

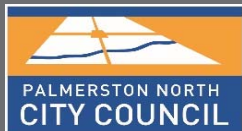
He Ara Kotahi – Implementation of the Palmerston North to Linton Shared Pathway



Rob Green – Green Infrastructure Services Ltd

Jon Schwass – Roading Manager – Palmerston North City Council

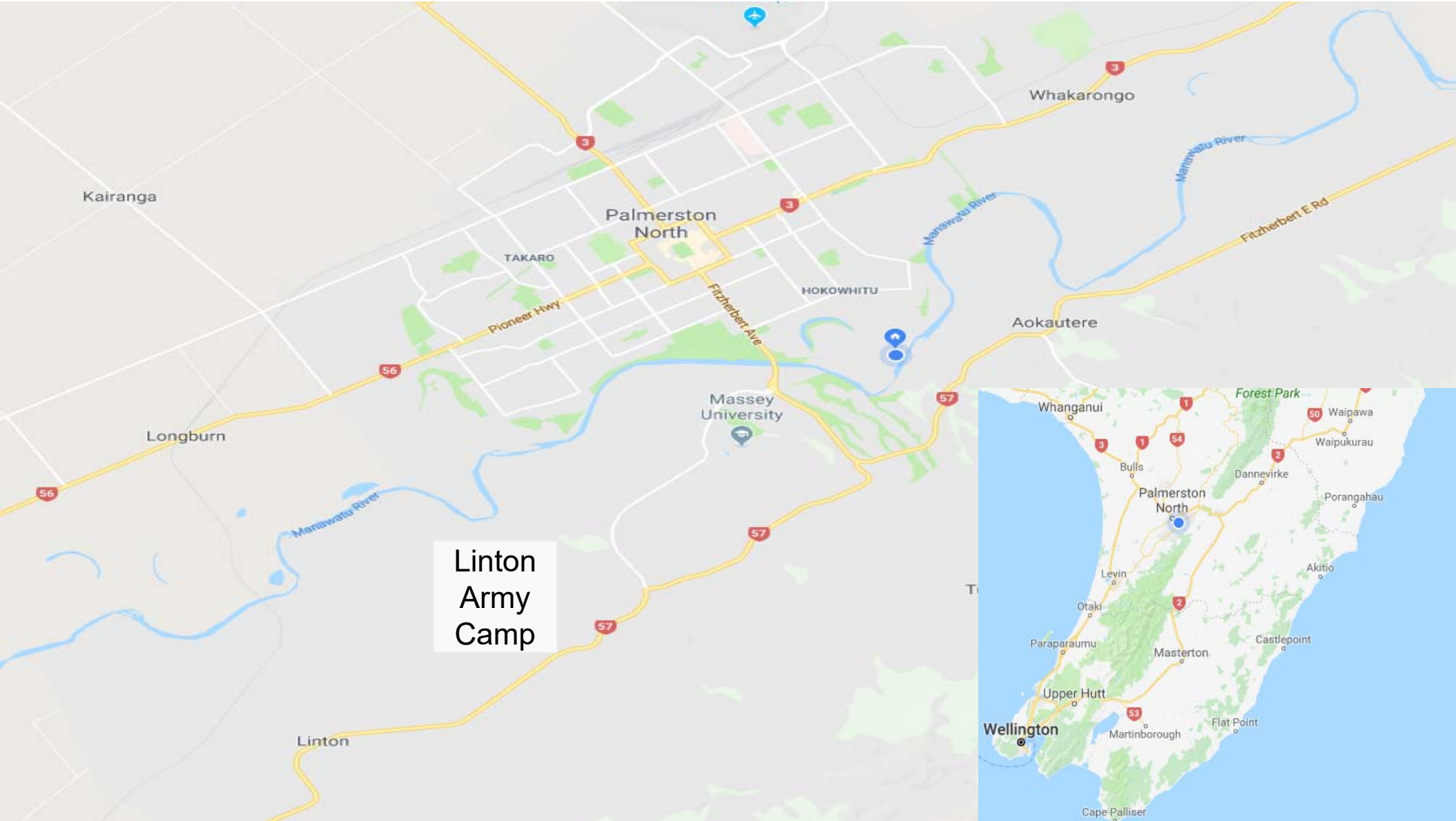
Peter Kortegast – WSP Opus



Introduction

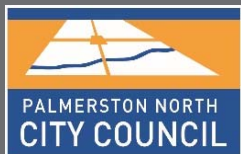
- Background
- Project Governance
- NZTA Approval
- Route Selection
- Regulatory Approvals
- Ruha Street Bridge
- Pathway
- Summary and Conclusions





