Sustainability and Community Resilience Committee
AGENDA

Notice of Meeting:

An ordinary meeting of the Sustainability and Community Resilience Committee will be held on:

Date: **Wednesday 1 June 2022**
Time: **9.30am**
Venue: **Council Chambers, Civic Offices, 53 Hereford Street, Christchurch**

Membership

Chairperson	Councillor Sara Templeton
Deputy Chairperson	Councillor Melanie Coker
Members	Mayor Lianne Dalziel
	Deputy Mayor Andrew Turner
	Councillor Jimmy Chen
	Councillor Catherine Chu
	Councillor Pauline Cotter
	Councillor Mike Davidson
	Councillor Celeste Donovan
	Councillor Anne Galloway
	Councillor James Gough
	Councillor Yani Johanson
	Councillor Aaron Keown
	Councillor Sam MacDonald
	Councillor Phil Mauger
	Councillor Jake McLellan
	Councillor Tim Scandrett

27 May 2022

Principal Advisor
Mary Richardson
General Manager Citizens & Community
Tel: 941 8999

Simone Gordon
Committee and Hearings Advisor
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To view copies of Agendas and Minutes, visit:
https://www.ccc.govt.nz/the-council/meetings-agendas-and-minutes/

Ōtautahi–Christchurch is a city of opportunity for all

Open to new ideas, new people and new ways of doing things – a city where anything is possible

Principles

- Being open, transparent and democratically accountable
- Promoting equity, valuing diversity and fostering inclusion
- Taking an inter-generational approach to sustainable development, prioritising the social, economic and cultural wellbeing of people and communities and the quality of the environment, now and into the future
- Building on the relationship with Te Rūnanga o Ngāi Tahu and the Te Hononga–Council Papatipu Rūnanga partnership, reflecting mutual understanding and respect
- Ensuring the diversity and interests of our communities across the city and the district are reflected in decision-making
- Actively collaborating and co-operating with other local, regional and national organisations

Community Outcomes

Resilient communities

- Strong sense of community
- Active participation in civic life
- Safe and healthy communities
- Celebration of our identity through arts, culture, heritage, sport and recreation
- Valuing the voices of all cultures and ages (including children)

Liveable city

- Vibrant and thriving city centre
- Sustainable suburban and rural centres
- A well connected and accessible city promoting active and public transport
- Sufficient supply of, and access to, a range of housing
- 21st century garden city we are proud to live in

Healthy environment

- Healthy water bodies
- High quality drinking water
- Unique landscapes and indigenous biodiversity are valued and stewardship exercised
- Sustainable use of resources and minimising waste

Prosperous economy

- Great place for people, business and investment
- An inclusive, equitable economy with broad-based prosperity for all
- A productive, adaptive and resilient economic base
- Modern and robust city infrastructure and community facilities

Strategic Priorities

- **Enabling active and connected communities to own their future**
- **Meeting the challenge of climate change through every means available**
- **Ensuring a high quality drinking water supply that is safe and sustainable**
- **Accelerating the momentum the city needs**
- **Ensuring rates are affordable and sustainable**

Ensuring we get core business done while delivering on our Strategic Priorities and achieving our Community Outcomes

- Engagement with the community and partners
- Strategies, Plans and Partnerships
- Long Term Plan and Annual Plan
- Our service delivery approach
- Monitoring and reporting on our progress

SUSTAINABILITY AND COMMUNITY RESILIENCE COMMITTEE OF THE WHOLE - TERMS OF REFERENCE
NGĀ ĀRAHINA MAHINGA

Chair	Councillor Templeton
Deputy Chair	Councillor Coker
Membership	The Mayor and All Councillors
Quorum	Half of the members if the number of members (including vacancies) is even, or a majority of members if the number of members (including vacancies) is odd.
Meeting Cycle	Monthly
Reports To	Council

Delegations

The Council delegates to the Sustainability and Community Resilience Committee authority to oversee and make decisions on:

- Enabling active citizenship, community engagement and participation
- Implementing the Council's climate change initiatives and strategies
- Arts and culture including the Art Gallery
- Heritage
- Housing across the continuum of social, affordable and market housing, including innovative housing solutions that will increase the supply of affordable housing
- Overseeing the Council's housing asset management including the lease to the Otautahi Community Housing Trust
- Libraries (including community volunteer libraries)
- Museums
- Sports, recreation and leisure services and facilities
- Parks (sports, local, metropolitan and regional), gardens, cemeteries, open spaces and the public realm (for the avoidance of doubt the Council retains its authority on matters relating to the Ōtākaro Avon River Corridor).
- Hagley Park, including the Hagley Park Reference Group
- Community facilities and assets
- Suburban Master Plans and other local community plans
- Implementing public health initiatives
- Community safety and crime prevention, including family violence
- Civil defence including disaster planning and local community resilience plans
- Community events, programmes and activities
- Community development and support, including grants and sponsorships
- The Smart Cities Programme
- Council's consent under the terms of a Heritage Conservation Covenant
- Council's consent to the removal of a Heritage Conservation Covenant from a vacant section.

Bylaws

The Council delegates to the Committee authority to:

- Oversee the development of new bylaws within the Committee's terms of reference, up to and including adopting draft bylaws for consultation.
- Oversee the review of the following bylaws, up to and including adopting draft bylaws for consultation.
    - Alcohol Restrictions in Public Places Bylaw 2018
    - Brothels Bylaw 2013
    - Cemeteries Bylaw 2013
    - Dog Control Policy and Bylaw 2016
    - Freedom Camping Bylaw 2015
    - General Bylaw 2008
    - Parks and Reserves Bylaw 2018
    - Public Places Bylaw 2018

Submissions

- The Council delegates to the Committee authority:
- To consider and approve draft submissions on behalf of the Council on topics within its terms of reference. Where the timing of a consultation does not allow for consideration of a draft submission by the Council or relevant Committee, that the draft submission can be considered and approved on behalf of the Council.

Community Funding

The Council delegates to the Committee authority to make decisions on the following funds (but not limited to), where the decision is not already delegated to staff:

- Heritage Incentive Grant Applications
- Extensions of up to two years for the uptake of Heritage Incentive Grants
- Christchurch Heritage Festival Community Grants over $5,000
- Applications to the Events and Festivals Fund
- Applications to the Capital Endowment Fund
- Applications to the Enliven Places Projects Fund
- Applications to the Sustainability Fund
- Applications to the Metropolitan Strengthening Communities Fund *[The Funding Committee will make recommendations on applications to this fund and report back to this Committee]*
- Applications to the Discretionary Response Fund
- Applications to the Place Partnership Fund
- Applications to the Community Organisation Loan Scheme

Limitations

- This Committee does not have the authority to set project budgets, identify preferred suppliers or award contracts. These powers remain with the Finance and Performance Committee.
- The general delegations to this Committee exclude any specific decision-making powers that are delegated to a Community Board, another Committee of Council or Joint Committee. Delegations to staff are set out in the delegations register.

- The Council retains the authority to adopt policies, strategies and bylaws.
- The Council retains its authority on matters relating to the Ōtākaro Avon River Corridor.
- The following matters are prohibited from being subdelegated in accordance with LGA 2002 Schedule 7 Clause 32(1) :
- the power to make a rate; or
- the power to make a bylaw; or
- the power to borrow money, or purchase or dispose of assets, other than in accordance with the long-term plan; or
- the power to adopt a long-term plan, annual plan, or annual report; or
- the power to appoint a chief executive; or
- the power to adopt policies required to be adopted and consulted on under this Act in association with the long-term plan or developed for the purpose of the local governance statement; or
- the power to adopt a remuneration and employment policy.

Chairperson may refer urgent matters to the Council

As may be necessary from time to time, the Committee Chairperson is authorised to refer urgent matters to the Council for decision, where this Committee would ordinarily have considered the matter. In order to exercise this authority:

- The Committee Advisor must inform the Chairperson in writing the reasons why the referral is necessary
- The Chairperson must then respond to the Committee Advisor in writing with their decision.

If the Chairperson agrees to refer the report to the Council, the Council may then assume decision-making authority for that specific report.

Part A Matters Requiring a Council Decision
Part B Reports for Information
Part C Decisions Under Delegation

TABLE OF CONTENTS

Karakia Tīmatanga

1. Apologies Ngā Whakapāha

At the close of the agenda no apologies had been received.

2. Declarations of Interest Ngā Whakapuaki Aronga

Members are reminded of the need to be vigilant and to stand aside from decision making when a conflict arises between their role as an elected representative and any private or other external interest they might have.

3. Confirmation of Previous Minutes Te Whakaāe o te hui o mua

That the minutes of the Sustainability and Community Resilience Committee meeting held on Wednesday, 30 March 2022 be confirmed (refer page 8).

4. Public Forum Te Huinga Whānui

A period of up to 30 minutes will be available for people to speak for up to five minutes on any issue that is not the subject of a separate hearings process.

4.1 Cancer Society of New Zealand
Amanda Dodd (Deputy Manager Health Promotion) will speak on behalf of the Cancer Society New Zealand to update the Committee on the Smokefree Aotearoa 2025 Action Plan.

4.2 Foodbank Aotearoa New Zealand
Dr John Milligan (Chief Executive, Foodbank Aotearoa New Zealand) will discuss how the organisation uses their experience, resources, and relationships and through the food banking model, they address food security as well as mitigate the effects of climate change.

4.3 Hagley Film Project
Izzie Evans will present to the Committee her short documentary film *'Hagley Inside Out'*
Film link available here: https://vimeo.com/657606547

5. Deputations by Appointment Ngā Huinga Whakaritenga

Deputations may be heard on a matter or matters covered by a report on this agenda and approved by the Chairperson.

There were no deputations by appointment at the time the agenda was prepared.

6. Presentation of Petitions Ngā Pākikitanga

There were no petitions received at the time the agenda was prepared.

Christchurch City Council

Christchurch City Council

Sustainability and Community Resilience Committee
OPEN MINUTES

Date: Wednesday 30 March 2022
Time: 9.31am
Venue: Held by Audio/Visual Link

Present

Chairperson	Councillor Sara Templeton
Deputy Chairperson	Councillor Melanie Coker
Members	Mayor Lianne Dalziel
	Deputy Mayor Andrew Turner
	Councillor Jimmy Chen
	Councillor Catherine Chu
	Councillor Pauline Cotter
	Councillor Mike Davidson
	Councillor Celeste Donovan
	Councillor Anne Galloway
	Councillor James Gough
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Part A **Matters Requiring a Council Decision**

Part B **Reports for Information**

Part C **Decisions Under Delegation**

Karakia Tīmatanga: Given by Councillor Galloway.

The agenda was dealt with in the following order.

1. Apologies Ngā Whakapāha

Part C

Committee Resolved SACRC/2022/00006

That the apologies received from The Mayor for lateness be accepted.

Councillor Templeton/Councillor Chen **Carried**

2. Declarations of Interest Ngā Whakapuaki Aronga

Part B

Councillor Templeton declared an interest in Officer Recommendation 2 in Item 11.

3. Confirmation of Previous Minutes Te Whakaāe o te hui o mua

Part C

Committee Resolved SACRC/2022/00007

That the minutes of the Sustainability and Community Resilience Committee meeting held on Wednesday, 2 February 2022 be confirmed.

Councillor Scandrett/Deputy Mayor **Carried**

4. Public Forum Te Huinga Whānui

Part B

4.1 Sustainable Coastlines

Emma Hunter presented her MSc research on the "Quantification and Characterisation of Pre-Production Pellet Pollution in the Avon-Heathcote Estuary/Ihutai, Aotearoa-New Zealand" to raise awareness of this issue and encourage discussion around solutions. In addition, Emma introduced the work that she is doing with Sustainable Coastlines.

Attachments

A 4.1 Emma Hunter - Presentation

4.2 Historic Places Canterbury

Mark Gerrard spoke on behalf of Historic Places Trust Canterbury regarding the Council's Heritage Strategy. Mr Gerrard gave feedback on the Trust's concerns with the Council's application of the strategy, especially in regards to adopting a whole life of carbon cycle when costing buildings and demolitions.

The Committee requested that Mr Gerrard be sent a copy of the report regarding the demolition of Centennial Hall.

Attachments

A 4.2 Mark Gerrard - Presentation

5. Deputations by Appointment Ngā Huinga Whakaritenga

Part B

There were no deputations by appointment.

6. Presentation of Petitions Ngā Pākikitanga

Part B

There was no presentation of petitions.

7. Te Tira Kāhikuhiku - December 2021, February 2022 and March 2022 Minutes

Committee Comment

1. The Committee requested an update with a table of all leases and licences of Red Zone land currently held, when they expire, and what the proposal is going forward for renewal rollovers and how this fits in with Council policy. This applies to Council owned land and land that will soon be owned by Council.

Committee Resolved SACRC/2022/00008

That the Sustainability and Community Resilience Committee receives the Minutes from Te Tira Kāhikuhiku meetings held on the follow dates

- 9 December 2021
- 22 February 2022
- 15 March 2022

Councillor Cotter/Councillor Coker **Carried**

The Mayor joined the meeting at 10.00am during consideration of Item 10.

10. Christ's College FENZ Access Easement In Botanic Gardens

Committee Resolved Officer Recommendations accepted without change
SACRC/2022/00009

Part C

That the Sustainability and Community Resilience Committee, acting under the delegated authority of the Christchurch City Council:

1. Approve pursuant to Section 48 of the Reserves Act 1977, the granting of a pedestrian Right of Way easement with restricted access for only Fire and Emergency New Zealand (FENZ) purposes, to Christ's College Canterbury over that part of the Local Purpose (Botanic Garden) Reserve known as the Botanic Gardens (Part Reserve 25 in Record of Title 668229) shown as hashed blue area on the plan below at paragraph 5.5, subject to:
    a. The acknowledgement that a public notice is not required in this instance.
    b. A recommendation that the Chief Executive, using the Council's delegated authority from the Minister of Conservation, consents to the granting of an easement referred to in (1) above.
    c. All necessary statutory consents under, but not limited to, the Resource Management Act and Building Control Act being obtained by Christ's College.
    d. Christ's College meet their own and Council's costs associated with the creation and execution of this easement.
2. Authorises the Property Consultancy Manager, should the easement be granted with the consent of the Chief Executive, to conclude negotiations with Christ's College and to finalise the documentation required to implement the easement.

Councillor Mauger/Councillor Scandrett **Carried**

8. Community Facilities update report

Committee Comment

1. In discussing the Representation Review and changes to the Community Board structure, the Committee requested a briefing outlining the plan for the transition of the spaces that are being used, staffing and transitioning various community groups across to new Community Boards.

Committee Resolved Officer Recommendation accepted without change
SACRC/2022/00010

Part C

That the Sustainability and Community Resilience Committee:

1. Receive the information in the Community Facilities update report.

Councillor Davidson/Councillor Coker **Carried**

Attachments

A Community Facilities Update

9. Heritage Incentive Grant Fund Applications

Committee Comment

1. The Committee requested for officers to check if unused Council owned slate stones can be donated to heritage projects.
2. The Committee resolved to defer Officer Recommendations 1-2 regarding St Michael and All Angels Church, to the Council meeting on 7 April 2022. This is to allow officers time to investigate additional funding avenues for the project.
3. Officer Recommendations 3 – 6 were accepted without change.

Officer Recommendations Ngā Tūtohu

That the Sustainability and Community Resilience Committee:

1. Approve a grant of up to $26,288 for conservation of the west Rose Window at St Michael and All Angels Church, 243 Durham Street South, Christchurch.
2. Note that payment of the St Michael's Church grant is subject to the applicant entering a 10 year limited conservation covenant with the signed covenant having the Council seal affixed prior to registration against the property title.
3. Approve a grant of up to $87,500 for conservation, upgrade, repair and maintenance works to St Barnabas Church Hall located at 8 Tui Street, Fendalton, Christchurch.
4. Note that payment of the St Barnabas Church Hall grant is subject to the applicant entering a 20 year limited conservation covenant with the signed covenant having the Council seal affixed prior to registration against the property title.
5. Re-approve the lapsed grant of up to $5,136 for conservation and maintenance works to the heritage building located at 23 Mandeville Street, Christchurch.
6. Approve a grant of up to $5,692 for conservation and maintenance works to Kinsey Cottage and Darkroom, Ferrymead Heritage Park, Christchurch.

