

THIS PRESENTATION

- What decision is required today
- Overview of work to date
- Current status
- The four proposed options
- Next steps



What decision is required today

- In the current LTP, the Museum strengthening project is an approved project.
- The LTP provides a funding envelope for completion of the project.
- Council's decision to proceed with strengthening the building was based on a strong desire from the community to see the building restored
- We now know that the costs of strengthening are significantly more than the funding available
- The quantum of change means under Council's significance and engagement policy we are required to re-consult
- The decision today is therefore to go back to the community, given the increased level of cost and risk, to reassess the level of support for continuing.



BACKGROUND



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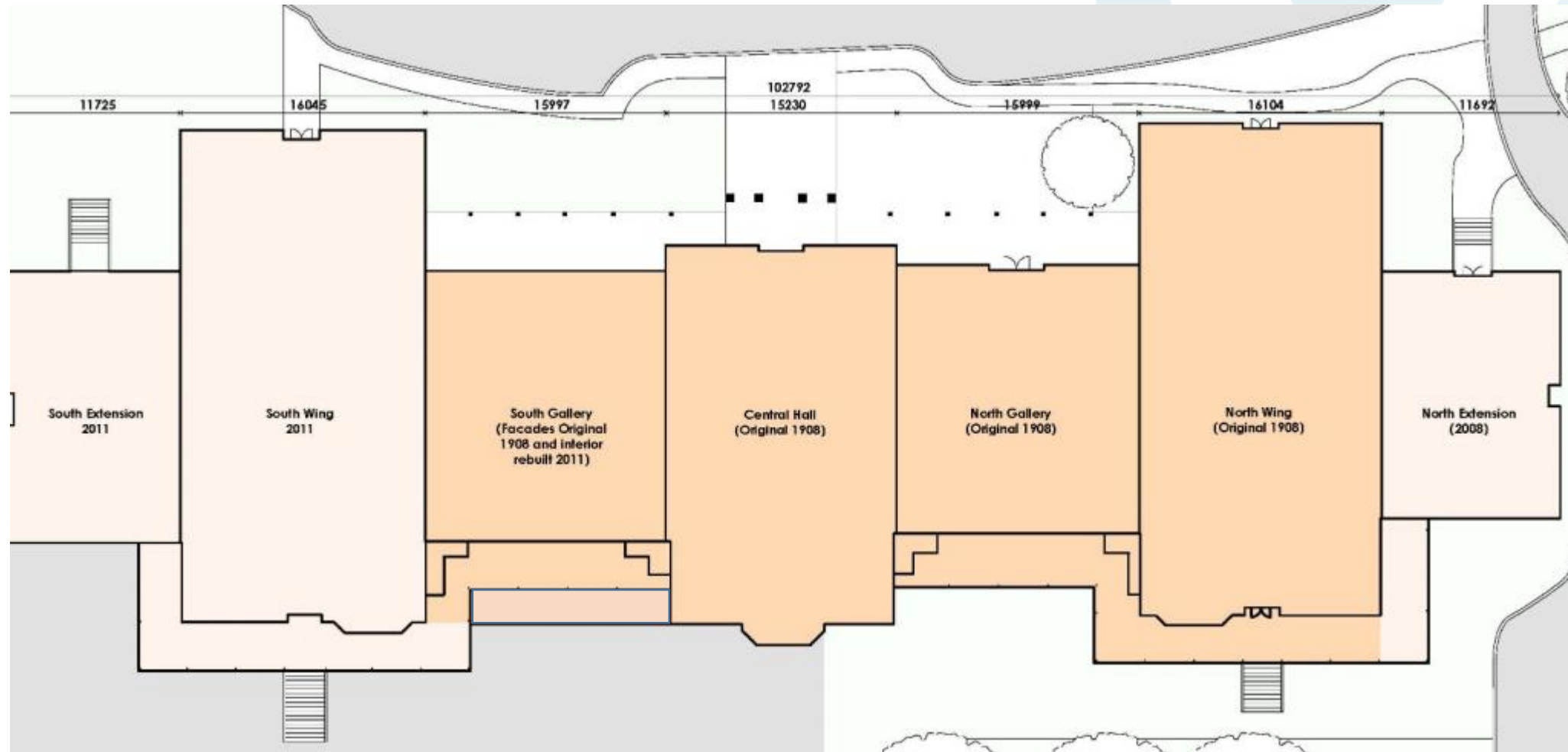
BACKGROUND