Background

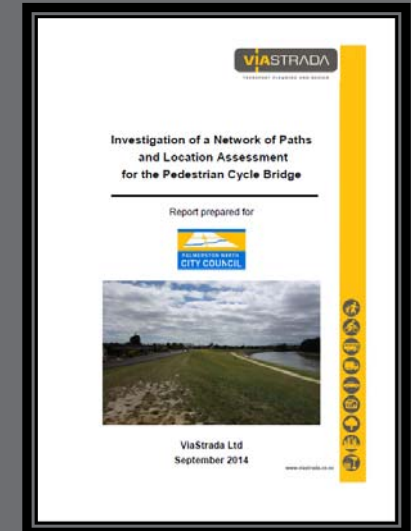
- A number of factors coalesced:
 - Ongoing submissions by NZDF about safety concerns
 - Government making UCP funding available
 - Powerco electricity supply strengthening project



Feasibility Study

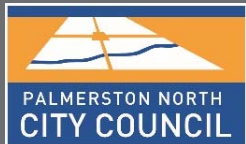
Aim: To identify feasible routes for a shared pathway from the city to Linton Army Camp with a connection to Massey University

- Completed in September 2014
- Five routes identified – each linking to existing streets with a bridge across the Manawatu River
- Final route selection would be based on projected commuter user numbers



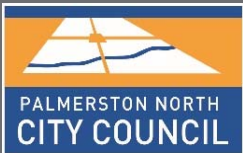
PNCC Long Term Plan (LTP)

- Based on project estimate of \$10m funding provision was made in the PNCC LTP:
 - Urban Cycleways Fund - \$3m (available until 30 June 2018)
 - Powerco - \$0.5m
 - National Land Transport Fund - \$3.3m (51% of residual cost)
 - PNCC - \$ 3.2m (49% of residual cost)



Project Steering Group

- PNCC
 - GM City Networks – Chairperson
 - One Elected Member
- NZ Defence Force – two representatives
- Massey University – one representative
- Horizons Regional Council - one representative
- NZTA – two representatives
- Iwi – three representatives



HEARA
KOTAHI

The pathway that
brings people together.