Committee Resolved SACRC/2022/00011

Part C

That the Sustainability and Community Resilience Committee:

1. Defer the following Officer Recommendations to the Council meeting on 7 April 2022:

   Officer Recommendation 1: *Approve a grant of up to $26,288 for conservation of the west Rose Window at St Michael and All Angels Church, 243 Durham Street South, Christchurch.*

   Officer Recommendation 2: *Note that payment of the St Michael's Church grant is subject to the applicant entering a 10 year limited conservation covenant with the signed covenant having the Council seal affixed prior to registration against the property title.*

2. Approve a grant of up to $87,500 for conservation, upgrade, repair and maintenance works to St Barnabas Church Hall located at 8 Tui Street, Fendalton, Christchurch.
3. Note that payment of the St Barnabas Church Hall grant is subject to the applicant entering a 20 year limited conservation covenant with the signed covenant having the Council seal affixed prior to registration against the property title.

4. Re-approve the lapsed grant of up to $5,136 for conservation and maintenance works to the heritage building located at 23 Mandeville Street, Christchurch.

5. Approve a grant of up to $5,692 for conservation and maintenance works to Kinsey Cottage and Darkroom, Ferrymead Heritage Park, Christchurch.

Councillor Templeton/Councillor Davidson **Carried**

The Mayor left the meeting at 11.11am during consideration of item 11.
The meeting adjourned from 11.11am and reconvened at 11.16am.

11. Community Applications to the 2021/22 Capital Endowment Fund

Committee Comment

1. Councillor Galloway provided a brief update to the Committee on the Mayors Welfare Fund.
2. Officer recommendations 1, 3 and 4 were considered together and were accepted by the Committee without change.
3. An amendment for the funding for Woolston Brass (Officer Recommendation 2) was considered and voted on separately. The amendment resolved to increase Woolston Brass' initial funding allocation from $200,000 to $270,000 from the 2021/22 Capital Endowment Fund. The Committee then approved an additional funding allocation of $130,000 from the 2023/24 Capital Endowment Fund. (Refer to Resolutions 4 and 5)

Officer Recommendations Ngā Tūtohu

That the Sustainability and Community Resilience Committee:

1. Makes a grant of $300,000 from the 2021/22 Capital Endowment Fund to The Society of St Vincent de Paul towards construction of the Pavitt Street Social Housing Project
    a. Payment will be released in one instalment of $300,000 on receipt of evidence that satisfactory fundraising has been achieved to make the project viable no later than 30 June 2023, approved by the Head of Community Support & Partnerships Unit.
    b. Reporting is to be submitted 12 monthly and upon completion of the Pavitt Street Social Housing Project.
2. Makes a grant of $200,000 from the 2021/2022 Capital Endowment Fund to Woolston Brass for Band Room.
    a. Payment will be released in one instalment of $200,000 on receipt of evidence that satisfactory fundraising has been achieved to make the project viable no later than 30 June 2023, approved by the Head of Community Support & Partnerships Unit.
    b. Reporting is to be submitted 12 monthly, and upon completion of the Dampier Street rebuild.
3. Makes a grant of $200,000 from the 2021/22 Capital Endowment Fund to North Avon BMX Club for the Bexley Reserve Pumptrack construction costs.
    a. Funding to be released as one instalment of $200,000 on receipt of evidence that satisfactory fundraising has been achieved to make the project viable no later

than 30 June 2023, approved by the Head of Community Support & Partnerships Unit.

b. Funding to be released as one instalment of $200,000 on receipt of evidence that the fundraising and appropriate consents are completed, approved by Unit Manager Community Support and Partnerships.

4. Makes a grant of $100,000 from the 2021/2022 Capital Endowment Fund to Canterbury Softball for upgrading the softball diamonds to artificial surfaces.

   a. Funding to be released in one instalment of $100,000 conditional on Community Board approval for the upgrade and on receipt of evidence that satisfactory fundraising has been achieved to make the project viable no later than 30 June 2023, approved by the Head of Community Support & Partnerships Unit.

   b. Reporting is to be submitted 12 monthly, and upon completion of the instalment of surfaces.

Committee Resolved SACRC/2022/00012

Part C

That the Sustainability and Community Resilience Committee:

1. Makes a grant of $300,000 from the 2021/22 Capital Endowment Fund to The Society of St Vincent de Paul towards construction of the Pavitt Street Social Housing Project

   a. Payment will be released in one instalment of $300,000 on receipt of evidence that satisfactory fundraising has been achieved to make the project viable no later than 30 June 2023, approved by the Head of Community Support & Partnerships Unit.

   b. Reporting is to be submitted 12 monthly and upon completion of the Pavitt Street Social Housing Project.

2. Makes a grant of $200,000 from the 2021/22 Capital Endowment Fund to North Avon BMX Club for the Bexley Reserve Pumptrack construction costs.

   a. Funding to be released as one instalment of $200,000 on receipt of evidence that satisfactory fundraising has been achieved to make the project viable no later than 30 June 2023, approved by the Head of Community Support & Partnerships Unit.

   b. Funding to be released as one instalment of $200,000 on receipt of evidence that the fundraising and appropriate consents are completed, approved by Unit Manager Community Support and Partnerships.

3. Makes a grant of $100,000 from the 2021/2022 Capital Endowment Fund to Canterbury Softball for upgrading the softball diamonds to artificial surfaces.

   a. Funding to be released in one instalment of $100,000 conditional on Community Board approval for the upgrade and on receipt of evidence that satisfactory fundraising has been achieved to make the project viable no later than 30 June 2023, approved by the Head of Community Support & Partnerships Unit.

   b. Reporting is to be submitted 12 monthly, and upon completion of the instalment of surfaces.

Councillor Davidson/Councillor Coker **Carried**

Committee Resolved SACRC/2022/00013

Amendment Moved by Councillor Johanson and Seconded by Councillor Cotter

That the Sustainability and Community Resilience Committee:

4. Makes a grant of $270,000 from the 2021/2022 Capital Endowment Fund to Woolston Brass for Band Room.

*The division was declared **carried** by 13 votes to 2 votes the voting being as follows:*

For: *Councillor Coker, Deputy Mayor Turner, Councillor Chen, Councillor Chu, Councillor Cotter, Councillor Davidson, Councillor Donovan, Councillor Galloway, Councillor Johanson, Councillor Keown, Councillor Mauger, Councillor McLellan and Councillor Scandrett*

Against: *Councillor Gough and Councillor MacDonald*

Abstained: *Councillor Templeton*

Councillor Johanson/Councillor Cotter **Carried**

Committee Resolved SACRC/2022/00014

Amendment Moved by Councillor Johanson and Seconded by Councillor Cotter

That the Sustainability and Community Resilience Committee:

5. Makes a grant of $130,000 from 2023/24 Capital Endowment Fund to Woolston Brass for Band Room.
    a. Payment will be released in two instalments of $270,000 and $130,000 on receipt of evidence that satisfactory fundraising has been achieved to make the project viable no later than 30 June 2024, approved by the Head of Community Support & Partnerships Unit.
    b. Reporting is to be submitted 12 monthly, and upon completion of the Dampier Street rebuild.

*The division was declared **carried** by 13 votes to 2 votes the voting being as follows:*

For: *Councillor Coker, Deputy Mayor Turner, Councillor Chen, Councillor Chu, Councillor Cotter, Councillor Davidson, Councillor Donovan, Councillor Galloway, Councillor Johanson, Councillor Keown, Councillor Mauger, Councillor McLellan and Councillor Scandrett*

Against: *Councillor Gough and Councillor MacDonald*

Abstained: *Councillor Templeton*

Councillor Johanson/Councillor Cotter **Carried**

Karakia Whakamutunga: Given by Councillor Galloway.

Meeting concluded at 11.44am.

CONFIRMED THIS 1ST DAY OF JUNE 2022.

COUNCILLOR SARA TEMPLETON
CHAIRPERSON

Item 7

7. Draft submission on National Adaptation Plan

Reference / Te Tohutoro:	22/539239
Report of / Te Pou Matua:	Jane Morgan, Team Leader Coastal Hazards Adaptation Planning Sarah Pahlen, Adaptation Advisor
General Manager / Pouwhakarae:	Jane Davis, General Manager Infrastructure, Planning & Regulatory Services

1. Purpose of the Report Te Pūtake Pūrongo

1.1 The purpose of this report is to consider and approve the draft Council submission to the Ministry for the Environment (MfE), in response to the consultation on their draft National Adaptation Plan and the associated managed retreat proposals.

1.2 Submissions are due with MfE by Friday 3 June 2022.

1.3 The decision in this report is of low significance in relation to the Christchurch City Council's Significance and Engagement Policy. This recognises that while there may be significant community interest in these proposals, the specific decision (to approve the draft submission) is of a lower level of significance.

2. Officer Recommendations Ngā Tūtohu

That the Sustainability and Community Resilience Committee:

1. Approve the draft Council submission to Ministry for the Environment on their draft National Adaptation Plan. (**Attachment A** *under separate cover)*.

3. Reason for Report Recommendations Ngā Take mō te Whakatau

3.1 The Council regularly makes submissions on proposals which may significantly impact Christchurch residents or Council business. Making submissions is an important way to influence national policies and legislation development.

4. Alternative Options Considered Ētahi atu Kōwhiringa

4.1 The alternative option to the recommendation outlined above is for the Council to not make a submission on these proposals. This is not the preferred option as it is important for the Council to advocate on issues that affect the Christchurch community, Council business and our strategic priorities.

5. Detail Te Whakamahuki

Draft National Adaptation Plan

5.1 The draft National Adaptation Plan (NAP) outlines the actions the government will take over the next six years to build climate resilience, and is in response to the priority climate-related risks identified in the National Climate Change Risk Assessment, released in August 2020.

5.2 New Zealand's first national adaptation plan will build the foundation for adaptation action. The consultation also outlines proposals for managed retreat policies.

Key submission points

5.3 Please note that the Council's draft submission on the National Adaptation Plan will be uploaded as an attachment under separate cover by 31 May due to the short timeframe for the submission period.

5.4 While the draft NAP signals direction and actions, most actions are already known and scheduled. The Council asks that central government act with greater aspiration and urgency, and speeds up central government's delivery of actions to gain sufficient momentum.

5.5 Significant, complex and wide ranging reform is underway concurrently across resource management, water services, emergency management and the future of local government. Each of these inter-dependent legislative reform programmes impact on the roles and responsibilities of local government, and yet the future of local government is scheduled to be clarified last in the sequence. Therefore Council seeks earlier guidance around the eventual roles and responsibilities of local government to allow us to operate effectively and ensure that communities and other stakeholders also share an understanding of the final destination of these reform processes.

5.6 We note the draft NAP places a disproportionate emphasis on local government's existing roles and responsibilities and de-emphasises central government's role with respect to adaptation actions. The submission also asks that if central government assigns additional roles and responsibilities to local government through legislative change, that there be commensurate allocation of funding to enable resourcing of these responsibilities.

5.7 The Council welcomes the commitment to delivering data, information, tools and guidance however, these need to be designed with end users in order for implementation to be successful.

5.8 The submission argues that the Canterbury earthquake experience should directly inform the development of the Climate Adaptation Act. We also seek the opportunity to help inform the development of this legislation.

5.9 The Government needs to take a greater role in building hazard literacy and understanding of climate science and impacts across people of all ages. While people and communities are at the heart of the draft NAP, there appears to be an absence of any genuine attempt to engage them in the consultation process.

6. Policy Framework Implications Ngā Hīraunga ā- Kaupapa here

Strategic Alignment Te Rautaki Tīaroaro

6.1 This submission aligns with the Council's strategic framework, particularly the strategic priority of meeting the challenge of climate change through every means available.

6.2 This report supports the Council's Long Term Plan (2018 - 2028):

6.2.1 Activity: Strategic Planning, Future Development and Regeneration

- Level of Service: 17.0.1.1 Advice to Council on high priority policy and planning issues that affect the City. Advice is aligned with and delivers on the governance expectations as evidenced through the Council Strategic Framework. - Triennial reconfirmation of the strategic framework or as required.

Policy Consistency Te Whai Kaupapa here

6.3 The decision is consistent with Council's Plans and Policies.

Impact on Mana Whenua Ngā Whai Take Mana Whenua

6.4 Council staff have discussed at a high level the content of the Council's submission with Te Rūnanaga o Ngāi Tahu given the intrinsic values Māori hold with whenua, wai and the environment and in acknowledgement of the importance of a partnership approach.

Climate Change Impact Considerations Ngā Whai Whakaaro mā te Āhuarangi

6.5 The NAP is a critical step towards preparing for the impacts of climate change.

7. Resource Implications Ngā Hīraunga Rauemi

Capex/Opex / Ngā Utu Whakahaere

7.1 Cost to Implement - the cost of preparing a submission has been met from existing budgets.

7.2 Maintenance/Ongoing costs - there will be no ongoing costs associated with making this submission.

7.3 Funding Source - existing operational budgets.

8. Legal Implications Ngā Hīraunga ā-Ture

Statutory power to undertake proposals in the report / Te Manatū Whakahaere Kaupapa

8.1 This consultation is public and open to any person or organisation.

8.2 As per the 23 January 2020 Council resolution CNCL/2020/00008, all Committees of the Whole have been delegated authority to approve draft submissions on behalf of the Council.

9. Risk Management Implications Ngā Hīraunga Tūraru

9.1 There are no significant risks associated with this decision.

Attachments / Ngā Tāpirihanga

No.	Title	Page
A	Draft submission National Adaptation Plan *(Under Separate Cover)*	

In addition to the attached documents, the following background information is available:

Document Name	Location / File Link
National Adaptation Plan consultation document	https://environment.govt.nz/publications/draft-national-adaptation-plan/

Confirmation of Statutory Compliance / Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).
(a) This report contains:
(i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and

(ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories / Ngā Kaiwaitohu

Authors	Jane Morgan - Team Leader Coastal Hazards Adaptation Planning Sarah Pahlen - Advisor Adaptation Planning Ellen Cavanagh - Policy Analyst
Approved By	Jane Davis - General Manager Infrastructure, Planning & Regulatory Services

Item 8

8. Community (Social) Housing Update Report 1 November 2021 to 30 April 2022

Reference / Te Tohutoro: 22/593612

Report of / Te Pou Matua: Bruce Rendall - Head of Facilities, Property and Planning Bruce.Rendall@ccc.govt.nz
Cate Kearney, Chief Executive, Ōtautahi Community Housing Trust

General Manager / Pouwhakarae: Leah Scales - General Manager Resources/CFO, Resources Group, Finance, Leah.Scales@ccc.govt.nz

1. Brief Summary

1.1 The purpose of this report is to update the Sustainability and Community Resilience Committee on community (social) housing activities.

1.2 The report stands to provide an update on activity for the period 1 November 2021 to 30 April 2022.

2. Officer Recommendations / Ngā Tūtohu

That the Sustainability and Community Resilience Committee:

1. Receive the information in the Community (Social) Housing Report

3. Matters to be Included

3.1 In December 2019 Council adopted a reporting framework that involves a report addressing the following matters:

Portfolio status of units categorised into the following groupings:

- Council owned Ōtautahi Community Housing Trust (ŌCHT) operated.
- ŌCHT owned and operated.
- Council owned community housing provider operated.
- Other.

3.1.1 Programmes of work included the following:

- Strategic undertakings.
- Housing fund.
- Planned works including maintenance.

4. Portfolio

4.1 At 30 April 2022, the Council's community housing portfolio consisted of 1944 units. This total comprises 1864 units under Deed of Lease to ŌCHT, 23 units leased to other community organisations (four complexes), and three remaining owner occupied units, all in one complex. 54 units have been closed pending redevelopment (two complexes).