- Gifted land
- Category 1 Heritage building
- 1963 ownership transferred to RLC
- 45,000 items in the collection



BACKGROUND - BUILDING

Building progressively constructed since 1908



PROJECT OVERVIEW



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COMPLEXITY

- One of the most complex Earthquake Strengthening projects in the country:
 - Age and materials of original building
 - Different construction materials and methods over decades
 - Challenging environment (geothermal)
- What that requires as public sector steward of public money
 - Utmost care (cf speed)



PROJECT TEAM

Experts delivering the mahi

Project Manager

WSP

Architects and
designers

Engineers

Peer Reviewers

Quantity
Surveyor

ECI Contractor

Dave Pearson
Architects:
Architect, Lead
Designer &
Heritage
Specialists

Structural: Dizhur

Geotech: Tonkin
& Taylor

Geotech: Arup

Structural: BSK

Weathertightness:
Respond
Architects

AECOM

Hawkins

Fire Protection:
Osborn
Associates

Mechanical &
electrical:
Innerscape

Fire: Fire
Connect



RLC Staff

Museum staff
Communications
Finance
Property

PROJECT TIMELINE

- Nov 2016: Kaikoura earthquake, mag 7.8. Building closed
- 2017: Detailed Seismic Assessment rating the museum at 19% New Building Standard (EQ prone), legal required to strengthen
- 2018:
 - LTP approval to strengthen the building (\$15.5m RLC contribution)
 - Concept design commences
 - Removal of all taonga
 - Crack mapping throughout the building



PROJECT TIMELINE

- 2019:
 - External funding secured (key milestone)
 - Resource consent, Initial design, Asbestos removal.
 - Contractor procurement
 - Open call for Expressions of Interest
 - Five respondents invited to RFP process, four submitted
 - Hawkins selected for ECI and preferred contractor status
 - Why? Reduces buildability risk and contract risk



