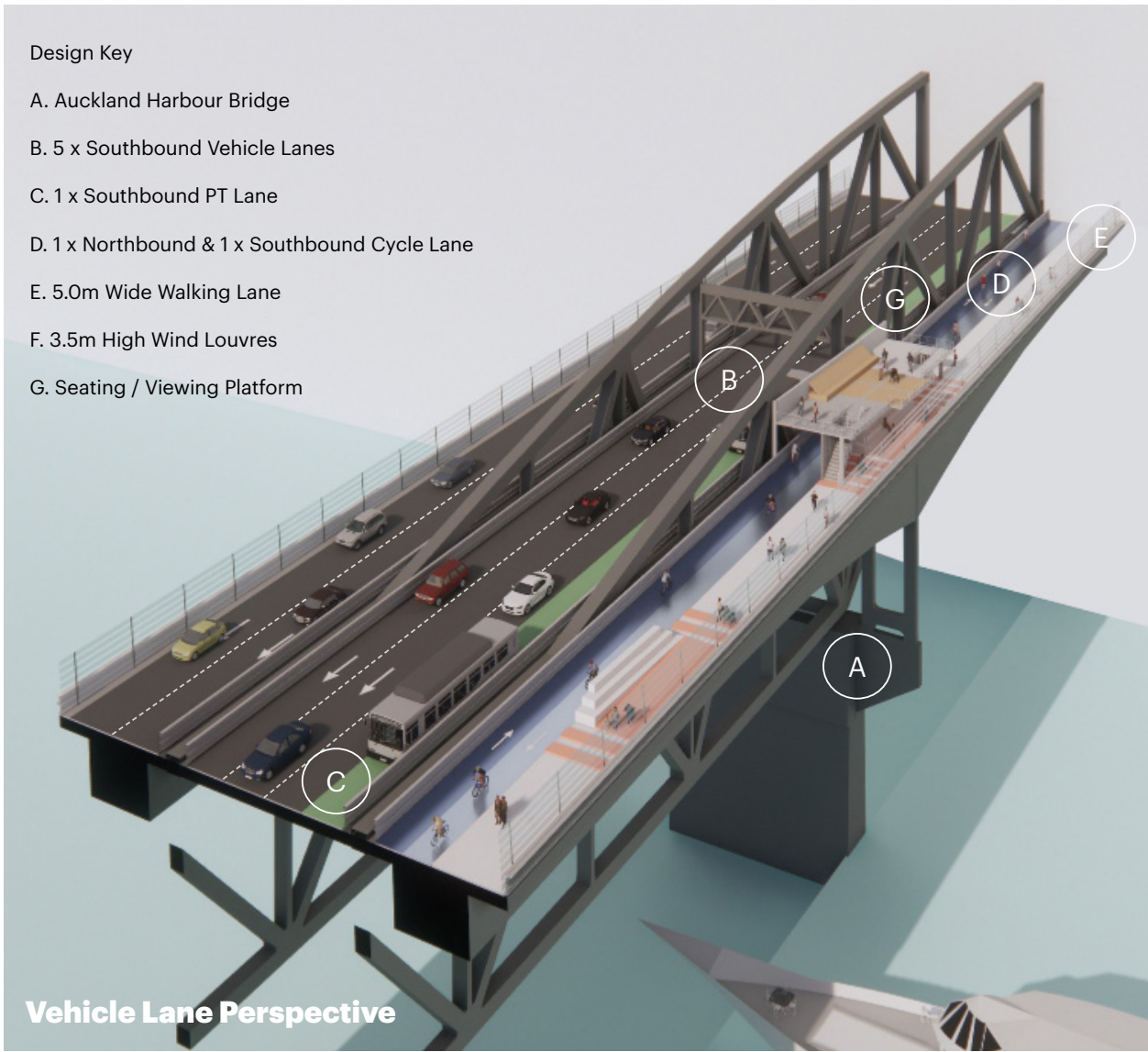
# Waitematā Bridge Study Re-purposed Auckland Harbour Bridge