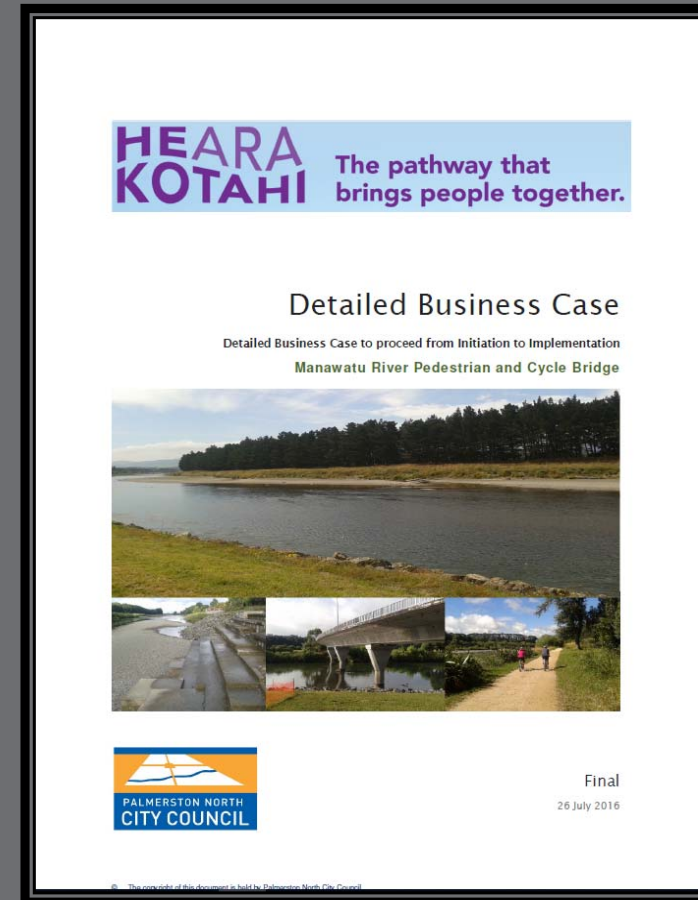
PNCC – Elected Members

Project Steering Group

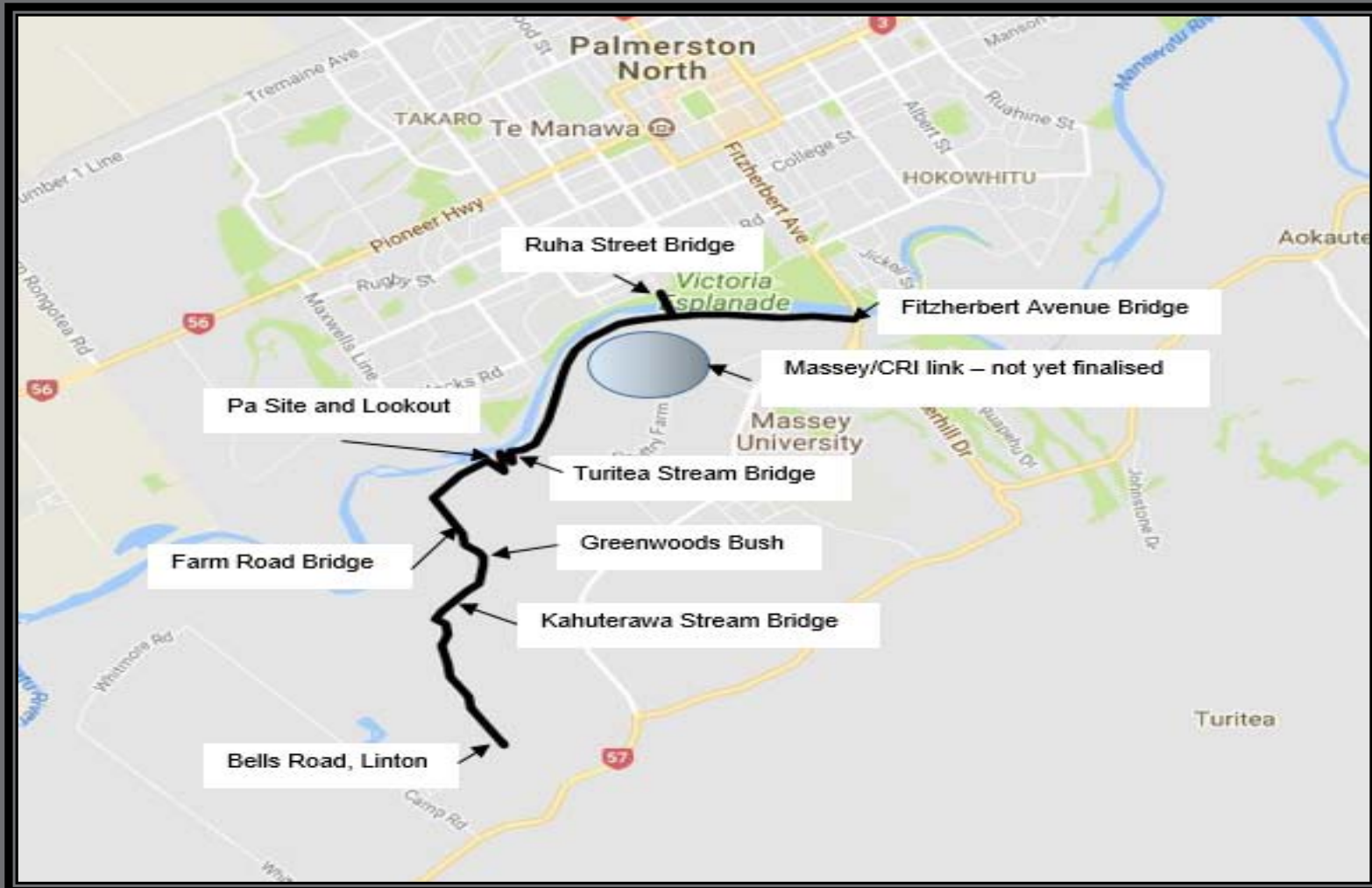
Working Party

NZTA Approval

- Indicative Business Case – Four bridge options to one zone
- Detailed Business case – final bridge site
- Assessments of:
 - Landscape and visual effects
 - Ecological factors
 - River hydraulics and flood control
 - Land use planning
 - Accessibility