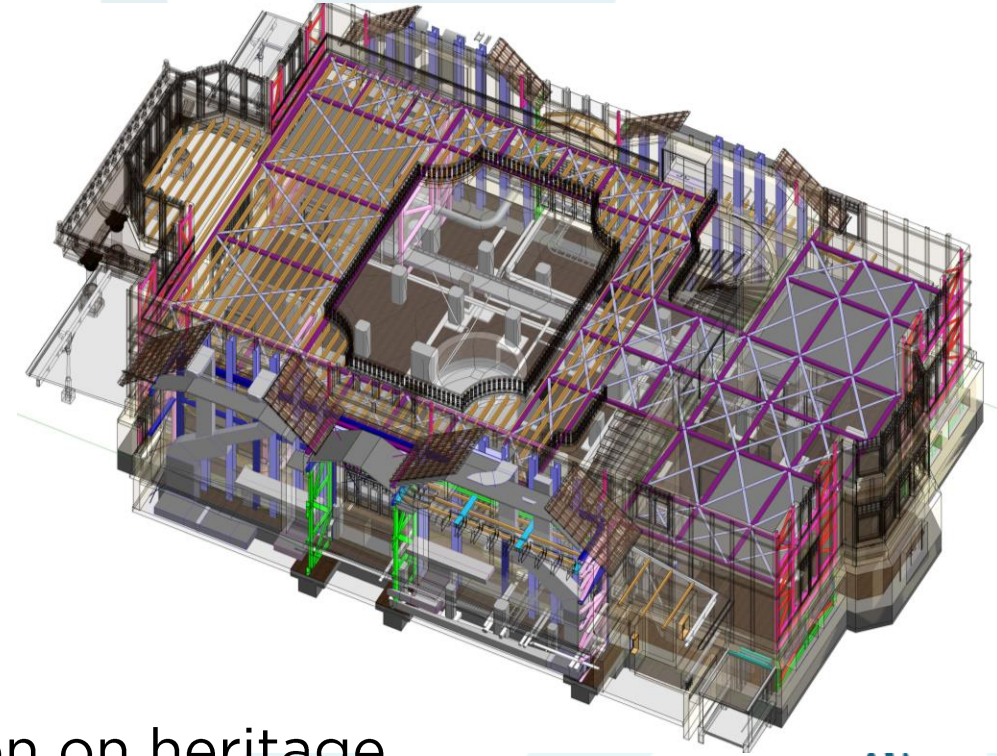
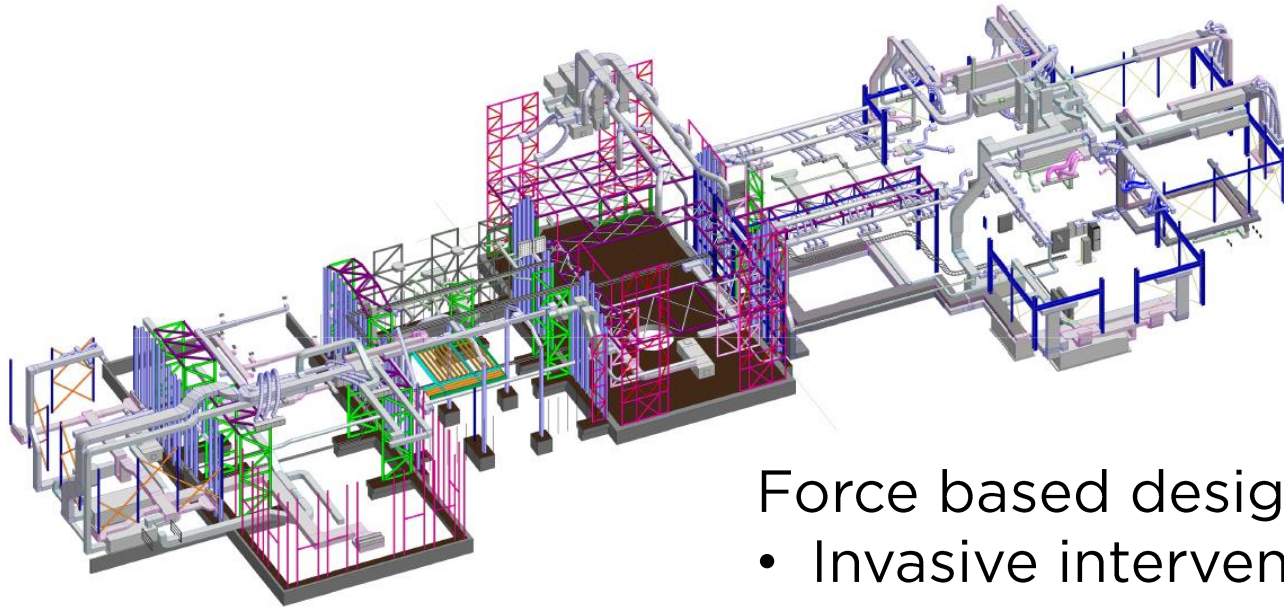
PROJECT TIMELINE

- 2020:
 - Early Contractor Involvement
 - Design peer review and major design re-set



DESIGN RESET

First methodology



Force based design

- Invasive intervention on heritage fabric
- Buildability risks to H&S, cost and time
- High cost