4.2 Council is facilitating the growth of social housing through a variety of mechanisms including capitalisation of, and loans to, ŌCHT. During the reporting period ŌCHT opened 70 new units

in Richmond and Edgeware and has another 41 under construction or planned for completion by September 2022.

Complex Name	Number of Units	Projected Opening Date
Glovers Road	6	Construction in progress. Estimated completion May 2022.
Willard Street	35	Awaiting building and resource consent. Estimated completion date September 23.

Table 1.

4.3 The planned aggregate total of facilitate properties (including ŌCHT developments) by June 2022 will be 2560 units bringing the level of service supply to just shy of the pre-earthquake total of 2649 units. Council is also in preliminary discussion with ŌCHT about how it can facilitate additional community housing, both social and affordable.

4.4 ŌCHT are currently well advanced in planning 35 homes in Willard Street. Tenants and neighbours are aware of plans for a whanau development with 17 - 2, 3, 5 bedroom homes and 18 one bed homes.

4.5 ŌCHT has advanced planning the redevelopment of the Council owned Carey Street complex and have commenced investigation at the Council owned Sandilands complex. Council has informed Carey Street neighbours of the investigations and will notify Sandilands neighbours at an appropriate time.

4.6 While other early investigations are underway these are not named due to the very preliminary feasibility status of the investigations in these tenanted properties.

4.7 To the best of our knowledge the current supply of community housing in Ōtautahi Christchurch is:

Provider	No. Units
Kāinga Ora (December 2021)*	6,999
Christchurch City Council**	1,944
ŌCHT (owned)	610
Community Housing Providers***	344
Total	**9,897**

Table 2.

*Owned by, or leased to, Kāinga Ora
**1,864 units leased to ŌCHT
***Owned or managed, excluding ŌCHT

4.8 During this reporting period Kāinga Ora completed 41 new homes and have 235 homes under construction. Further information can be found on: https://kaingaora.govt.nz/developments-and-programmes/what-were-building/public-housing-developments/

4.9 Figure 1 is taken from the December 2021 Public Housing Quarterly Report which can be found on the Ministry of Housing and Urban Development (HUD) website. This shows the housing numbers in Canterbury. The number in brackets denote the previous quarter. https://www.hud.govt.nz/assets/News-and-Resources/Statistics-and-Research/Public-housing-reports/Quarterly-reports/Public-housing-quarterly-report-December-2021.pdf

Fig 1. (HUD) Quarterly Report December 2021

5. Strategic Undertakings

Changes to Maintenance Responsibilities

5.1 The transition of major maintenance to ŌCHT took effect from 1 July 2021, through an exchange of letter addendum to the lease.

5.2 The first term of the lease ended on 2 October 2021, ŌCHT took up the right of renewal with several minor changes (separately reported to the Council). The substantial changes have now been agreed, including incorporate the maintenance matters, and the new lease is substantially in place. Subsequently the Deed of Lease between the Council and ŌCHT has been reviewed and proposed variations are in the final approval stage.

Security Restructuring

5.3 Council and ŌCHT have undertaken restructuring of loan security arrangements. This work involved mortgages in favour of Council over several ŌCHT properties to secure $55 million of loans. A further $45 million worth of security is provided through General Security Agreements. Some ŌCHT properties have been removed from the security arrangements to allow them to be used to secure additional debt financing for new developments. Overall the restructuring of security has resulted in better protection for Council while also allowing ŌCHT to undertake additional developments.

Land Swap

5.4 During the period, Council and ŌCHT have been exploring a potential land swap option to facilitate two new mixed tenure developments. This matter will be the subject of a separate report to the Council.

Council Surplus Land

5.5 The Council has a policy of considering any surplus land for housing purposes. During the period covered by this report, the Council has been in negotiation with ŌCHT about the possible sale of surplus Council land for housing developments. These negotiations are progressing well and will be reported to Council at an appropriate time.

Asbestos Management Working Group

5.6 The Council has an organisation wide programme of work to undertake surveys and prepare asbestos management plans for all pre-2000 buildings including social housing.

5.7 Housing staff continue to represent housing on the working group tasked with ensuring completion of this Council wide legislated programme of work. The development of a long

term building management system will see QR coding on Council buildings enabling onsite contractor access to reports and information and contributing to safe work practices.

5.8 A key deliverable is negotiation with ŌCHT for entry to units to ensure timely completion of asbestos surveys. From this survey a management plan (base plan) is developed, and made available for contractor reference.

5.9 Council has worked with ŌCHT to manage the impacts of legislated asbestos surveys and other inspections on tenant's quiet enjoyment of their homes. This has worked well with the majority of the asbestos surveys being completed. There are approximately 90 units across 13 complexes to be completed.

Community (Social) Housing Strategy

5.10 The Council approved this Strategy in January 2021 and staff are working to implement relevant actions. Specifically (but not comprehensively):

5.10.1 We are encouraging and incentivising a range of tenure and housing models through working with partners in the affordable housing space to identify how Council land could be used to facilitate affordable housing developments.

6. Housing Fund

6.1 In line with the Council Policy to maintain Community (Social) Housing as a 'rates neutral' service all housing financial activities are accounted for under a specific Housing Fund. All housing revenues are paid into the fund and all expenses drawn from it.

6.2 The predicted rental income for the 2022-23 FY is $15,649,000.

6.3 The opening balance of the housing fund at 1 July 2021 was $2,853,000 and closing at 30 April 2022 with a balance of $3,668,000 deficit.

6.4 Financial movement for the reporting period can be attributed to net operations including planned and major work, plus the minor maintenance programmes managed by ŌCHT.

6.5 The fund is forecast to end the financial year with a balance of $904,000. While this low balance is concerning, it reflects the focus on expenditure to lift unit quality and the accelerated implementation of the healthy homes (Warm and Dry) requirements.

6.6 To date we have chosen to meet the costs of the Warm and Dry programme from the Fund without using the approved $10m loan.

6.7 The fund is expected to move into an accumulation phase from FY24 onwards but will remain constrained until the end of the decade.

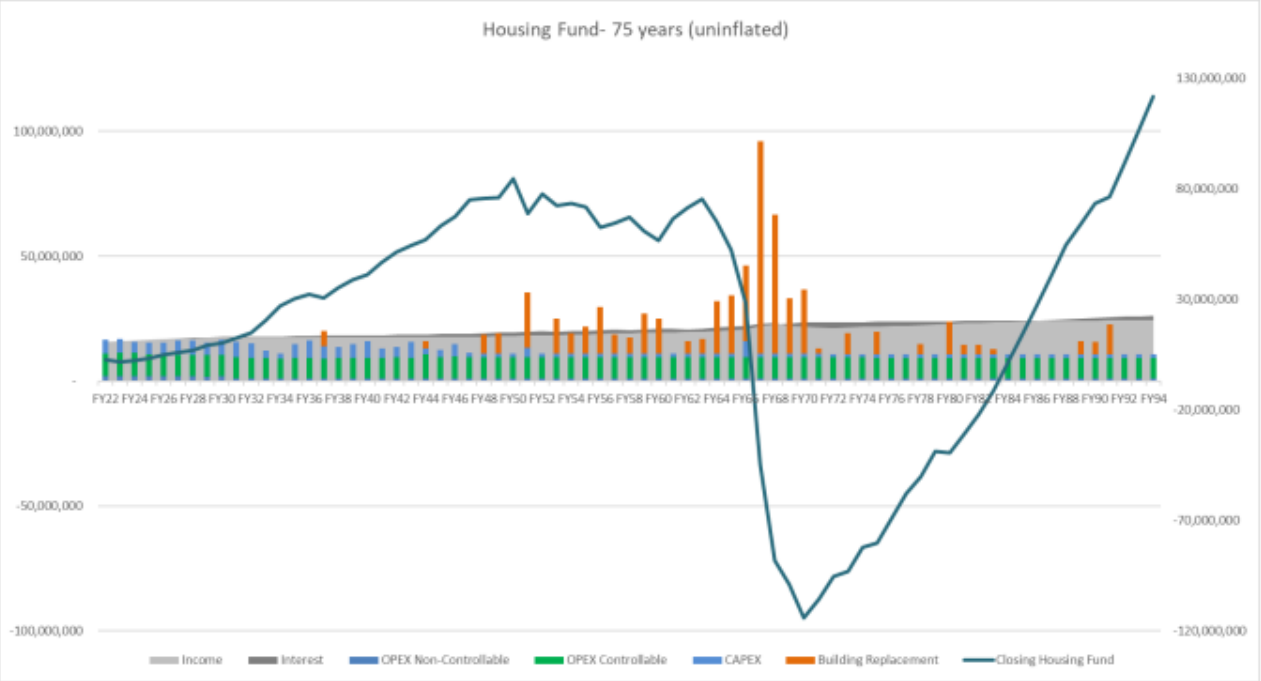

Figure 1-2: Social Housing Fund Projections

7. Work Programmes

7.1 When major repairs or planned works are undertaken, units are removed from the 'ready to let' listing for the duration of the works.

7.2 As at 30 April 2022, 105 units (compared to 101 in the previous report) were unavailable to let for various reasons.

Reason	Unavailable Units	Comments
Temporary Accommodation	10	ŌCHT works programme - major upgrade
Asbestos	4	
Fire Damage	1	Insurance repairs - Boyd Cottages
Meth contamination	3	Over 15µg/100 cm^2 threshold- require remediation
Planned / Major work	14	ŌCHT works programme - major upgrade
Pending redevelopment	73	Andrews Cres, Carey St and Sandilands (54 outside of lease and 19 within the lease)

7.3 54 units are closed due to age, condition, and financial viability. The future of these buildings is currently being considered as part of new build financing investigations. Options include redevelopment of the sites, subject to funding, or "capital recycling", i.e. sales with the return reinvested to improve the portfolio.

7.4 Some of the planned /major works reflect the industry wide shortage of resources, particularly Gib.

7.5 The Maintenance budgets for FY22 are OPEX $4,705,341 and CAPEX $6,898,096 totalling a budget of $11,603,437.

7.6 Works planned, commenced or completed during the period 1 November 2021 to 30 April 2022 is detailed below.

Work Programme	Unit/Complex
Asbestos Removal	Airedale Martindales Norman Kirk Wycola Phillipstown Jennifer/Manor
Exterior Painting	Veronica Cedar Forfar Thurso Knightsbridge Bartlett Jennifer/Manor/Torquay
Meth Decontamination	Hadfield Mary McLean Bridgewater
Internal Upgrades	Wycola Courts Aorangi Picton/Nelson Pickering Greenhurst
Bathroom Upgrade	Pickering
Stairs	Greenhurst
Spouting Replacement	Forfar
Water leak repairs	Phillipstown Roimata Cleland Marwick Vincent Plus 2 other small ones
Line Marking	Various (25 completed)
Large Tree Maintenance	Walsall Norman Kirk Hadfield H P Smith G F Allan Mary McLean Division Briggs Row Clent
Warm & Dry	Curtains various Aluminium window repairs - various

Works planned for completion are detailed below.

Committed Work	Unit/Complex
Exterior Painting	Halswell
Balconies	Aberfoyle Aorangi
Line Marking	Various (15 remaining)
Large Tree Maintenance	Various

Interior Upgrades	Wycola Roimata
Path repairs	Division Harman
Roof replacements	Kaumatua Whakahoa
Water leak repairs	24 various complexes
Spouting replacement	Walsall

Planned to be scoped	Unit/Complex
Interior Upgrades	Pickering Huggins

Table 5. ŌCHT planned works

Attachments / Ngā Tāpirihanga

There are no attachments to this report.

In addition to the attached documents, the following background information is available:

Document Name	Location / File Link
Not applicable	Not applicable

Confirmation of Statutory Compliance / Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).

(a) This report contains:
  (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
  (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories / Ngā Kaiwaitohu

Author	Bruce Rendall - Head of Facilities, Property & Planning
Approved By	Leah Scales - General Manager Resources/Chief Financial Officer

Item 9

9. Ōtautahi-Christchurch District Greenhouse Gas Emission Tracker

Reference / Te Tohutoro: 22/651948
Report of / Te Pou Matua: Kevin Crutchley, Resource Efficiency Manager, kevin.crutchley@ccc.govt.nz
General Manager / Pouwhakarae: Lynn McClelland, Assistant Chief Executive Strategic Policy & Performance, lynn.mcclelland@ccc.govt.nz

1. Brief Summary

1.1 The purpose of this report is to demonstrate the Ōtautahi-Christchurch District Greenhouse Gas Emission Tracker to the Sustainability and Community Resilience Committee.

1.2 The Ōtautahi-Christchurch District Greenhouse Gas Emission Tracker is available to view on the Council website: https://smartview.ccc.govt.nz/apps/emissions/?

1.3 The Council's Greenhouse Gas Emission Tracker allows people to see how the district is tracking across different emission sources as well as displaying general transport trends. The tracker displays transportation modes, including fossil fuelled vehicles, cycling, bus patronage, and battery electric vehicle numbers.

1.4 It also shows stationary energy use from electricity, diesel and petrol. This includes emissions from the use of gas, coal and geothermal energy to generate electricity. It also includes estimated greenhouse gas emissions from plant use such as diesel and petrol use in generators and from diesel boilers.

1.5 Data is fed-in from different emission sources and the tracker displays the monthly trends for users.

1.6 The tracker has been developed in response to the resolutions made at the 12 September 2019 Council meeting, CNCL/2019/00228;

2.f Develop a schedule of indicators to provide updates on achievement of these targets and that these be highly visible to the public.

2.g Develop communications, engagement and education initiatives to encourage climate friendly behaviours, and outline why we need to change and how we can.

2. Officer Recommendations Ngā Tūtohu

That the Sustainability and Community Resilience Committee:

1. Receive the information in the Ōtautahi-Christchurch District Greenhouse Gas Emission Tracker Report.

Attachments / Ngā Tāpirihanga

There are no attachments to this report.

In addition to the attached documents, the following background information is available:

Document Name	Location / File Link
Newsline article: *'New greenhouse gas emission tracker shows the way we're going'*	https://newsline.ccc.govt.nz/news/story/new-greenhouse-gas-emission-tracker-shows-the-way-were-going

Confirmation of Statutory Compliance / Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).

(a) This report contains:

(i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and

(ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories / Ngā Kaiwaitohu

Author	Kevin Crutchley - Resource Efficiency Manager
Approved By	David Griffiths - Head of Strategic Policy & Resilience Lynn McClelland - Assistant Chief Executive Strategic Policy and Performance

Christchurch City Council

10. South Library Te Kete Wānanga o Wai Mōkihi - Earthquake Repair Options

Reference / Te Tohutoro: 22/529026

Report of / Te Pou Matua: Carolyn Robertson, Head of Libraries & Information, carolyn.robertson@ccc.govt.nz
Brent Smith, Head of Vertical Capital Delivery, brent.smith@ccc.govt.nz

General Manager / Pouwhakarae: Mary Richardson, General Manager Citizens & Community, mary.richardson@ccc.govt.nz

1. Purpose of the Report Te Pūtake Pūrongo

1.1 The purpose of this report is to update Council on the findings of the pre-project investigation into the cost and scope of repair works required to address structural damage to the South Library from the 2010-2011 Canterbury earthquake sequence and bring this facility up to 100% NBS Importance Level 3; and endorse the staff recommendations.

1.2 This report provides Council with a comparison of repair with a rebuild of this facility including supporting technical advice in relation to: geotechnical, structural, architectural, building services, legal, insurance, whole of life carbon, programme, cost, and funding implications.

1.3 In summary the investigation has revealed:

a. The scope of repair required to address the structural damage at the South Library is more extensive than previously thought.

b. The extent of fabric replacement required for a repair is almost equivalent to a rebuild.

c. The complex repair has a high level of risk and unknowns in terms of time, cost and quality.

d. There are significant benefits to a rebuild including; energy efficiency, comfort, reduced operational and maintenance costs, lower whole of life carbon assessment, lower capital cost, more surety of construction programme, better contractual terms and associated warranties & guarantees.

e. Because of the anticipated length of closure we recommend setting up a temporary facility in the area if feasible.

f. The cost estimate for repair exceeds the $13.6 million of CAPEX funds on plan. The project will require a (future) bid for construction capital and operating funds for temporary facility in Annual Plan 2023-2024.

g. Staff recommend a rebuild of this facility.