 - Projected commuter numbers
 - Recreational benefits



Final Route

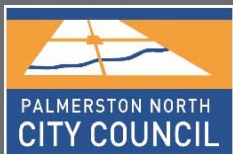




Project Details

Ruha Street Bridge

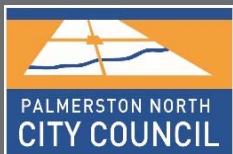
- 195m long, 4.2 m total width
- 10m wide viewing platform at mid-span
- Four spans across Manawatu River



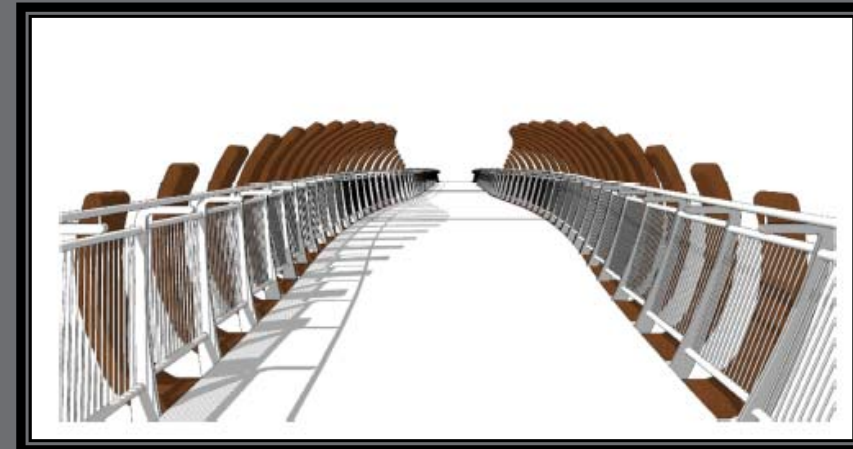
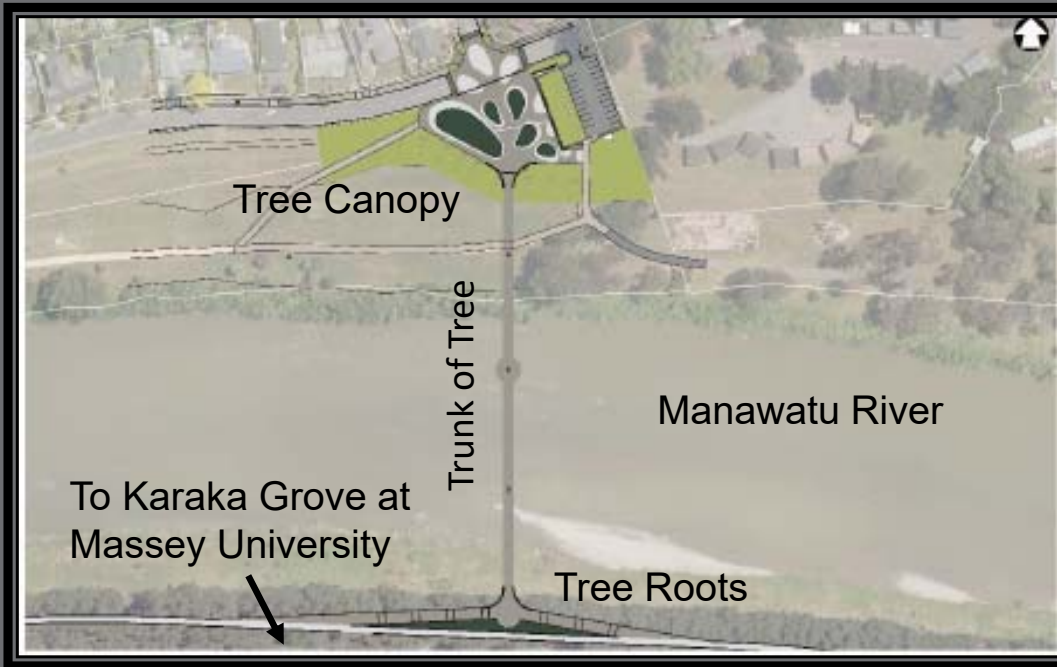
Project Details