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DESIGN RESET

Final methodology

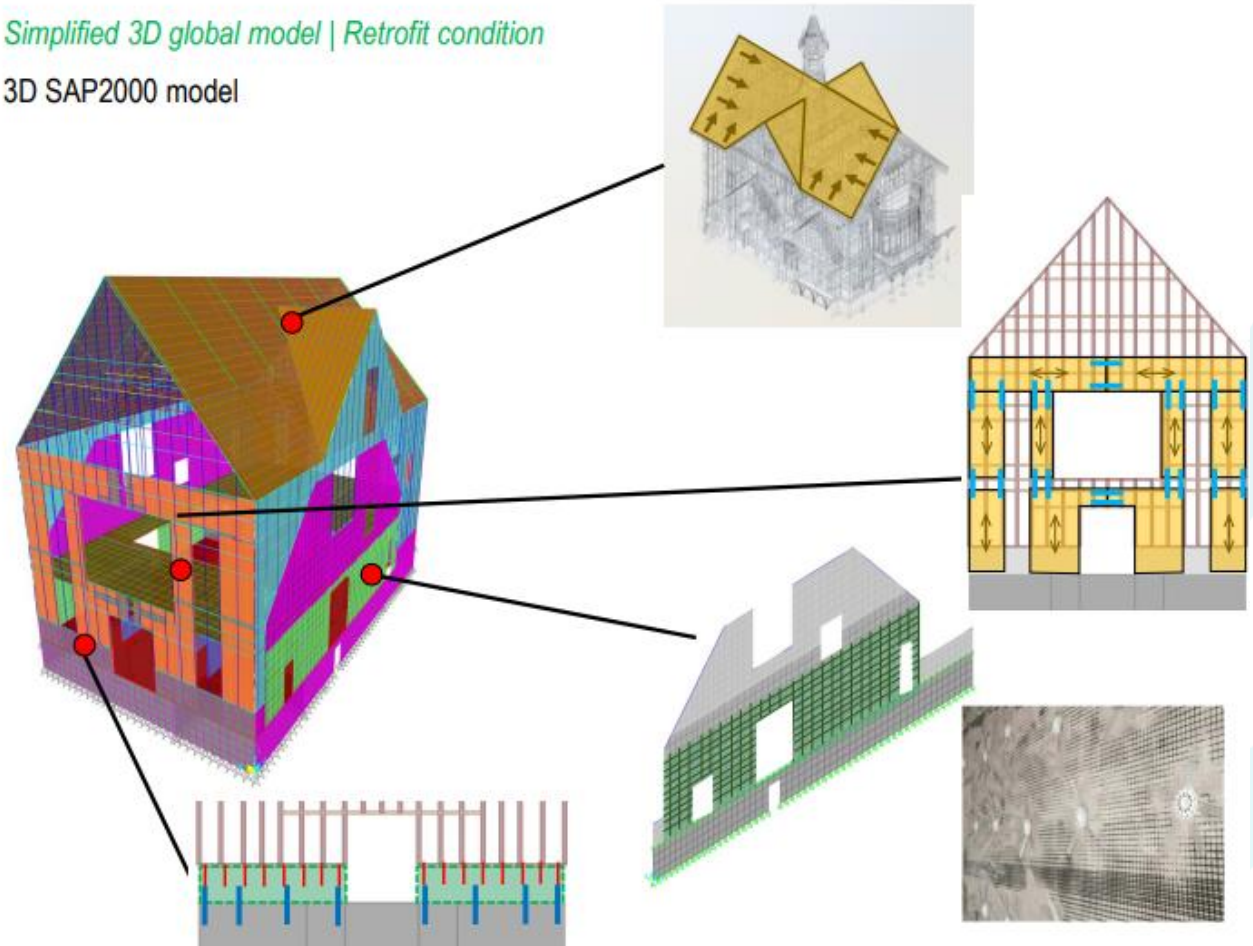
Displacement uses
inherent strength

Met expectations:

- 80% NBS
- Buildable
- Less invasive
- Faster
- More cost effective

Simplified 3D global model | Retrofit condition

3D SAP2000 model



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PROJECT TIMELINE

What has happened?