1.4 The decision in this report is of low significance in relation to the Christchurch City Council's Significance and Engagement Policy. The level of significance was determined by:

1.4.1 Noting that the decision to repair the earthquake damaged South Library has already been made on 04 August 2016. This is included in the current Long Term Plan 2021-2031.

1.4.2 The recommended resolution is that staff advance the design of the repair or rebuild to 'concept' and validate the cost estimate before returning to Council in Q1 2023 for a decision to progress the project.

1.4.3 There is sufficient Operating and Capital budget already on plan to develop the concept design and associated cost estimate.

1.5 In terms of gauging the views and preferences of interested and affected persons, consultation will be undertaken with the current stakeholders, community groups, and also members of the local community to take all suggestions put forward into consideration during the planning and design phases of the project.

2. Officer Recommendations Ngā Tūtohu

That the Sustainability and Community Resilience Committee:

1. Direct staff to progress the design for a rebuild of the South Library Facility on its existing site.
2. Endorse the development of a concept design and costing for consideration by Council in Q1 2023.
3. Note that the advancement of the project to construction will require additional funding in Annual Plan 2023-2024 and or a Long Term Plan adjustment.

3. Reason for Report Recommendations Ngā Take mō te Whakatau

3.1 **Rebuild on the existing site:** The preferred option, recommended by staff is the rebuild of the facility on the existing site for the following reasons.

3.2 There is now an opportunity for Council to review the rationale of a repair vs. new build option and make sure that the right long-term choice is made. In scoping the repair consideration has been given to the following key factors:

a. Long term performance of the building.

b. Possible future change to the building use including the opportunity to improve function or the complete scope of issues with the original (pre-quake) design.

c. Building Code Compliance.

d. Recommendation of 'Heathcote river flooding report' and the impact of any possible underfloor or road flooding.

e. The cost of temporary accommodation & relocation while works are carried out.

f. The insurability of the repaired building.

g. The complexity of contracts for the repair works including warranties for works.

h. The (current day) difference in cost between a repair and a full replacement.

3.3 **Functionality**: A preliminary workshop was held with Council staff who manage and occupy the building on both the functionality and future operational requirements. The results of this indicated that the facility provides sufficient floor area but the use of the space is inefficient. With wholesale changes to interior fabric required for repair or rebuild, there is an opportunity to optimise building function and efficiency, providing best value for future library and community use.

3.4 **Geotechnical:** Modelling and a preliminary site investigation, Attachments A and B, to inform the structural solution for repair. Modelling has revealed that the site is low risk for lateral spread but prone to liquefaction in the deep soil layers below the water table. This means that (shallow) ground improvement is not beneficial and in future seismic events the building will be prone to further differential settlement.

3.5 **Structural Engineering:** A high level structural repair design to inform the cost estimate for repair, Attachment C. The scope of repair will include the foundations and floor slabs. A raft slab is recommended as this gives good seismic resilience and is simple to design and construct. The new slab can be placed on top of the existing foundation and floor slabs avoiding the need to excavate and dump the existing fabric. This saves money and time, minimises excavation of contaminated ground, provides the opportunity to raise the floor level to mitigate flood risk and comply with current flood level requirements.

The internal pre-cast concrete walls are quake prone and the engineer recommends removing these to reduce the seismic load on the building. Given the existing floor will be covered by a new slab, all of the internal walls and finished will need to be replaced.

3.6 **Architectural:** Advice has been provided in relation to the reuse of fabric, the interface of the new structural elements with existing building elements and code compliance, Attachment D. South Christchurch Library is approaching a 20-year life span, which brings several building elements to their considered “end of life” and will require replacement in the near future.

The necessary structural repairs require building consent, and due to Building Code changes since the building was consented and constructed, elements of the building design and fabric will require upgrade.

A patch work repair to the system is unattainable with a high level of risk and unknowns outweighed by the benefits of a new system. A new façade system to the outside line of the new steel will provide continuity and simplification of the construction and sequencing with the roof replacement. This solution will remove the risk of any residual earthquake damage and any potential weather tightness issues caused by the condition of existing system. A new continuous façade system will also have a positive impact on the thermal performance of the building and internal comfort level.

3.7 **Building services**: The heating ventilation and cooling (HVAC) system is approaching the end of its useful working life and would become redundant in the repair and rebuild scheme. The current and ongoing issues with sewer and HVAC can be addressed in the repair or rebuild scope.

3.8 **Whole of life carbon:** An assessment has been prepared in accordance with EN 15978 (2011), Attached E. The carbon assessment makes comparisons against Council’s Ōtautahi Climate Resilience Strategy (issued 2021).

The assessment shows repair offers a greater level of re-lifting to existing building fabric while a new build offers the greatest potential to improve the environmental impact of the structure, thermal performance, servicing strategy, comfort and daily performance of the building.

3.9 **Insurance:** In order for Council to be in the best possible insurance position going forward we would need a repair strategy that rectifies all the existing earthquake damage and is able to be consented under the Building Act. There are specific clauses in Council's insurance policy that state any damage that existed at the start of the policy period (i.e. unrepaired EQ damage) is not covered in another event, regardless of cause. All repairs must comply with Building Act where applicable. A rebuild means that full insurance cover can be obtained to replacement value and the Building Act complied with as matter of course.

3.10 **Legal:** The legal advice is consistent with the insurance position in that a rebuild is considered to be more straightforward than a repair. A repair is inherently more difficult to scope because of unforeseen damage which results in less contractual certainty and more potential for cost & time overrun. There are also issues with risk and liability in relation to old & new fabric and consents. A rebuild offers greater certainty for scope and cost, tighter contractual terms. There is also more programme certainty.

3.11 **Cost**: There is currently a CAPEX budget of $13.6 million on plan for the period FY22-27.

The cost estimate for the proposed repair and a cost estimate for an equivalent new build on the same footprint is repair $26.6 million vs. new build $24.9 million, Attachment F.

This is an early concept level cost estimate but gives a clear indication that the cost of repair will exceed the allocated funds. This is because the updated scope of repair is more extensive than the "do-minimum" repair option selected in 2016 and associated prices have escalated significantly since the previous estimate was prepared.

The cost of repair exceeds the cost of a new build because of the complexity and inefficiency of construction within an existing building. In addition to this base cost estimate we would expect that the project contingency needed for repair would also be a higher than that of a new build.

These cost of repair and new build are similar because the extent of fabric replacement required in the repair is almost equivalent to a full replacement. In the case of repair, all of the interior and much of the exterior building fabric requires replacement.

3.12 **Programme:** Council previously deferred this repair project through a previous Long Term Plan, so it could be sequenced to occur after the new Hornby Centre opens in 2023 and ensure that another facility was available within the libraries network.

Following a decision by Council on repair of new build the project will enter the design phase, followed by construction (Council approvals and funds permitting) in calendar year 2024. It is estimated that the repair or new build would take about 18 months. A construction timeline will be confirmed once the scope, funding and procurement plan is confirmed. No start date has been set.

4. Alternative Options Considered Ētahi atu Kōwhiringa

4.1 Repair of the existing building - not recommended.

Advantages

- Community perception that a much used and loved facility is not demolished and replaced.

Disadvantages

- The working structure of the building needs to be replaced and with it all of the internal and much of the exterior fabric. The remaining roof structure and the south wall could be reused but will compromise the design and function of the repaired building
- May pose warranty, building compliance and insurance issues.
- The repair is more expensive in terms of capital outlay
- The repair will have a higher operating cost due to the inefficiency of the thermal envelope and constraints on heating and ventilation services.
- In addition although the repair brings the building strength back to 100% NBS, this is a life safety rating and the repaired building will not be as resilient as a new build.

4.2 Rebuild on the existing site but adjacent to current facility (rather than on the same footprint) - not recommended.

Advantages

- The existing facility could be decommissioned once the new one was operational avoiding the need to establish a temporary facility – saving $211,000 facility costs.

Disadvantages

- The existing facility would be operating immediately adjacent to the construction zone which does not leave sufficient safe working space for construction and puts users at risk by placing them in close proximity to the construction site.
- The existing slab could not be reused which would add approximately $1 million of cost to the build as well as impacting the carbon footprint.
- The available ground space on the site would force the new building footprint to be smaller than the existing one and compromised in terms of functionality due to the boundary constraints of the long narrow site and the location of wellheads and protected trees plus the setback requirements for the access way and river.
- The access way, off Colombo Street, is zoned as legal road and would need to be stopped if the building were to be placed on or near it.

4.3 Renovation of the Council owned distribution centre (at 54a Colombo Street) - not recommended.

Advantages

- The existing facility could be decommissioned once the new one was operational avoiding the need to establish a temporary facility – saving $211,000 facility costs.

Disadvantages

- The building is a single storey warehouse type structure with steel portal frames and precast concrete wall panels. The construction drawings are dated July 1986 and it is assumed that construction was soon after this. It has been assessed as > NBS 38%.
- The distribution centre is significantly smaller than the current facility, with approximately 840m^2 of floor area. This corresponds to only 34% of the current facility floor area.
- A comprehensive renovation including strengthening and fit out plus the installation of a lift would be required to make this building serviceable as a community facility.
- The current use would need to be transferred to another site
- It is anticipated that Community expectation would be that a similar level of service would be provided at the repaired/rebuilt facility. This includes Library, Customer Service and Community Board spaces and services, plus a café, bookable meeting rooms and the creative learning and programming spaces. Moving to a building with reduced floor space is unlikely to provide sufficient space for the current service offering.
- Obtaining consent would take longer and cost more than remaining on the current site. The subject site is zoned Residential Suburban in the Christchurch District Plan (the Plan) and is also a 'Scheduled Activity', Beckenham Water Services Yard and Pumping Station – Public Utilities (PU 1). The scheduling would not allow for the redevelopment of the site for any other purposes. Resource consent would likely be required to establish a library on the site as a Discretionary Activity and there is a risk that the application could be publicly notified.

4.4 A new site for the facility - not recommended.

Advantage

- The existing facility could be decommissioned once the new one was operational avoiding the need to establish a temporary facility – saving $211,000 facility costs.

Disadvantages

- The existing facility is a busy community hub and well used by a number of community focused teams. The site is centrally located in the ward and has good connectivity to public transport links as well as being an attractive setting in its own right.
- Moving this facility to a new site would require extensive public consultation and may not be supported by the local community.
- Establishing a new facility on a new site is expected to take considerably longer than rebuilding on the existing site and may cost more. There is also a degree of uncertainty in relation to the availability of any suitable site in the area noting the zoning restrictions, the land to the east of the site and east of Waimea Terrace is located within a Character Area.
- In the case that it is possible to find a suitable site, Council would still need to negotiate a sale, obtain resource consents and undertake extensive consultation with the users of the current facility and the wider public impacted by the new location. This would take in the order of two years and cost more than consenting on the existing (scheduled – SC2– Service Centres and Community Centres) site.
- In terms of opportunities to build on a new site in this area, a site-specific planning assessment would be required to understand what planning implications there may be. It is noted that libraries are contained in the definition of 'community facility' in the District Plan. Community facilities are not provided for as permitted activities in the neighbouring Residential Zones and resource consent would likely be required to establish a library as a Discretionary Activity with the potential for the application to be publicly notified.
- In addition to the increased cost of consenting the cost the land purchase for a new site could be an additional land cost for Council. Although the cost of the new site could be offset by the sale of the current site, it is likely to be negatively impacted by the setback constraints, well heads on the site, contaminated land status, liquefaction potential of the site, High Flood Hazard Management Area, and adjacency to the public utility site next door which shares the access way. Future use of the existing site would be limited to what can be consented under the District Plan which zones this as residential medium density.
- Building a new facility on a new site in the area would require extensive public consultation which will increase the time and cost to achieve consent.
- The opportunity to reuse the existing slab as the base for a new raft foundation would be lost with the associated cost and carbon impacts.

4.5 Defer the repair or rebuild of the facility - not recommended.

Advantages

- Deferral would have the short term effect of saving on capital expenditure

Disadvantages.

- Delaying the capital cost of construction will increase risk, liability and cost escalations with the time taken to address this repair
- South is the only library in the network of 20 libraries not to have been either repaired or rebuilt in the last decade, following the earthquakes of 2010/11. Despite its high use, it is not at the same standard as other libraries of similar size and function with the building services at/or near end of life.

- The building is currently at 34%NBS (IL3) and relies on temporary strengthening (the red steel bracing on the exterior) to achieve this. The risk to the public in a 34%NBS (IL3) building is approximately 5-10x that of an equivalent new building designed to 100%NBS (IL3). This temporary strengthening was installed in 2012 so has now been in place for almost 10 years. As a PCBU, Council needs to decide if they are comfortable continuing with this level of risk in what is a high-use community facility.
- The durability of the building has been compromised due to the earthquake damage from a decade ago, with potential for increased maintenance costs and damage that may well exist currently but is unseen.
- Opex costs will continue to rise as the compromised heating, cooling, ventilation and drainage systems continue to decline and approach the end of their useful working life. There is a higher probability that asset subcomponents reactively fail and require replacement if the rebuild is further deferred.
- There are operating issues with the HVAC system which mean it is no longer fit for purpose. These issues are demonstrated by:
    - Staff work areas have become health and safety discomfort issues caused by lack of cooling, inadequate heating control and limited ventilation effectiveness.
    - Board room and learning centre rooms suffer from the same technical issues to the staff work areas.
    - Members of the public and staff regularly experience discomfort due to drafts, lack of cooling and inadequate heating control.
    - Café has inadequate odour and moisture exhaust ventilation, inadequate hot water supply and has restricted electrical capacity.

- In view of the new Covid mitigation focused ventilation assessments; all the occupants in this building are at a relatively high risk due to the lack of acceptable ventilation.
- A major failure of any of these services or the building structure itself would run the risk of facility closure for a significant period.
- The project was deferred in 2018 and again in 2020. The 2015 LTP budget figure for this project was $16.55 million, this equates to $22.7 million (an additional 37%) in today's dollars and $25.7 million (an additional 55%) by project completion in late 2025. The estimated annual escalation cost for delaying the project beyond 2025 would be an average of 3-4% per annum compounding. The cost of the construction work will continue to increase if the work is deferred.
- The existing Café tenant needs some certainty over the timeline for this rebuild. By deferring the work again we run the risk of losing this tenant.

4.6 Private-Public Partnership - not recommended.

Advantages

- A Private-Public Partnership would have the effect of saving on capital expenditure

Disadvantages.

- Council is not currently aware of any opportunities of this nature or precedent for this model for a library-service centre hub.
- Developing a relationship of this nature would likely add significantly to the complexity, timeframes and front end costs of the project.
- It is possible the sort of deal that could be proposed here would be developer benefiting in being 'gifted' a long lease on the land and potentially build above. It is anticipated that this arrangement could negatively impact community engagement and buy-in for the project.

- Private-Public Partnerships have been suggested on other library projects and a mixed use development is just too complex when considering fire compliance, access, security, acoustics, etc. Anything higher than single storey has a cost premium in the structure, stairs and lifts and increased circulation.
- Given that the focus of a community hub like the South Library and Service Centre is the local community, we consider that Council is best placed to deliver this service.
- In addition to the time needed to form a contractual relationship it is anticipated that there would be more time required for the predesign/briefing and design phases, as well as consultation with the Community about a significantly larger building on the site and any new activity on the site (e.g. commercial or residential use)
- The constraints of the existing site including setbacks, well heads, contaminated land status, liquefaction potential, High Flood Hazard Management Area, adjacency to the public utility site next door which shares the access way. Mean that future use of the existing site would be limited to what can be consented under the District Plan which zones this as residential medium density.