Pathway

- 7.6 km total length - 3m wide to proposed lookout and 2.5 m wide beyond
- Four bridges – 2 x 35 m long, 1 x 10m long and 1 x 45m long
- 200m of elevated boardwalk sections
- Two registered heritage sites
- Links to Massey University and Linton Camp



Ruha Street Bridge – Karaka Tree Theme

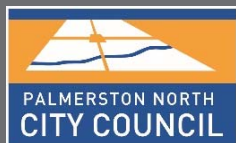
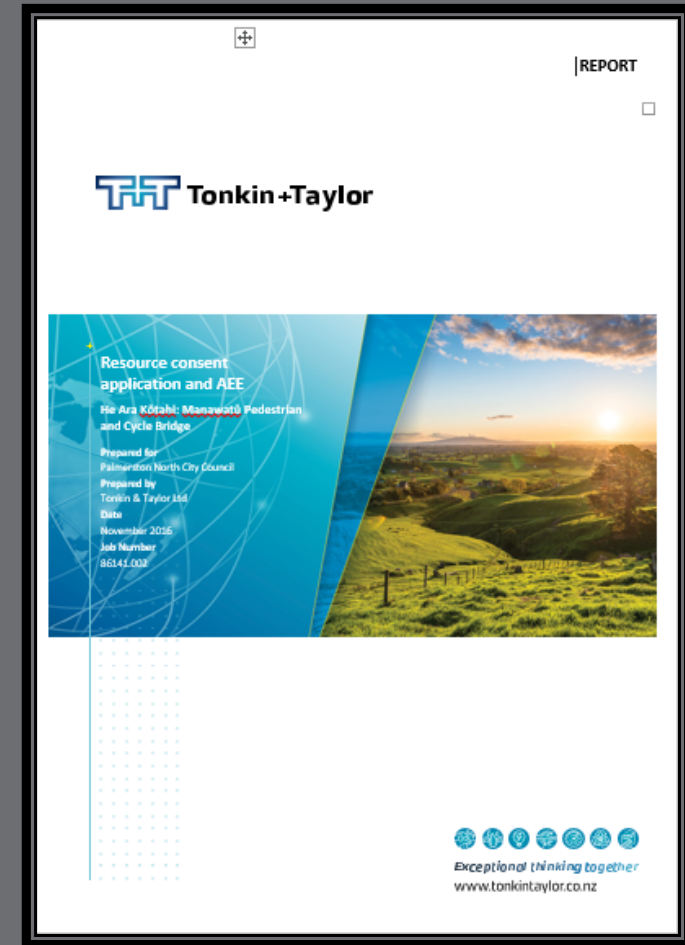


Showing the ribs of the tree trunk through the centre of the bridge

Regulatory Requirements

- 19 separate consents required -Building consent exemptions

Description	Authority Issuing Consent				
	PNCC District Plan	Horizons Regional Council One Plan	PNCC Building Act	Heritage New Zealand	Land Information New Zealand
Pathway	✓✓✓			✓	
Ruha Street Bridge	✓	✓	✓		✓
Four Other bridges	✓✓✓✓	✓✓✓	✓✓✓✓		