- **2021: Design optimisation**
 - Engineering investigation and modelling,
 - New structural concept,
 - Specialist ground (geotech) investigation

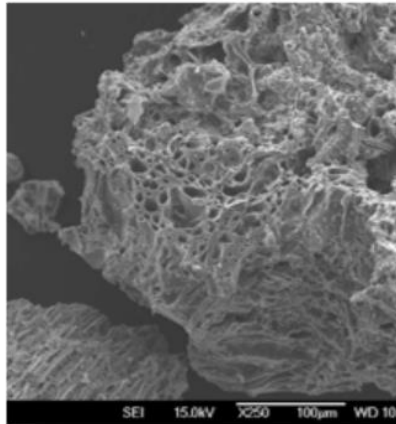
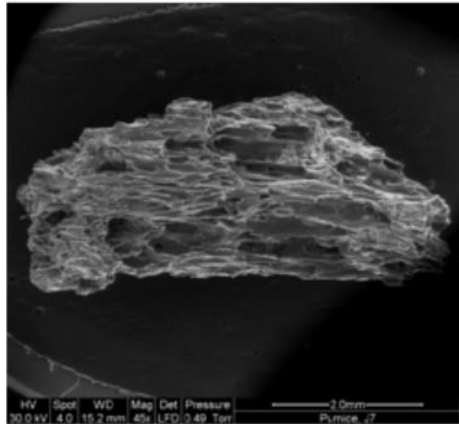
This process significantly reduced cost and improved buildability