4.7 Consider a long term lease instead of rebuilding the South Library - not recommended.

Advantages

- Leasing would have the short term effect of saving the current capital budget of $13.6 million which would have a 0.12% rates benefit spread over 4 years.

Disadvantages.

- The annual cost of commercial rent for an equivalent floor area (2462m^2) is in the order of $700,000 per annum. This is an operating cost that would directly impact rates, adding 0.11% to rates.
- It is doubtful that a long term lease of a suitable space in the desired location and of a suitable size to accommodate the various services and functions would be available or a cost effective option for Council. It is anticipated that the community would not find this option acceptable for anything more than a short term solution.
- A site-specific planning assessment would be required to understand what planning implications there may be. Community facilities are not provided for as permitted activities in the neighbouring Residential Zones. This means resource consent would likely be required to establish a library as a Discretionary Activity with the potential for a publicly notified application.
- The placement of a community hub within a leased commercial space must be carefully considered as Council has no control over neighbouring activity which could potentially put staff and customers at risk.

5. Detail Te Whakamahuki

5.1 The South Library and Service Centre is a busy popular community hub as demonstrated by the statistics below. Programme attendance at South has grown over the last few years from 5th highest in FY 2018-2019 to 2nd in FY 2020-2021 with 12,002 attendees.

Issues

- South Library issues (of physical books and other items) for the FY 2020-2021 were 511,443. More books were borrowed from South Library than any other library in the network.
- South Library consistently accounts for 13% to 14% of all Issues.
- The South Library collection has over 74,000 books available for loan which accounts for 6.6% of Libraries' total stock holdings.

Visitation (Footcount)

- South had the sixth highest footcount for FY 2020-2021 with 289,015 visits, which accounts for almost 8% of all visits across the network.
- There has been a noticeable increase to the Issues per Visit metric each year at South Library, where the network average has remained fairly constant, possibly indicating its loyal customer base of avid readers.

New members

- In FY 2020-2021 1,422 new members were signed up, which was almost 7% of the total.
- South consistently sits in the top 4 libraries for the number of new members signed-up.

5.2 Post-quake investigations were carried out in 2011 – 2013. Temporary Repairs to strengthen the superstructure were carried out in 2012. The original investigations carried out in the post-quake period necessarily focussed on life safety and building make safe work. The investigations were high level, minimally invasive surveys designed to pick up critical data for temporary works. This data was used to price and compare the original options for the repair scheme presented to Council in 2016. This 2016 report provided estimate of scope and cost of repair noting that some elements were not fully investigated. Key items not investigated included;

- Insurance and legal
- Geotech
- Egress & Fire for code compliance
- Flood levels

5.3 More than eight years have elapsed since the last of these primary investigations were carried out in 2013 and we now need to confirm the scope and cost of repair for this facility acknowledging that; what is acceptable today as a long-term solution may not be the do-minimum repair option chosen previously.

5.4 We have sought advice from the Legal Services Unit with respect to the utilisation of funds in the current LTP for, either a repair or rebuild. In the case that additional funding is needed for the project, this can be covered off in the consultation process associated with either a future Annual Plan or LTP process.

5.5 Staff have investigated options for a temporary facility to house a small library and customer service offering. The current cost estimate for the temporary facility (including moving, fit out, 2 years of rental net of current facility budgets and revenue losses) is $211,000. An option following the closure of South Library Hours could be to extend the hours at Spreydon Library including evening and Sunday opening, plus the provision of the Mobile Library Service near the current South Library site on specific days and times, based on community demand.

5.6 It is not envisaged that further significant central government funding will be forthcoming and certainly not Capital funding to contribute to a major repair or rebuild. Note, Council did receive operational funding from the Ministry of Education when South Library was opened for a few years to support targeted learning initiatives in partnership with the schools in the local area. This funding did not contribute to the running costs or improvements to the facility itself.

5.7 The decision affects the Waihoro Spreydon-Cashmere Community Board area.

6. Policy Framework Implications Ngā Hīraunga ā- Kaupapa here

Strategic Alignment Te Rautaki Tīaroaro

6.1 This report supports the Council's Long Term Plan (2021 - 2031):

6.1.1 Activity: Libraries

- Level of Service: 3.1.2.1 Residents have access to a physical and digital library relevant to local community need or profile - Provide weekly opening hours for existing libraries:23-74 hours per week (as appropriate for metropolitan, suburban, and neighbourhood) .South is a large suburban library.
- 3.1.5 Library user satisfaction with library service at Metro, Suburban and Neighbourhood libraries.
- 3.1.1.4 Collections and content in a variety of formats are available to meet the needs of the community.
- 3.1.3.1 residents have access to the internet and new technologies.
- 3.1.3.3 Access to information via walk-in to library services.
- 3.1.4 Provide public programmes and events, learning and recreational needs.
- 3.1.8 Customer satisfaction with programmes and events.

Policy Consistency Te Whai Kaupapa here

6.2 The decision to rebuild the South Library is consistent with Council's Plans and Policies. The decision aligns with Council's target of being net carbon neutral for its operations by 2030 and our commitments under the Council Ōtautahi Climate Resilience Strategy (issued 2021).

6.3 Once Council has resolved to provide direction on Council's preferred option for the remediation of the earthquake damaged South Library, the preferred option (repair / new build) will be procured in accordance with Council's Procurement Policy and Framework.

Impact on Mana Whenua Ngā Whai Take Mana Whenua

6.4 The current proposal is to rebuild the existing facility on its current site.

6.5 Should the Council decide rebuild the library and service centre on its current site (recommended option), it is not anticipated that the scale or nature of operations at the site will change significantly. The focus for rebuilding is to replace the damaged facility with associated improvements in strength, resilience, operational performance and functionality of the building.

6.6 There is an opportunity to engage with mana whenua early in the process to ensure that te reo name; Te Kete Wānanga o Wai Mōkihi is given prominence on the new building and that the cultural narrative of the site is incorporated into the design.

Climate Change Impact Considerations Ngā Whai Whakaaro mā te Āhuarangi

6.7 The whole-of-life carbon comparison shows the amount of carbon released at each building life cycle stage. Climate change occurs as a result of accumulated greenhouse gases in the atmosphere reducing whole of life emissions is an important strategy for reducing climate impacts. Rebuild has the lowest upfront emissions and total life cycle emissions, thus having a lower climate impact than the repair option.

6.8 A repair offers opportunity to re-life (re-use) existing fabric. A rebuild offers greater scope to improve the environmental performance of the structure, envelope, servicing strategy, comfort and operational performance of the building.

6.9 In terms of net zero carbon targets:

- Repair exceeds the 2020 benchmarks for embodied and operational targets however falls short of 2025 and 2030 targets.
- Rebuild exceeds the 2025 target for embodies carbon and the 2030 target for operational carbon.

6.10 The total lifecycle carbon comparison is:

- Repair 1,352 $kgCO_2e/m^2$
- Rebuild 1,095 $kgCO_2e/m^{2.}$

Accessibility Considerations Ngā Whai Whakaaro mā te Hunga Hauā

6.11 We want to ensure our community facilities are accessible both to staff and visitors.

6.12 The current South Library and Service Centre is an accessible facility. However in the course of the design process any changes in accessibility requirements for code compliance will be addressed.

6.13 Should the decision be made to build a new facility, staff investigations will include consideration of how the site and the facility as a whole are fully accessible.

7. Resource Implications Ngā Hīraunga Rauemi

Capex/Opex / Ngā Utu Whakahaere

7.1 Cost to Implement - There is currently a CAPEX budget of $13.6 million on plan for the period FY22-26. The cost estimate for the proposed repair and a cost estimate for an equivalent new build on the same footprint is repair $26.6 million (0.13% rates increase over three years from FY2024) vs. new build $24.9 million (0.11% rates increase over three years from FY2024).

7.2 No budget is currently allocated for R&R or facility upgrades because the facility is programmed for construction. The condition of the facility is deteriorating and there are issues with HVAC and drainage. This facility will require R&R funds if the EQ repair work is not proceeding as programmed.

7.3 The funding currently included in the capital programme for this project is insufficient for the repair (or rebuild). The project will require additional funding through the 2023-2024 Annual Plan or 2024 Long Term Plan process to meet the shortfall.

7.4 We will also need to make an allowance for OPEX, phased to match construction, to cover the cost of a temporary facility. This has been estimated at $211,000 for 24 months starting from an early 2024 start and is factored into the above noted rates impact. The costs are net of current facility operating and maintenance budgets adjusted for loss of revenues from the café lease and inability to run programmes from the smaller facility for 24 months.

7.5 Both options increase Council's debt ratio by approximately 0.09%.

Other / He mea anō

7.6 Once a decision has been made as to whether this facility should be repaired or rebuilt, the next phase of work can be advanced. This comprises the development of a functional brief & technical specification which will enable an elemental costing to be completed. This work will

give Council more scope definition and enable a more accurate cost estimate to be developed. It also provides a basis for the approach to market for design and construction tenders.

8. Legal Implications Ngā Hīraunga ā-Ture

Statutory power to undertake proposals in the report / Te Manatū Whakahaere Kaupapa

8.1 The Council has the statutory power to either repair or rebuild the earthquake damaged South Library.

8.2 The Council has the legal ability to enter into contracts for the procurement of services, however to do so it needs to act in accordance with Section 14 of the Local Government Act 2002 (LGA) 2002. The LGA 2002 (Section 14) details the principles relating to local authorities. The principles most relevant to the Council's procurement activity are:

8.2.1 In performing its role, a local authority must act in accordance with the following principles:

A local authority should;

- conduct its business in an open, transparent, and democratically accountable manner and;
- give effect to its identified priorities and desired outcomes in an efficient and effective manner and;
- undertake any commercial transactions in accordance with sound business practices and;
- ensure prudent stewardship and the efficient and effective use of its resources in the interests of its district or region, including by planning effectively for the future management of its assets; and
- in taking a sustainable development approach, a local authority should take into account:
    - The social, economic, and cultural interests of people and communities; and
    - The need to maintain and enhance the quality of the environment.

Other Legal Implications / Ētahi atu Hīraunga-ā-Ture

8.3 The legal considerations are:

8.3.1 A rebuild provides more certainty of scope of work, and therefore more certainty of cost. If a repair was selected as the preferred option, the condition of parts of the existing materials will not be able to be determined until works commence. This may result in a more extensive scope of works than initially expected, and as a result, increased cost.

8.3.2 A rebuild will result in more comprehensive warranties and guarantees being available to the Council. A repair using existing materials will potentially compromise certain warranty claims if the failure could be attributed to the quality of the existing materials. An appropriate contract can mitigate a portion of this risk, however the risk is eliminated entirely if a rebuild is selected.

8.4 This report has been reviewed and approved by the Legal Services Unit.

9. Risk Management Implications Ngā Hīraunga Tūraru

9.1 The complex and extensive repair needed to return the South Library to 100% New Building Standard involves a significant degree of uncertainty and therefore risk. A new build is more easily defined and the associated construction work is fully warrantied so is a lower risk than repair.

9.2 The Council needs to consider a number of risks when considering this report. Of particular note are: financial, legal and reputational.

Financial risks include:

- Ongoing operational costs of maintaining a facility with the current building services systems issues;
- Difficulty in fully scoping repair work results in a complex repair contract with an increased risk of scope variation, programme delay and associated cost increases;
- Increases in the cost of repair / new build with inflation;
- Vulnerability of IL3 at 34% NBS puts it at risk of closure in a future seismic or flood event;
- Future insurance issues if the building is repaired rather than replaced and the risk that significant reinstatement costs may not be covered by insurance.

Legal risks include:

- Difficulty in fully scoping repair work results in a complex repair contract with an increased risk of scope variation, programme delay, warranty and compliance issues.
- Vulnerability of IL3 at 34% NBS puts it at risk of closure in a future seismic or flood event.

Reputational risks include:

- Vulnerability of IL3 at 34% NBS puts it at risk of closure in a future seismic or flood event.
- Concern from staff and community about delay in repair and length of closure;
- Concern from the wider Christchurch community regarding costs of repairing or building a new facility.
- Consistency of choice with regard to Council's Climate Resilience strategy (repair does not meet targets)

Attachments / Ngā Tāpirihanga

No.	Title	Page
A	South Library EQ Repair_Geotech Report_Aurecon 01 December 2021	45
B	South Library EQ Repair_Geotech PSI Report_Aurecon 02 December 2021	61
C	South Library EQ Repair_Structural Engineering Report_Lewis Bradford 08 December 2021	119
D	South Library EQ Repair_Architectural Report_Jasmax 21 January 2022	133
E	Christchurch South Library Carbon Report_Jasmax_ 220317	146
F	South Christchurch Library Repair & Rescoping Cost Report R2	182

In addition to the attached documents, the following background information is available:

Document Name	Location / File Link
Not applicable	Not applicable

Confirmation of Statutory Compliance / Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).

(a) This report contains:

(i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and

(ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories / Ngā Kaiwaitohu

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Christchurch City Council

Christchurch South Library

Conceptual Geotechnical Foundation Repair Feasibility Report

Christchurch City Council

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aurecon

Bringing ideas to life

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Approval			
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Contents

Appendices

Tables

1 Introduction

1.1 Overview

Christchurch City Council (CCC) is investigating options to repair earthquake damage at the South Christchurch Library, located at 66 Colombo Street, Cashmere. The Library building was damaged during the Canterbury Earthquake Sequence between 2010 and 2012 . The identified damage comprises foundation settlement and cracking and damage to the library superstructure.

CCC's Structural Engineer for the project, Lewis Bradford Consulting Engineers, have proposed two repair strategies to Aurecon for the library foundation, comprising:

- **Option A:** Installing new isolated foundation pads under new structural columns, whilst retaining the existing non-structural floor slab. Localised removal of the existing floor slab is likely to be required to accommodate the new foundation pads. Hardfill and polystyrene would be placed over the existing slab as required to the underside of a new floor slab.
- **Option B:** Remove the entire existing non-structural floor slab and found the new pads and slab on a compacted hardfill system as required.

CCC has requested Aurecon to provide conceptual Geotechnical Engineering as inputs for the feasibility assessment of the proposed foundation repair strategies. Structural strengthening works will also be undertaken with either of these options which will include installing new roof bracing and struts, wall bracing, and struts and new columns.

1.2 Scope

Aurecon's scope of work for the conceptual geotechnical engineering inputs include the following:

- Collate the historical Geotechnical Reports completed for the site by other third-party consultants, including the OPUS Geotechnical Assessment Report, dated February 2013 [TRIM 13/434169].
- Collate and analyse any additional geotechnical investigations and information from readily available third-party sources, such as the New Zealand Geotechnical Database (NZGD) and ECAN's GIS platform.
- Provide geotechnical recommendations for the Structural Engineer's feasible repair strategies.

1.3 Explanatory Statement

We have prepared this report in accordance with the brief as provided. The contents of the report are for the sole use of the Client and no responsibility or liability will be accepted to any third party. Data or opinions contained within the report may not be used in other contexts or for any other purposes without our prior review and agreement.

The recommendations in this report are based on available data collected at specific locations with limited site coverage. Only a finite amount of information has been collected to meet the specific financial and technical requirements of the Client's brief and this report does not purport to completely describe all the site characteristics and properties. The nature and continuity of the ground between test locations has been inferred using experience and judgment and it must be appreciated that actual conditions could vary from the assumed model.

Subsurface conditions relevant to construction works should be assessed by contractors who can make their own interpretation of the factual data provided. They should perform any additional tests as necessary for their own purposes.

Subsurface conditions, such as groundwater levels, can change over time. This should be borne in mind, particularly if the report is used after a protracted delay.

2 Site Conditions

2.1 Site Description

The main features of the site are as follows:

- The site is located at 66 Colombo Street, Beckenham in Christchurch.
- The library building has an approximate footprint of 2,470m2.
- The site comprises two separate property titles with a total area of approximately 20,000m2.
- Hunter Terrace bounds the site to the north and east while Colombo Street runs along the western boundary and a driveway connecting Colombo Street to Hunter Terrace bounds the site to the south. The Heathcote River runs along the north side of Hunter Terrace.
- The library is positioned towards the south west part of the site. The library carpark runs along the south boundary and the rest of the site is covered by lawn and trees.
- The site slopes gently towards the Heathcote River.