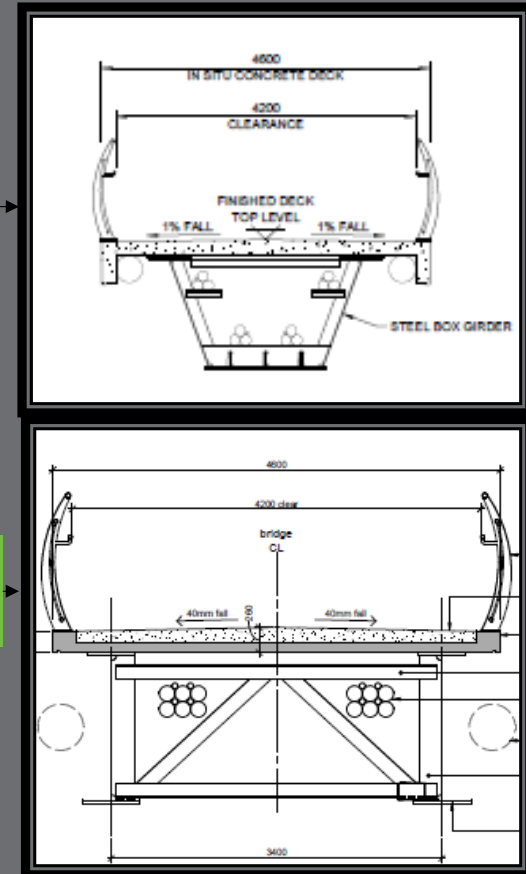
Ruha Street Bridge Construction

- Detailed design completed – estimate confirmed
- Early Contractor Involvement Process initiated – May 2017
- Alternative tender submitted - \$1m lower than conforming

Original Design

ECI Process

Alternative Tender Design



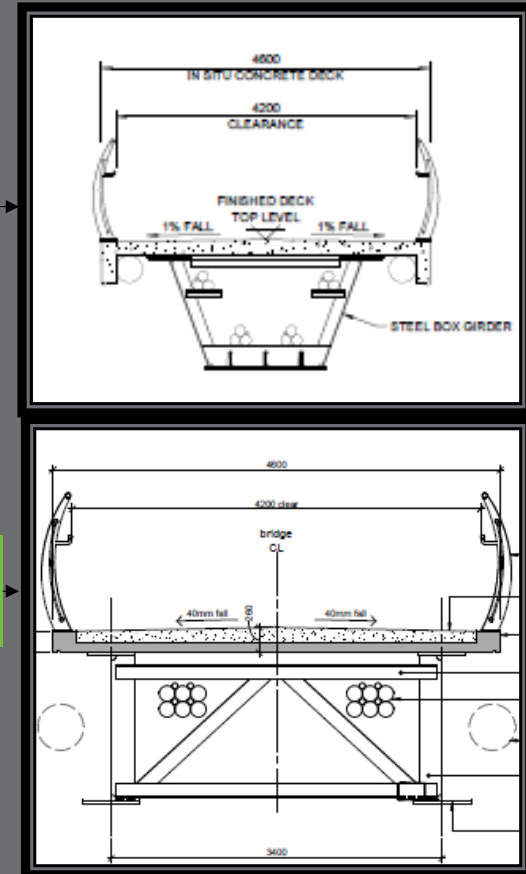
Ruha Street Bridge Construction

- PNCC accepted alternative tender in October 2017
- Time delays through need to complete detailed design and peer review of alternative tender
- Construction management plans approved (consent requirement) – January 2018
- Construction commenced – February 2018