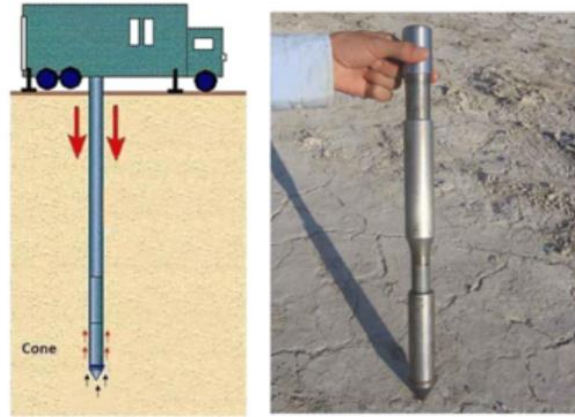
GEOTECH



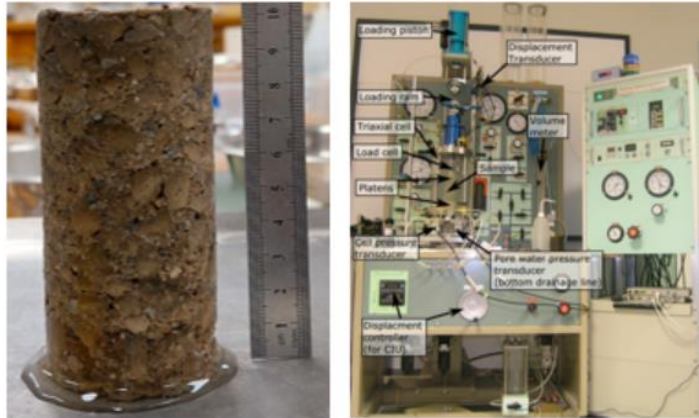
Different molecular structure



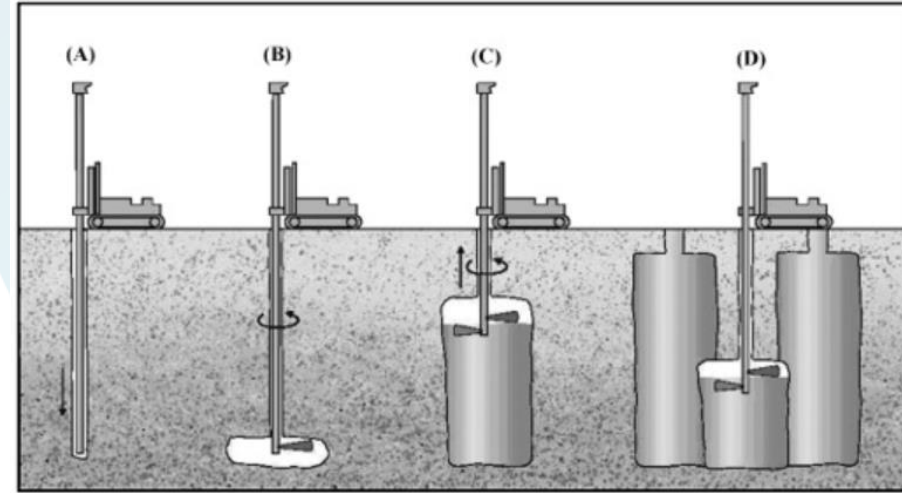
Traditional liquefaction testing
40% NBS



Specialist testing



Grout injection \$15m



\$15m saving

70%
NBS



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PROJECT TIMELINE

What has happened?

- **2022:**
 - Detailed design, consent ready, peer reviewed throughout entire design process
 - Cost estimates received for new design
 - Report to Council (April and June):
 - Reduced NBS for ground to 70%



Current Status of the Project



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CURRENT STATUS

- Construction tender proposal received from Hawkins
- A portion of the tender proposal remains unfixed which opens the possibility for further cost increases
- Quantity surveyor has reviewed and updated overall estimate (including contingency at Treasury recommended level and all costs to date)
- Cost envelope to fully strengthen the building plus internal fit-out is \$81.4m plus unknown escalations
- Council must consult on whether to continue with the project



CONSULTATION FOCUS

Key consultation question:

“Has the level of community support to strengthen the Museum building changed given the increased level of cost for the project and associated escalation in risk?”

- Options are provided for the sole purpose of providing alternatives against which the community can reevaluate their original preference for proceeding with strengthening the building.
- Council will use the level of community support alternatives in determining an agreed pathway forward.



OPTION 1

Continue as planned, restore the building and open as a museum

- Fully strengthen the building and all internal fit-out.
- Cost envelope \$81.4m requires an additional \$28m of funding:
 - **NB** exhibition design and install is additional
- Building re-opened completed by end of 2025 (assuming no funding or construction delays).
- Risks:
 - **External funding:** still to be confirmed
 - **Construction risk:** Complexity and age of the building = potential cost increases



OPTION 2

Stage the project

- Stage 1: Strengthen the building (estimate \$54m – additional \$500k RLC plus any withdrawn funding)
- Stage 2: Fundraise and carry out internal fit-out
- Building would re-open after Stage 2
- Risks:
 - **External funding:** depends on retaining Stage 1 funding and securing sufficient additional funds
 - **Construction risk:** as for Option 1
 - **Inflation:** cost for Stage Two will continue to increase



OPTION 3

Postpone the project

- Building stays closed + investigate new museum/gallery at a new site. All external funding returned
 - Cost est. at \$10m, includes costs to date and remedial work (make the building safe for passers-by and to prevent trespass).
- **Building Act:** By 2042 Council must get to 34% NBS or obtain an extension or exemption, or obtain consent to demolish
- Risks:
 - **Legal obligations:** Council must find pathway comply with Building Act in next 20 years
 - **Funding:** Future costs will continue to increase, no guarantee of external funding
 - **Reputation (funders and contractors)**
 - **Access/care of collection**



OPTION 4

34% NBS

- Investigate alternative seismic solution to achieve 34%
- Seeks to maintain the iconic façade
- Building would not open as a museum (new museum site to be investigated)
- Risks:
 - **Feasibility:** Requires new design, consenting and costing
 - **Funding:** Future funding to be identified
 - **Reputation (funders and contractors)**



NEXT STEPS

- Proposed consultation timeframes
 - 10 May: Council decision to consult.
 - 17 May: Community consultation will open on the options.
 - 14 June: Consultation period closes.
 - 5 July: Council decision on the preferred option.