2.2 Regional Geology

The regional geology of the site is described by GNS Science (2014) as "Unconsolidated to poorly consolidated mud, sand, gravel and peat of alluvial and colluvial origin."

2.3 Seismically Induced Ground Damage

The following sections summarise the likely levels of seismic shaking experienced, and the corresponding ground damage observed on site during the 2010-2011 Canterbury Earthquake Sequence (CES).

2.3.1 Published Seismicity

Table 1 below summarises the magnitude and likely peak ground acceleration (PGA) experienced at South Christchurch Library during the CES, as published on the New Zealand Geotechnical Database (NZGD, 2021).

Table 1 Published CES Activity

Parameter	Darfield Earthquake 4 September 2010	Christchurch Earthquake 22 February 2011	Major Aftershock 13 June 2011	Major Aftershock 23 December 2011
Distance from Epicentre(1)	38km east	4km northwest	8km west	11km west
Moment Magnitude	M_w 7.1	M_w 6.2	M_w 6.0	M_w 6.0
PGA on Site(2)	0.22g	0.43g	0.24g	0.17g
Scaled PGA on Site to M_w = 7.5(3)	0.20g	0.31g	0.16g	0.11g
Comparison with IL3 Design Events(4)	> SLS EQ <ULS EQ	<ULS EQ (~IL2 ULS EQ)	> SLS EQ	~SLS EQ

(1) Institute of Geological and Nuclear Sciences (GNS, 2014).

(2) Peak Ground Accelerations (PGA) at site based on values by O'Rourke et al. (2015).

(3) Calculated based on scaling factors by Idriss and Boulenger (2008)

(4) Comparison with design events based on the equivalent PGA at Mw7.5 for an IL3 Structure, SLS PGA = 0.13g and ULS PGA = 0.44g, as recommended in MBIE Module 1 and NZS1170.5, respectively. NZS1170.5 was used as the PGA derived for IL3 buildings using the MBIE Module 1 method is lower than that derived using NZS1170.5 and Canterbury specific zone factors for IL2 buildings.

Based on Table 1 the site, from a free-field perspective, has experienced seismic events greater than a SLS level event during the 4 September 2010, 22 February 2011 and 13 June 2011 events. The non-corrected PGA during the 22 February event was close to that of a ULS event.

2.3.2 NZGD - Recorded Ground Damage

A review of the relevant information on the NZGD has been undertaken, and the recorded damage is summarised in Table 2 below.

Table 2 Recorded Free Field Ground Damage from NZGD

Information	4 September 2010	22 February 2011	13 June 2011	23 December 2011
Review of Aerial Photographs	No photos available.	Surface expression (sand boils) on Hunter Terrace north of the library, none on the site.	No surface expression observed.	No surface expression observed.
Liquefaction and Lateral Spreading Observations	Not inspected.	Liquefaction not mapped on the site. Roads on either bank of the Heathcote River had moderate to serve quantities of ejected material near the library.	Roads surrounding the site had no observed ground cracking or ejected liquefied material.	Not inspected.
Ground Cracking	No cracking mapped.	Crack along Hunter Terrace north of the library, 3.5m long with an unclassified width. Crack south of Earnlea Street across Colombo Street, 30m long with a width of less than 10mm.	Not inspected.	Not inspected.
Vertical Ground Movement, LiDAR (±0.1m)(1)	No data	No data	+0.1m to -0.2m	+0.1m to -0.1m

(1) Predominate movements at the site listed.

2.3.3 Post-Earthquake Observations

Aurecon understand that the building was damaged during the CES with settlement and differential settlement of the floor slab and underlying pad foundations. This settlement has induced deformations in the frames of the library. A floor level survey was undertaken post-CES by Lewis Bradford and provided to Aurecon, is attached as Appendix A. This survey shows that the centre of the building, along an east to west axis, has settled approximately 60mm relative to the datum, while the sides have settled between 30mm and 60mm.

3 Geotechnical Investigations

Aurecon have undertaken a review of the readily available geotechnical investigations carried out across the wider Christchurch South Library site and directly adjacent properties (if available). No additional physical investigations have been undertaken as part of the Aurecon's review process.

3.1 Existing Geotechnical Investigation Logs

Our review has identified the following information:

- Four historical geotechnical boreholes located on the wider site and two geotechnical boreholes close to the site.
- Three historical Cone Penetration Tests (CPT) located on the wider site and one CPT located within approximately 20m of the site.
- Four ECan wells located on the wider site.

3.2 Groundwater

Groundwater levels have been assessed from several sources:

- The historical bore logs had recorded groundwater depths between 1.2mbgl to 2mbgl.
- The water level of the Heathcote River is approximately 2.0m below the floor level of the library.

From this available information, considering the groundwater level is likely to be heavily influenced by the river levels, and the collar of the bore hole with the highest groundwater level has a lower elevation than the building, a groundwater depth of 2.0m will be assumed for this report. This level is expected to be hydraulically connected to the water level in the Heathcote River, and will vary seasonally or following periods of prolonged rainfall or drought.

4 Engineering Considerations

4.1 General

CCC is investigating the potential to repair earthquake damage at the South Christchurch Library. CCC's Structural Engineer for the project, Lewis Bradford Consulting Engineers, have proposed two repair strategies for the library foundation, comprising:

- **Option A:** Installing new isolated foundation pads under new structural columns, whilst retaining the existing non-structural floor slab. Localised removal of the existing floor slab is likely to be required to accommodate the new foundation pads. Hardfill and polystyrene would be placed over the existing slab as required to the underside of a new floor slab.
- **Option B:** Remove the entire existing non-structural floor slab and found the new pads and slab on a compacted hardfill system as required.

This section of the report presents Aurecon's Christchurch South Library ground model, seismically induced liquefaction assessment, and recommendations and discussions on the proposed relevelling/repair options put forward by the structural engineer.

4.2 Ground Model

Based on the available geotechnical information at the site, the inferred ground model for the site is detailed in Table 3 below.

Table 3 Inferred Geotechnical Ground Model

Geotechnical Unit	Depth to Top of Unit	Unit Thickness	Description
1	Surface	0.3m to 2.6m	Variable topsoil, landfill material or silt / sandy silt crust.
2	0.3m to 2.6mbgl	0.9m to 5.5m	Medium dense to dense gravel, sandy gravel and sand (predominately sandy gravel).
3	2.3m to 5.8mbgl	~10m	Soft to firm or medium dense silty sand and silt.
4	~15mbgl	>10m	Dense to very dense sandy-gravel (Riccarton Gravels).

4.3 Seismically Induced Liquefaction Hazard Assessment

The site and its immediate surrounding have experienced liquefaction induced ground damage during the CES. The liquefaction potential of the site has a significant impact on the viability of the proposed foundation and floor repair strategies.

In determining the liquefaction potential at the site, the main factors to be considered are:

- Which layers have liquefied?
- What is the likelihood of further liquefaction in the future?
- How the potential liquefaction affects the development?

Each of these is considered below.

4.3.1 Potential for Liquefaction

Three primary factors contribute to liquefaction potential:

- Soil grading and density.

- Groundwater.
- Earthquake intensity and level of ground shaking.

Soil Grading and Density

The historical geotechnical bore logs at the site have shown layers of sand and non-plastic silty sand in the upper 15m of the ground strata. From a soil grading perspective, these soils have the potential to be liquefiable depending on their density and other factors discussed below.

Groundwater

Based on our assessment of the site conditions, Aurecon have adopted a depth to groundwater of 2.0mbgl. Therefore, soils are potentially liquefiable below this depth from a saturation criterion. It should be noted that groundwater levels are subject to seasonal changes. As South Christchurch Library is a shallow founded building, variations in the groundwater level could have a significant impact on the liquefaction hazard.

Earthquake Intensity and Level of Shaking

The level of ground shaking is one of the key factors in determining whether liquefaction will or will not occur. For this study, Aurecon have assessed three design levels of shaking. Aurecon understand that the building has been classified as an Importance Level 3 (IL3) structure in accordance with Table 3.2 of the New Zealand structural loadings standard (NZS 1170.0, 2002) and the building will have a nominal 50-year design life. To determine the design level of earthquake shaking Aurecon have adopted the MBIE/NZGS (2016) recommendations for the two SLS events. For the ULS event, Aurecon have adopted the NZS1170.5 event as this results in a larger, more appropriate earthquake event and MBIE Module 1 lacks specific guidance for ULS events and IL3 structures in the Canterbury Region.

The design seismic events for the liquefaction assessment are detailed in Table 4 below:

Table 4 Assessed Earthquake Events

Event	Magnitude	PGA
1-in-25 Year – SLS-a	M_w 7.5	0.13g
1-in-25 Year – SLS-b	M_w 6.0	0.19g
1-in-1000 Year – ULS	M_w 7.5	0.44g

4.3.2 Methodology

The ability for subsoils to resist the effect of ground shaking associated with the various earthquake shaking levels has been assessed from the subsoil information obtained from the CPTs. In our assessment of the free-field liquefaction risk we have considered the following effects:

- Liquefiable layers.
- Liquefaction induced reconsolidation settlement.
- Liquefaction induced ground damage.

The liquefaction assessment has been carried out using the references in Table 5 below:

Table 5 Liquefaction Assessment References

Test	Liquefaction Assessment Method	Fines Content	Liquefaction Cut Off	Liquefaction Settlement Method
CPT	Boulanger and Idriss (2014) with a 15% probability of liquefaction	Based on I_c with C_{fc} = 0.2[(1)]	Based on a 2.6 I_c cut off	Zhang et al. (2002)

(1) Cfc of 0.2 is based on Aurecon experience and published literature for Christchurch (Lees et al., 2015).

4.3.3 Liquefaction Results

The results of the liquefaction assessment are summarised in Table 6 below. It should be noted that the historical CPTs on the wider site were predrilled to depths below the gravel layers, therefore soils above the predrill depth are not analysed. The maximum depth of this analysis was 10m.

Table 6 Liquefaction Assessment Results

Earthquake Event	Earthquake Effects	Results
SLS-a (M_w7.5, 0.13g)	Potentially Liquefiable Layers	Silty sand and sand layers throughout the ground strata.
	Indexed Settlement	15mm to 35mm
	Expected Damage	No to little expression of liquefaction, minor effects.
SLS-b (M_w6.0, 0.19g)	Potentially Liquefiable Layers	Silty sand and sand layers throughout the ground strata.
	Indexed Settlement	25mm to 45mm
	Expected Damage	No to minor expression of liquefaction with some sand boils.
1/1000 Year ULS (IL3) (M_w7.5, 0.44g)	Potentially Liquefiable Layers	Silty sand and sand layers throughout the ground strata.
	Indexed Settlement	45 to 65mm
	Expected Damage	Little to moderate expression of liquefaction with sand boils and some structural damage. This level of ground damage is expected to be similar to that which occurred during 22 February 2011 Christchurch Earthquake

Note: Indexed settlements are calculated over the upper 10m of the soil column only.

4.3.4 Lateral Spreading

Lateral spreading occurs when surface soils move downslope or towards a free edge, such as a river or basin. Lateral spreading can occur during an earthquake under seismic loading and following the earthquake until the excess pore water pressure caused by ground shaking dissipate and the soil regains strength.

When assessing the potential for liquefaction induced lateral spreading at the site, the following was considered:

- The proximately of the site to the Heathcote River.
- The site and surrounding area being relatively level.
- Very limited evidence of lateral spreading damage was observed or recorded at or around the site after any major earthquake in the CES

Based on the sandy gravel layers between 0.3m and 5.8m depth forming a crust near the surface and the observed / recorded historical site performance during the CES, the risk of lateral spreading at the site has been assessed as low.

4.4 Foundation Repair Recommendations

4.4.1 Site Ground Model and Historical Seismic Response

The site ground model comprises a thin silt/sand crust 1m to 2m thick, overlying sandy gravels to approximately 5m. Underlying these gravels are liquefiable silts and sands to at least 15m depth.

Due to predrilling the upper material of surrounding CPT traces, and a lack of intrusive testing within building footprint, the exact composition of the soil immediately below the building is currently unknown. However, numerical analysis indicates that from a geotechnical/liquefaction perspective the site has experienced the equivalent of an IL2 ULS design level earthquake during the 22 February 2011 Christchurch Earthquake. In combination with the lack of observed ground damage during the CES, including the lack of surface expression of liquefaction immediately surrounding the structure, and the lack of evidence of shallow bearing failures of the existing structure, Aurecon do not consider there to be any significant thicknesses of shallow liquefiable material in the upper 5m.

Therefore, Aurecon consider that both the building and site response is governed by the deeper liquefiable soils below the upper gravel layer (Unit 2, Table 3) and some localised shallow softening/settlement.

Due to the lack of physical testing within the building footprint, Aurecon are currently uncertain as to what the shallow footings are founded on i.e. compacted hardfill, natural silty or gravelly soils, or uncontrolled fill.

4.4.2 Lewis Bradford's Proposed Repair Strategies

With regard to the proposed repair strategies from Lewis Bradford, Aurecon make the following comments and recommendations.

Option A

Option A comprises installing new isolated foundation pads under new structural columns, whilst retaining the existing non-structural floor slab. Localised removal of the existing floor slab is likely to be required to accommodate the new foundation pads. Hardfill and polystyrene would be placed over the existing slab as required to the underside of a new floor slab. When looking at this proposed foundation/slab repair strategy:

- Using the MBIE Concept of Index Liquefaction Settlements (upper 10m of soil profile only), under SLS EQ loading Aurecon calculate approximately 15mm to 35mm of indexed settlement (nominally 20mm of differential settlement) with little to no ground damage.
- Looking at historical site response during the CES Index Settlements, under ULS EQ loading are calculated to be approximately 45mm to 65mm settlement with little to no ground damage.
- Based on actual site behaviour during the CES and Aurecon's conceptual numerical analysis, shallow bearing failures of the existing pad foundations are unlikely to have occurred.

Therefore, based on the combination of our analysis, and site observations of historical seismic performance to date, Aurecon consider the proposed Option A to be suitable and expect it to meet SLS deformation requirements given in the NZBC. Aurecon does not see any significant benefit to carry out grouting/resin injection under the slab. See below for preliminary recommended bearing capacities for shallow pad design.

Option B

Option B compromises the removal of the entire existing slab and founding the new pads and slab on a compacted hardfill system.

Due to the lack of apparent shallow liquefaction risk and the site performance considerations noted in Option A, Aurecon consider this solution to be viable. Also due to the absence of shallow liquefiable soils, ground improvement by grouting is unlikely to be needed. The thickness of compacted hardfill is subject to detailed design consideration.

Once the site is opened and the subgrade material can be inspected, localised soft spots of unsuitable material may need to be removed from the site and replaced with compacted granular hardfill or site concrete.

Alternative Foundation Option: Structural Concrete Raft Foundation

In addition to the advice provided on the proposed Repair Options 'A' and 'B' Aurecon recommend, for sites prone to seismically induced liquefaction, to tie all pads and footings with either ground beams or integrally to the floor slab in accordance with foundation design best practice.

If this approach is adopted, the footings could either be tied with ground beams as a grillage of footings with the floor slab between; or the entire floor slab could be treated as a double reinforced 'raft' slab with localised thickenings for column point loads. This foundation system provides significantly more continuity across footing locations and the ability to redistribute structural loads during a future major seismic event. In addition to improved seismic performance, an integral floor slab-footing / raft system will be better placed to withstand the potential effects of variable ground conditions in the upper soils immediately below the building footprint.

Considering the observed site performance during the CES and the conceptual numerical analysis undertaken by Aurecon, Aurecon consider the use of a structural concrete raft foundation will meet the requirements of the NZBC with appropriate detailed design input.