Original Design

ECI Process

Alternative Tender Design



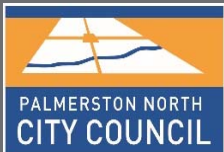
Ruha Street Bridge Construction



Pier construction from
causeway in river

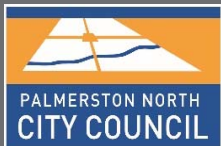
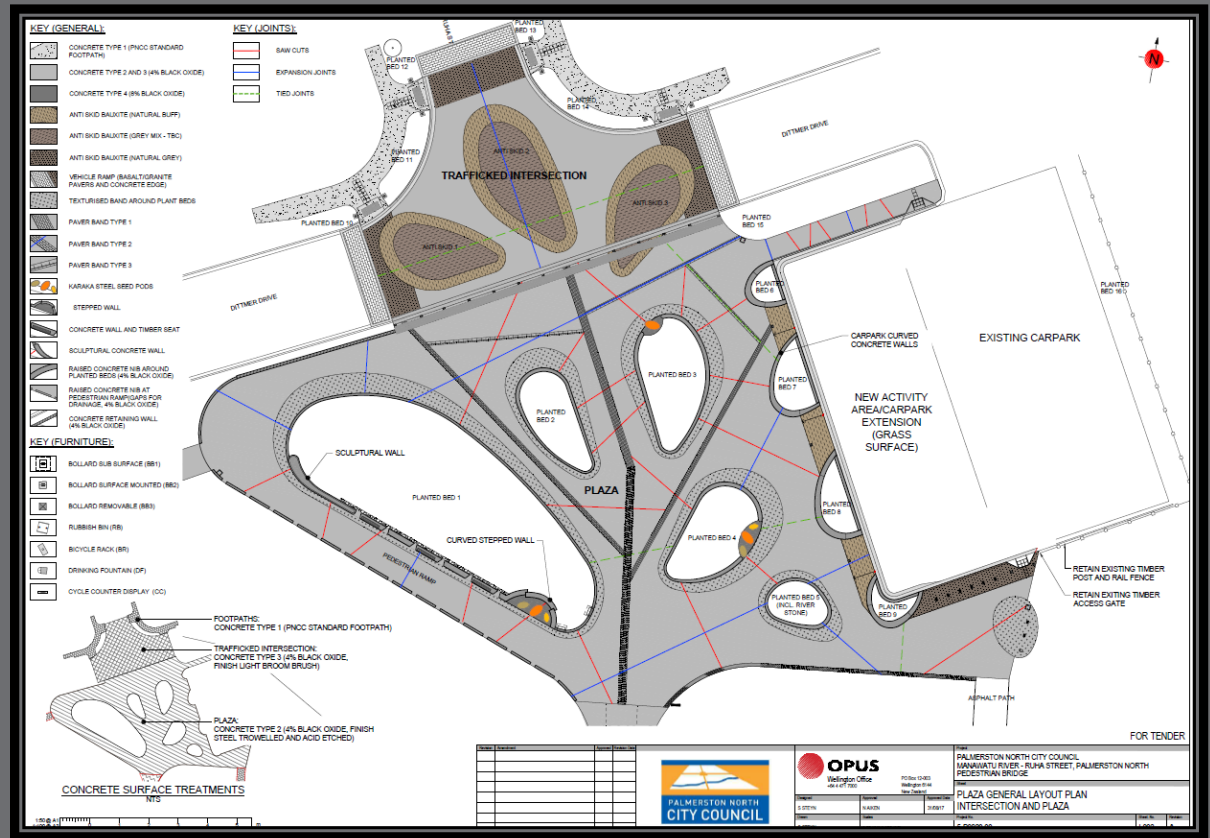


Abutments and piers
completed – looking from city
side



Ruha Street Bridge Construction

Proposed Plaza on City side of bridge

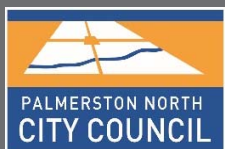


Pathway Construction

- Progressing to completion in April 2019
- Topographical challenges
 - Steep sections of 20 m elevation change
 - Three stream and one farm road crossing
 - Two heritage sites
 - Area of very sensitive vegetation
- None of pathway is on Council owned land

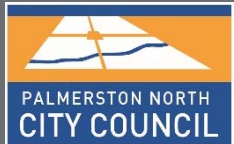


Turitea Bridge – pile/pier construction
Turitea Bluff in background



Conclusion

- Feasibility studies should not be rushed – identify all of the constraints
- Setting the correct project structure at the outset is critical
- Important to understand the construction market
- Select the right contractors – not just based on lowest price



Conclusion (cont'd)

- Non – construction related elements to meet RMA and NZTA processes are time consuming and expensive (23% of costs) – final cost likely to be > \$15m
- Form partnerships with iwi
- Recognise and acknowledge landowner requirements
- Celebrate success and focus on positive aspects of the project !!!