## Proposed Lane Reconfiguration:

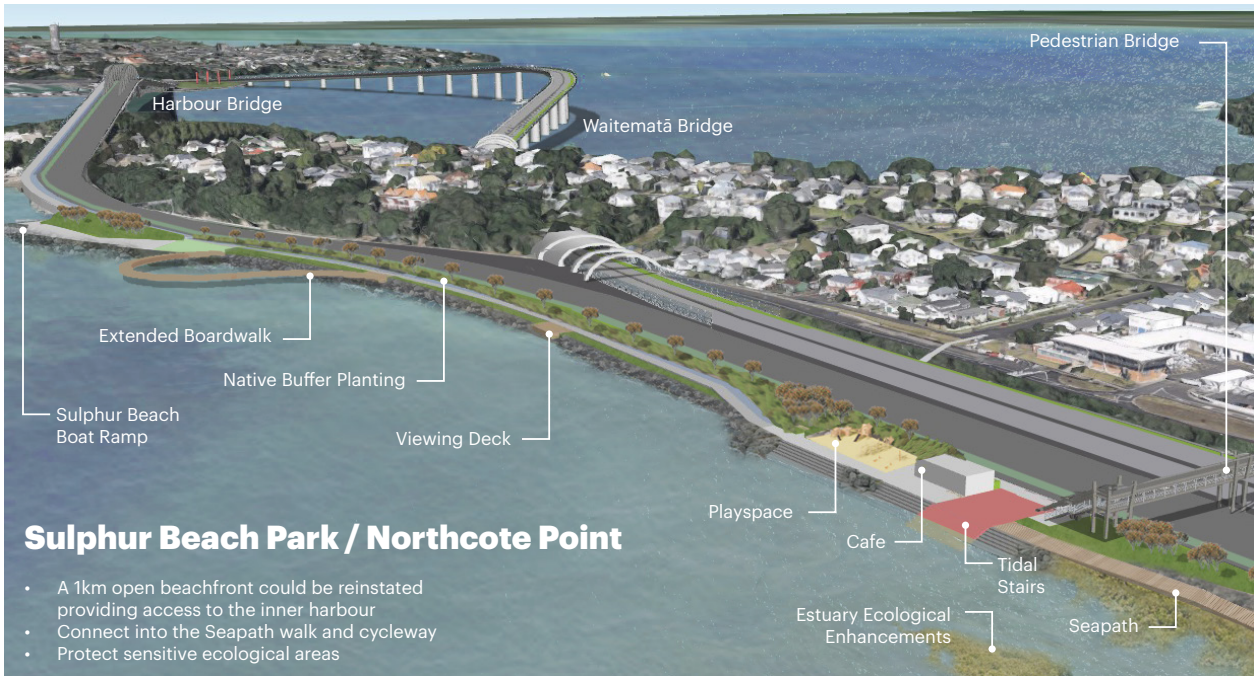
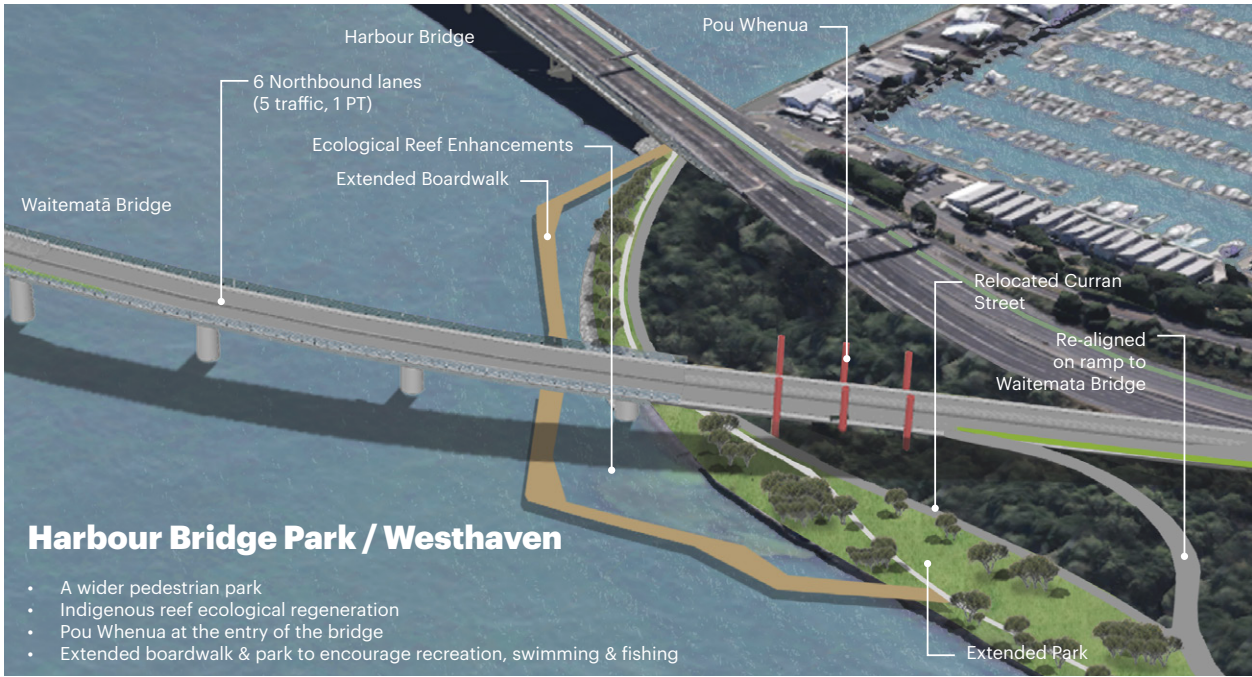
- 8 existing lanes (north & south)
- 1 dedicated public transport lane (south)
- 5 vehicle lanes (south)
- 2 eastern lanes (9m total width) converted to walking/cycling
- Seating/viewing platforms

## Waitematā Harbour Viewing Deck:

- Expansive city and harbour views
- Potentially Auckland's No.1 tourist destination
- Operating hours: 5am-10pm with CCTV and security guards (similar to Sydney Harbour Bridge)
- Estimated 5000 x Walking & Cycling Movements Per Day



## Historical Precedents





# Causeway Bridge Crossing Study **Plan View**





# Causeway Bridge Crossing Study Perspective



Aerial View 02



# Causeway Bridge Crossing Study Design Proposal

Features:

- 11.0km long
- 34m wide
- 6 lanes

Opportunities:

- Acts as bypass to avoid Auckland City centre and congestion on either side of existing Harbour Bridge resulting in reduced carbon emissions and travel time
- Reduces travel distance and time between SH1 (north of Constellation Dr) and SH20
- Provides for community recreation with proposed walking /cycling lanes and viewing/fishing deck

Structure:

- Prestressed concrete construction - maintenance free with a design life of 300yrs (similar to Brisbane Gateway Bridge)
- Designed to HN-HO-72 traffic loads.
- Navigation span of bridge is 250m (similar to AHB)
- 3.5m high strengthened acrylic louvers to cut wind speed (50% reduction)