NEXT STEPS

- Option 1 and 2:
 - Confirm all external funding and negotiate construction contract
 - Council decision to award the construction contract
- Option 3 and 4:
 - Return external funding, close out existing contracts (including exhibition), secure the building
 - Prepare options for next year's LTP



QUESTIONS?



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Extra slides if needed

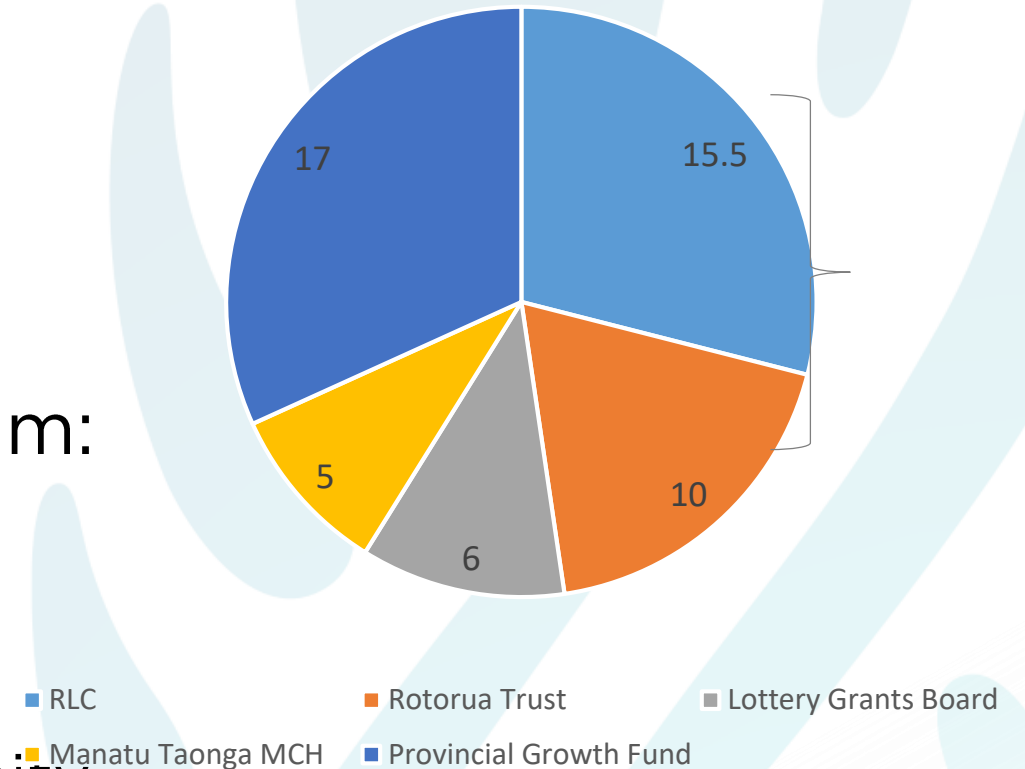


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Funding \$53.5m

BUILD FUNDING

- RLC \$15.5m (29%)
- \$38m external funding for museum:
 - \$17m Kanoa – job creation
 - \$5m MCH – heritage of building
 - \$6m Lotteries – heritage & community
 - \$10m Rotorua Trust – community outcomes



BUILD FUNDING

RLC
Contribution

\$21.8m

\$22.6m

\$20.5m

\$15.5m

RLC Share of Funding

Aquatic Centre Stages 1 and 2

Sir Howard Morrison Centre

Lakefront

Rotorua Museum

80%

66%

50%

29%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%



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