A structural raft foundation does not require specific design for a 'loss of support' case due to the lack of identified shallow liquefaction risk.

Foundation Repair Summary

Aurecon consider all three foundation repair options to be technically viable to meet the deformation and strength criteria of the New Zealand Building Code. The final solution adopted by CCC will need to factor cost, construction timing and resiliency requirements.

In the event that the library structure is to be demolished and reconstructed, Aurecon recommends the use of a structural concrete raft foundation, subject to detailed design confirmation.

4.4.3 Preliminary Bearing Capacities

As a preliminary assessment, without confirmation of the exact founding material and foundation sizing, shallow pad foundations founded with a minimum embedment of 0.4m can be proportioned for an ultimate bearing capacity of 200kPa. This capacity shall be factored by 0.33 for SLS, and 0.5 for all ULS and EQ overstrength cases.

The bearing capacity values provided are indicative only for conceptual costing and shall not be used for a Building Consent Application.

4.5 Further Recommendations

A geotechnical engineer should be retained to:

- Undertake a detailed assessment of shallow foundation bearing capacities once the concept design has been developed further and proposed footings sizes are known. The scale of this investigation cannot be confirmed at this stage of the project however could comprise:
  - Shallow test pits surrounding the building footprint approximately 3m deep to confirm the depth to underlying gravel.
  - Install groundwater monitoring piezometers to confirm the depth to shallow groundwater.
  - Localised investigations within the building footprint through the existing floor slab using Scala probing and hand augers, or possibly CPT, should the floor slab be retained. The main purpose of investigations through the floor slab would be to confirm the presence, or absence, of unsuitable materials such as existing uncontrolled fill beneath the floorslab.

- Provide design input if the raft foundation option is selected, e.g. subgrade reaction modulus values and limiting pressures.
- Prepare a detailed design report/letter to support building consent application.
- Undertake geotechnical inspections during construction to validate the design assumptions as required.

5 References

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Appendix A
Library Floor Level Survey

LEGEND

High >58 mm

Med 28-58 mm

Low <28 mm

LB MARK-UP 18 OCT 21

exposed

its and

tiled

services

Electrical on same

◇ SIJ = slab isolation joint

SEJ = slab expansion joint

SCJ = slab compression joint

STJ = slab tied joint

cable ducts in slab located under reinforcing mesh shown thus. Refer to Electrical drawings. Refer to Mechanical drawings for heating cables cast into slab and located above the reinforcing mesh.

existing well ⊕ approx. location

1 2 3 4 5 6 7 8 9 10 11 12 13 14

7200 7200 7200 7200 7200 7200 7200 7200 7200 7200 7200 7200 7200

A B C D E F G H J K L

2400 7200 2400 2400 7200 2400 2400 7200 2400

MED

LOW

HIGH

SIJ typical

SCJ

SEJ

STJ

100 recess MSB room

240x100 slab duct

fall 250

fall 200

RL 16.150

RL 16.150

RL 15.950

RL 16.200

no data

no data

investigate this

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South Christchurch Library

Preliminary Site Investigation

Christchurch City Council

Reference: 520809

Revision: 2

2021-12-02

aurecon

Bringing ideas to life

Document control record

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Executive Summary

Christchurch City Council (CCC) engaged Aurecon New Zealand Limited (Aurecon) to undertake a contaminated land Preliminary Site Investigation (PSI) for the South Christchurch Library at 66 Colombo Street, Cashmere, Christchurch.

Aurecon understands that the library building was damaged during the Canterbury Earthquake Sequence between 2010 and 2012. CCC are currently investigating the feasibility of repair and strengthening options for the library. The site's soils may be disturbed as part of this process, and CCC have requested Aurecon to prepare a PSI to provide a high-level overview of possible contaminated land issues at and around the library site, and other adjacent areas also owned by CCC. The PSI has been completed in tandem with a geotechnical feasibility study, which has been reported on separately.

Historical aerials and records show the site has been used for various activities over the last 100 years, with potentially contaminating activities identified on the site including:

- Historical landfilling;
- Hydrocarbon storage, leaks and spills;
- Historical buildings and associated demolitions; and
- Possible gas works waste used for weed control along Hunter Terrace.

A Conceptual Site Model indicates that in the case of soil disturbance associated with redevelopment of the library site (and surrounds) there are potential risks of exposure to contaminants for construction workers associated with any repair of the foundations of the library building, as well as potential health risks to off-site adjacent residents, and to public users of the site. There are also potential pathways in which there is a risk of contamination of shallow groundwater, and to ecological receptors in the nearby Heathcote River.

This report meets the definition of a PSI detailed within the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

Recommendations

Based on the information collated in this report, Aurecon recommend that:

- consideration be given to further intrusive investigation of the possible landfill extent and composition in relation to the proposed repairs. From a construction programme perspective, this would ideally be completed once the design of the repairs has been finalised and the locations, quantity and depths of any soil disturbance works are known. However, if there are other factors, such as tight timelines and consenting implications, it may be worthwhile working in parallel as the design progresses so that contaminated land can work collaboratively with other disciplines.
- If further consideration to the overall landfill extent is required, a Detailed Site Investigation (DSI) be undertaken to quantify the extent and level of contamination within the proposed areas of soil disturbance.
- the information and conclusions in this report be shared and incorporated into future discussions around additional development on the site.

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Appendices

Figures

Tables

1 Introduction

1.1 Background

Christchurch City Council (CCC) engaged Aurecon New Zealand Limited (Aurecon) to undertake a contaminated land Preliminary Site Investigation (PSI) for the South Christchurch Library at 66 Colombo Street, Cashmere, Christchurch. The site location, including the adjacent CCC potable water pumping and treatment station (waterworks site) at 54 Colombo Street, is shown in *Drawing 520809-0000-DRG-KF-0001-01-A*, Appendix A.

Aurecon understands that the library building was damaged during the Canterbury Earthquake Sequence between 2010 and 2012. CCC are currently investigating the feasibility of repair and strengthening options for the library which include options for repair or replacement of the current foundation slab. Depending on the options selected to be progressed for further consideration the site's soils may need to be excavated. In order to allow time for these considerations to be made and not restrict option selection, the potential for contamination needs to be understood. As a result, CCC have requested Aurecon to prepare a PSI to provide a high-level overview of possible contaminated land issues at and around the library site and other adjacent areas also owned by CCC.

1.2 Objectives and Scope

The objectives of the contamination assessment are to:

- Identify current and historical activities with the potential to have caused contamination at the site; and
- Inform implications for the proposed development with regard to these activities, including any requirement for an intrusive site investigation.

The following scope of works was undertaken:

- Desktop study including review of:
  - Background information with specific focus on the library site, and the CCC owned land immediately south, including a review of historical aerial photos, Environment Canterbury's Listed Land Use Register (LLUR) of HAIL, and likely site conditions (geology, hydrogeology).
  - Preparation of a Conceptual Site Model (CSM) based on the desktop review information, to clearly outline the likely source-pathway-receptor (SPR) linkages and potential contaminants that may impact soil disturbance works at the site.
  - Summarise the findings of the desktop review and discuss implications with respect to contaminated land, associated with redevelopment of the site.

This report has been reviewed by SQEPs[1] has been produced summarising the desktop study information and provides high-level recommendations for further work and pragmatic future management of the site.

This report has been prepared in general accordance with the Ministry for the Environment (MfE) *Contaminated Land Management Guideline No. 1: Reporting on Contaminated Sites in New Zealand (Revised 2021)* (MfE 2021a).

The persons undertaking, managing, reviewing and certifying (verifying) this report are suitably qualified and experienced practitioners (SQEPs) as defined in the MfE's NES Users' Guide (MfE 2012).

[1] SQEP: Suitably Qualified and Experienced Practitioner, as defined in MfE 2012 for compliance with legislative requirements (NES-CS)

1.3 Explanatory Statement

1.3.1 Review scope and use

- Aurecon has prepared this report for Christchurch City Council, exclusively for its use. It has been prepared in accordance with our scope of services and the instructions given by or on behalf of the Christchurch City Council. Data or opinions contained within the report may not be used in other contexts or for any other purposes without Aurecon's prior review and agreement.
- Aurecon accepts no responsibility or liability to any third party for the use of, or reliance on, the report by any third party and the use of, or reliance on, the report by any third party is at the risk of that party.

1.3.2 Limits on Investigation and Information

- Soil and rock formations are often variable, and this along with use, storage or disposal of hazardous substances on a site can result in heterogeneous distribution of contaminants. Contaminant concentrations may be evaluated at chosen sample locations - however, conditions between sample sites can only be inferred based on geological and hydrological conditions and the nature and the extent of identified contamination. Boundaries between zones of contamination are often indistinct, and therefore interpretation is based on available information and the application of professional judgement.
- Only a finite amount of information has been collected to meet the specific technical requirements of the Christchurch City Council's brief and this report does not purport to completely describe all the site's characteristics and properties. The nature and continuity of the ground at test locations has been incorporated from previous reports prepared by parties other than Aurecon. It must be appreciated that actual conditions could vary from those presented in those reports.
- This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should further information become available regarding the conditions at the site, including previously unknown likely sources of contamination, Aurecon reserves the right to review the report in the context of the additional information.
- This report has been prepared for the Christchurch City Council for its own use and is based on information provided. Aurecon takes no responsibility and disclaims all liability whatsoever for any loss or damage that the Christchurch City Council may suffer as a result of using or relying on any such information or recommendations contained in this report, except to the extent Aurecon expressly indicates in this report that it has verified the information to its satisfaction. This report is not to be reproduced either wholly or in part without our prior written permission.

2 Site Description

2.1 Site Identification and Layout

Site identification details are presented in Table 1. A site layout plan showing the latest aerial imagery sourced from LINZ Data Service is presented in *Drawing 520809-0000-DRG-KF-0001-01-A,* Appendix A.

Table 1 Site Identification

Site Name	South Christchurch Library
Site Location	66 Colombo Street, Cashmere, Christchurch (also including 54 Colombo Street, immediately south of the library (CCC waterworks site)).
Legal Description/s	SO336314 & DP2527 (collection of multiple lots spanning the current library location and all of the CCC owned land immediately south).
Site Area (ha)	Approximately 3.1 ha total (1.11 ha for the current library site and 1.99 ha for the remainder of the CCC owned land to the south)
Site Coordinates	1570803 E 5176719 N
Site Zoning	Residential Suburban
Current Site Use	Library (with carpark and green areas), with CCC workshop and groundwater abstraction site to the south

2.1.1 Surrounding Land Use

The surrounding land uses are recorded in Table 2.

Table 2 Surrounding Land Use

North	Hunter Terrace on the site boundary, with the Heathcote River immediately north.
East	Hunter Terrace on the site boundary, with the Heathcote River immediately east.
South	Cashmere Club and residential houses beyond
West	Colombo Street and residential houses

2.2 Site Environment

2.2.1 Topography

The site is predominantly flat with less than 1.0 m variation in surface elevation within the site boundaries. The most notable topographic feature nearby is the Heathcote River which curves around the northern and eastern periphery of the library and is up to approximately 3.0 m below the site (based on LiDAR information).

2.2.2 Geology

The regional geology of the site is described by GNS Science (2014) as *"Unconsolidated to poorly consolidated mud, sand, gravel and peat of alluvial and colluvial origin."*

The site is also known to be the location of a historic landfill (see Section 3 below). As such, there is a variable thickness of landfill material overlying the natural in-situ alluvial deposits.

Additional information on the geology of the site is included in the Geotechnical Feasibility Assessment Report prepared for the site (Aurecon 2021).

2.2.3 Hydrology

The Heathcote River is present to the North and East of the site and it is assumed any overland flow from the site which is not directed to the CCC stormwater network will drain directly into the river. Most of the site though is comprised of open grass areas, and it is expected that most overland flow within the site will soak to ground. Water otherwise accumulating on the hardstand areas and building roofs of the site is assumed to be directed into the CCC stormwater network.

No surface water bodies are noted as being present within the site boundaries.

2.2.4 Hydrogeology and Well Details

Using the regional council mapping software (Canterbury Maps Viewer), a search of registered wells was performed on 21 November 2021 and wells identified within 50 m of the site are detailed in Table 3.

Based on the available piezometric data, the shallow groundwater regime flows in an eastward's direction across the site.

Table 3 Wells within 50 m of the Site

Well No	Distance from site (m)	Direction	Downgradient? (Y/N)	Depth and water level (WL) (m below mounting point)	Use
M36/1040	Within site	-	-	-	Sealed/grouted
M36/0910	Within site	-	-	-	Sealed/grouted
M36/1356	Within site	-	-	28.40m deep, 0.21m WL	Community supply
M36/1355	Within site	-	-	-	Sealed/grouted
M36/0931	Within site	-	-	-	Sealed/grouted
M36/1358	Within site	-	-	-	Sealed/grouted
M36/0985	Within site	-	-	29.30m deep, 0.3m WL	Community supply
M36/1085	Within site	-	-	-	Sealed/grouted
M36/1042	Within site	-	-	-	Sealed/grouted
M36/1041	Within site	-	-	-	Sealed/grouted
M36/4591	Within site	-	-	29.50m deep, 0.59m WL	Community supply
M36/1363	Within site	-	-	29.30m deep, +0.60m WL	Community supply
M36/1196	Within site	-	-	-	Buried
M36/1195	Within site	-	-	28.90m deep, +0.32m WL	Community supply
M36/2828	Within site	-	-	29.40 deep, 0.71m WL	Community supply
M36/1112	5m	NW	N	72.50m deep, No level recorded	Sealed/grouted
M36/1113	10m	NW	N	34.10m deep, 0.93m WL	Sealed/grouted
M36/0978	10m	N	N	74.90m deep, 1.02m WL	Sealed/grouted

M36/1129	15m	N	N	37.70m deep, No level recorded	Sealed/grouted
M36/0992	10m	N	N	72.20m deep, No level recorded	Sealed/grouted
M36/0997	10m	N	N	25.60m deep, No level recorded	Sealed/grouted
M36/8905	25m	N	N	3.05m deep, No level recorded	Geotechnical / Geological Investigation
M36/1359	10m	NE	Y	26.80m deep, No level recorded	Sealed/grouted
M36/1360	10m	E	Y	22.90m deep, 1.29m WL	Sealed/grouted
M36/8904	30m	E	Y	3.05m deep, No level recorded	Geotechnical / Geological Investigation
M36/1109	10m	E	Y	54.80m deep, No level recorded	Sealed/grouted
M36/1361	10m	E	Y	36.60m deep, No level recorded	Sealed/grouted
BX24/2177	20m	E	Y	4.00m deep, No level recorded	Geotechnical / Geological Investigation
M36/8903	25m	E	Y	3.05m deep, No level recorded	Geotechnical / Geological Investigation
M36/1110	15m	E	Y	73.10m deep, 1.04m WL	Sealed/grouted
M36/8837	30m	E	Y	7.01m deep, No level recorded	Geotechnical / Geological Investigation
M36/8902	25m	SE	Y	3.05m deep, No level recorded	Geotechnical / Geological Investigation
M36/1357	10m	SE	Y	21.30m deep, No level recorded	Sealed/grouted
M36/1362	40m	SE	Y	29.00m deep, 0.81m WL	Sealed/grouted
M36/1005	35m	S	Y	114.00m deep, No level recorded	Not used (unknown if sealed)
M36/0975	20m	S	Y	185.90m deep, No level recorded	Sealed/grouted
BX24/2176	10m	SW	N	4.00m deep, No level recorded	Geotechnical / Geological Investigation
M36/8988	50m	W	N	2.13m deep, No level recorded	Geotechnical / Geological Investigation
M36/8987	50m	W	N	1.52m deep, No level recorded	Geotechnical / Geological Investigation

Note: + WL denotes flowing artesian pressure with the water level measured above the mounting point.

2.2.5 Ecology

Under the Resource Management Act (Section 30), regional councils and unitary authorities have responsibilities to safeguard the life-supporting capacity of soil and ecosystems and ensure any adverse effects on the environment are avoided or mitigated.

The site redevelopment will likely not result in a change of land use to a more sensitive land use, but the presence of potential on and off-site ecological receptors was investigated for completeness. The results are presented in Table 4.

Table 4 Ecological assessment checklist[1]

Ecological receptor	On site	Off-site	Comments
Marshes, swamps, tidal flats or other ecologically sensitive wetlands near[2] the site?	N	Y	The Heathcote River Drains to the Avon-Heathcote Estuary
Are other aquatic habitats such as rivers, lakes or streams near the site?	Y	Y	The Heathcote River is directly adjacent to the site
Are ecologically important marine or estuarine environments near the site?	N	Y	The Heathcote River Drains to the Avon-Heathcote Estuary
Are ecologically important or sensitive environments such as national parks or nature reserves located near the site?	N	N	
Are habitats for rare, threatened or endangered species near the site?	N	N	
Are forested, grassland or other habitats of significance located near the site	N	N	
Is the site used for food production (arable or livestock)?	N	N	
Summary: Based on the information collected, the site **is** considered ecologically sensitive, and data **should** include assessment using guidelines relevant to the assessment of ecological impact			

1: Table adapted from Appendix 4I, MfE 2011c

2: Near is judged on a site-specific basis given the contaminant's potential for transport by wind, surface run-off, groundwater transport or preferential pathways from service lines etc and should include positive factors such as reticulation of stormwater away from the site

2.2.6 Summary of Environmental Conditions

Based on desk study information, and additional information sourced from the Aurecon Geotechnical Feasibility Report for the site (Aurecon 2021) the expected environmental conditions at the site are summarised in Table 5.

Table 5 Generalised ground profile

Geotechnical Unit	Depth to Top of Unit	Unit Thickness	Description
1	Surface	0.3m to 2.6m	Topsoil, landfill material (of unknown composition) or silt / sandy silt.
2	0.3m to 2.6mbgl	0.9m to 5.5m	Gravel, sandy gravel and sand (predominately sandy gravel).
3	2.3m to 5.8mbgl	~10m	Silty sand and silt.
4	~15mbgl	>10m	Dense to very dense Sandy-Gravel (Riccarton Gravels)

The site is considered topographically flat and is known to be the location of a historic landfill. The Heathcote River adjacent to the site is identified as an ecological receptor and sensitive groundwater abstractions (community drinking water supply) are located within the site boundaries.

3 Site History

3.1 Introduction

A search of readily available information sources was conducted with the objective of identification of past or present activities with the potential to contaminate land or other media such as sediment and groundwater. The nature and extent of any identified activities has also been assessed, where information was available.

3.2 Regional Council Register of HAIL Sites

Environment Canterbury Regional Council (ECan) hold a database (Listed Land Use Register (LLUR)) of sites that have, or have had in the past, an activity or industry that is detailed in the Hazardous Activities and Industries List (HAIL) (MfE 2012).

The web-based database was queried on *21 November 2021* and the following sites with HAIL activities were identified:

- SIT 208 – CCC Waterworks
- SIT 10763 – 66 & 70 Colombo Street Landfill (Christchurch Landfill #51)

The HAIL activities noted on the LLUR include:

- G3 – Landfill Sites
- A17 – Storage tanks or drums for fuel, chemicals or liquid waste

The Property Statement from the regional council register is provided in Appendix B. Note that the register is incomplete as not all HAIL activities in the region have been identified. Reports held by ECan in relation to the site were reviewed, and a summary of each is provided in Section 3.5 below.

3.3 Regional Council Consents

Using the regional council mapping software, a search of active consents within a radius of 100 m was performed on 21 November 2021 and consents identified are detailed in Table 6.

Table 6 Active Consents

Consent type	Consent holder	Summarised details	Comments
CRC204470 Water permit	CCC	Groundwater take / use (On the site)	Issued and active, associated with wells M36/1195, M36/2828, M36/1363, M36/4591, M36/0985 & M36/1356
CRC202789 Discharge Permit	CCC	Discharge of contaminants to air associated with operation of a diesel-driven standby generator (On the site)	Issued and active
CRC182295 Water Permit	CCC	Dewatering consent for works along Colombo Street (Off site)	Issued 2017 – Currently inactive
CRC182296 Water Permit	CCC	Discharge of dewatering water for works along Colombo Street (Off site)	Issued 2017 – Currently inactive

3.4 Local Authority Property Files

The Property Files were requested from the Christchurch City Council for 66 and 54 Colombo Street. Over 1 GB of scanned documents and drawing data was included in the property files and as such only a high level review was completed (several thousands of pages were included).

The majority of the property files relate to earthquake damage assessments and repair documentation for the library building. With regard to any information about ground conditions during the original construction of the library, a review of the available civil plans, scanned consent documents and structural drawings from that time period within the property files was completed. We did not find any records detailing specific disposal requirements in any of the consent documentation, no reports associated with a contamination investigation, or any records for offsite disposal having occurred. However, a design document submitted as part of building consent of the current library stated:

"The site was a former rubbish tip which was closed in the 1960s – the type and depth of the fill is not known or if any compaction has been carried out – the filled areas extend from the corner of Colombo Street / Hunter Terrace along Hunter Terrace to the boundary between Pt Lot 18 DP2527 & 88 Hunter Terrace (Cashmere Club Inc).

There are no records indicating that it contains any contaminants"

The area suggested as being occupied by the landfill in the above quote encompass the entire northern and eastern boundaries of the library and waterworks sites, with the western extent undefined. As such, the landfill material could possibly extend across the site. With no available inspection records or other information on the subgrade encountered in original construction of the library, there is potential for the library to be founded on the landfill material.

3.5 Records of Title

The record of title and historic title were requested from Terranet. Land ownership by the Heathcote County Council, and more recently the Christchurch City Council was noted, but no historical titles for early 1990s ownership of the land were available. A review of Archives New Zealand failed to find any further information on historic ownership.

3.6 Review of Historical Aerial Photography

Publicly available historical aerial images for the site have been reviewed. A summary of features identified in these images is presented in Table 7. Historical Aerial Images with an overlay of the current library and the wider site boundary are provided in Appendix C.

Table 7 Summary of historical aerial imagery

Year and source	Site	Adjacent area
1925-1929 Canterbury Maps	Earliest aerial available – the site is open land along the river with what appears to be soil disturbance (bare ground, mounding etc.) in the NW and to the SE. A probable horse stables is present in the location of the current library (Hunter Cartage and Horse Stables Company, see Section 3.5 below), along with a stockpile of something (possibly hay) to the west. A small rectangular building is present in the south-eastern corner. The remainder of the current waterworks premises is occupied by probable residential houses, towards the western side and a large building likely associated with the Hunter Cartage Co. While the land overall doesn't appear to be an active landfill, it is notably more reworked and disturbed than any of the surrounding neighbourhood.	There are no available aerials for the land to the north of the site across the Heathcote River, but to the south of the current waterworks premises are open paddocks, with a small building and trees to the east. Across Colombo Street to the west there are few houses yet built, and mostly occupied by open paddocks. Elsewhere to the south and what can be seen to the east, the area appears to be already relatively densely populated with residential homes.

Year and source	Site	Adjacent area
1940-1944 Canterbury Maps	The stable buildings have been removed – but some bare ground is still noticeable where this building was. The grassed open areas appear to be more well-kept and a track (the future Hunters Terrace) has been formed along the river side, forming the northern and eastern boundaries of the site. One small building had been built at the southwestern end of the site, but otherwise no other changes are noted.	Some infilling with residential houses is notable to the north, east and west of the site. The southern boundary remains bordering on open paddocks.
1945-1949 Canterbury Maps	Two new structures have appeared, one in the open area to the east of the current library, and one in amongst the collection of houses in the SW. It appears that to the east of these buildings there is an area of disturbed ground, possibly indicative of gravel excavation/stockpiling, and/or topsoil removal (or landfilling?)	No major changes noted, but gradual increasing density of housing.
1955-1959 Canterbury Maps	Potential stockpiling of timber or long stacked pipe is noted across the open areas of the site, and an additional building has been constructed at to the east of the collection of buildings in the SW corner. Another small building has been built to the north of the site, just offset from the current library footprint. No further ground disturbance associated with the area identified in the 1945-49 aerial is noted.	No major changes noted. Gradual increasing density of housing.
1965-1969 Canterbury Maps	Stockpiles remain but in different locations and a new section of track/roading has been extended into the eastern side of the site. No other major changes noted.	No major changes noted. Gradual increasing density of housing.
1970-1974 Canterbury Maps	A new building (a clubrooms most likely) and associated car parking area, plus the first (sealed?) section of Hunter terrace is seen in the NW corner of the site (about half of the area of the clubrooms intersects the current library footprint). Otherwise, the site appears to be used in much the same way as previously. A long pipe extending out NE to the Heathcote River is present, unsure of use (Drainage? Pumping?).	Building south of the SE corner removed and a large area of bare ground appears scraped on the property to the south (likely site preparation).
1975-1979 Canterbury Maps	Poor quality photo, but not major changes noted. Hunter Terrace appears to be fully constructed.	Cashmere Club (building to the south of the site) has been constructed.
1980-1984 Canterbury Maps	A Bike track has been built in the SE corner of the waterworks site, and more of the overall site appears to be gravelled and more storage occurring. To the east of the clubrooms in the northwest corner of the site a carpark area and a small rectangular building have been constructed.	Cashmere Club building extended.
1985-1989 Canterbury Maps	Poor quality, but some buildings in the SW seem to have been removed.	Poor quality photo, no obvious changes.

Year and source	Site	Adjacent area
1990-1994 Canterbury Maps	Trees maturing, and some new building layouts noticeable in the SW and center of the site. The carpark in the northeast corner of the site has been sealed and the rectangular building visible there previously has been removed. (Note, orthorectification of the base image is distorted, and the boundary overlay appears shifted to the east approximately 10 m).	No changes noted.
1995-1999 Canterbury Maps	Poor quality, and colour. Small asphalt carpark constructed to the eastern end of the future library footprint. No other changes noted.	Poor quality, and colour. No changes noted.
2000-2004 Canterbury Maps	Poor quality, and colour. No changes noted. (The library was however constructed between 2002 and 2003).	Poor quality, and colour. No changes noted.
2010-2014 Canterbury Maps	Library and car parking have been constructed. To make way for this development, the clubrooms and car parking areas have been removed). The site otherwise appears to be in its current day layout.	This aerial is only a few days after the 2011 earthquake, and liquefaction and building damage can be noticed in the surrounding neighbourhoods. No major changes (or liquefaction ejecta) are noted in the immediate vicinity of the site.
2015-2019 Canterbury Maps	No major changes, except for some yard layout changes in the CCC waterworks site.	No changes noted.

3.7 Results of Previous Environmental Investigations

The site has been investigated by at least eight previous investigations, mostly centred around the waterworks premises, and including desktop studies as well as intrusive investigations targeting both surficial and near surface soils, and groundwater. Reports available from ECan, following the LLUR search, were requested and reviewed with a summary of each provided below.

Royds Consulting Limited – 1994

A Detailed Site Investigation report produced by Royds Consulting in 1994 is the oldest report associated with the site. This report was not available for review, but a summary of the report held by ECan stated the DSI was completed in association with the removal of three 2,200L diesel underground storage tanks from the CCC water pumping station. During removal of the tanks, the summary indicated several holes were noted, and liquid phase hydrocarbons observed in the base of the tank pit. Sampling of the tank pit material confirmed high concentrations of total petroleum hydrocarbons (TPH) present in a non-aqueous phase. Two observational bores were installed in the backfilled excavation, for later monitoring (this monitoring is discussed below).

Pattle Delamore Partners – 1995

An Environmental Assessment, and two short letter reports produced by Pattle Delamore Partners (PDP) Limited in 1995 detail the results of groundwater sampling related to the observations of contamination made during removal of the two underground storage tanks in 1994. Three boreholes were drilled (in addition the two observational bores installed in the tank pit excavations) . Two of these new boreholes were placed between the tank pit and the Heathcote River, with the third placed in the tank pit backfill. The results from sampling of the groundwater reported high TPH concentrations within the PDP installed tank pit borehole and non-aqueous phase product was observed on two occasions in two of the tank pit boreholes.

No TPH was detected above the laboratory limit of reporting in the monitoring wells outside of the tank pit. It was inferred in the final letter report that the source of the TPH contamination had been removed with removal of the tanks, and that any free phase product was likely isolated to within the tank pit.

Pattle Delamore Partners - 2010

The primary objectives of the PDP 2010 desktop study (Preliminary Site Investigation) were to assist Christchurch City Council determine potential risks in terms of land contamination for the proposed "Mid Heathcote River Master Plan" which included the eastern and northern boundaries of the South Christchurch Library and CCC waterworks premises. The development plans included cut to fill activities involving the excavation and re-contouring of soils along the Heathcote Riverbank. The information sourced for the report included interviews with previous site owners and official submitted material from previous works in the local area.

In summary, the information gathered by PDP suggested the site had been previously used as a landfill, but the landfill footprint could not be identified. An interview was conducted with the family of the previous landowner (Hunter Cartage and Horse Stables Company) and during that interview it was verbally confirmed that quarrying and backfilling had occurred on the site. The content of the landfill was not confirmed. Reportedly, some unexpected items such as vehicles have been uncovered at the site during previous works. The report surmised that if there was a landfill located on the site, the age of the indicated filling (around 1930s) suggests that gas and liquid leachate generation would potentially be past peak concentrations. The report included review of the CCC Closed Landfills Map, but the scale of these maps precludes any detailed interpretation of possible extent.

The site history account in this report identified HAIL activities in the vicinity of the Library and CCC waterworks site as: landfilling activity; possible gas works waste for weed control along Hunter Terrace; other uncontrolled filling across the site; and a limited area of hydrocarbon contaminated groundwater (associated with the reports above).

Sephira Environmental Limited – 2019

A DSI completed by Sephira Environmental detailed the excavations and soil disturbance associated with a 60 m long trench on the CCC waterworks site, as part of inground infrastructure upgrades. The excavation was undertaken on the western half of the site through the waterworks premises and encountered sandy silt fill with fine to coarse gravel. No mention of landfill refuse was noted in the report. Laboratory results reported soil concentrations of contaminants of concern above local background concentrations, and one sample reported concentrations of arsenic above the commercial/industrial human health criteria.

Beca Limited - 2019

CCC commissioned Beca to undertake a Groundwater Contamination Investigation at the CCC waterworks site, to assess potential sources of contamination in the context of New Zealand Drinking Water Standards. This investigation consisted of a desk study PSI, followed by intrusive investigation as part of a DSI.

The PSI summarised that the bore field extended across an area of historical landfilling and suggested intrusive investigation be carried out to determine the consistency of the fill material present and assess how contaminated this material may be.

The DSI involved the installation of six shallow groundwater bores on the site, one adjacent to each of the groundwater abstraction bores (with the abstraction bores shown in Appendix A of this report for reference). The soils from each bore hole were logged, and piezometer wells installed. Landfill material, generally comprising loosely pack topsoil and silt, with traces of brick, wood and metal were found to maximum depths of 0.3 – 1.5 m below ground level. A layer of topsoil was noted above the fill material in the boreholes, with landfill material present from approximately 0.3 m depth.

Groundwater levels were recorded between 1.2 – 2.0 m bgl during the investigation, which was above the base of landfill material in one location. No soil sampling of the collected soil/fill material was completed, but groundwater sampling of the installed piezometers indicated that contamination of the shallow groundwater

was occurring with groundwater results exceeding the NZ Drinking Water Standards for dissolved arsenic in one location (BH04, corresponding to Well M35/1195). Testing of the abstracted water from the drinking water bores, however, did not suggest any contamination of the deeper aquifer was occurring. These bores extract water from Aquifer 1, and a confining layer of approximately 10 m thickness separates the aquifer water from the shallow groundwater.

3.8 Possible Extent of Landfilling Activities

Based on the information contained in the available reports, it appears the extent (both lateral and vertical) of the former Colombo Street and Hunter Terrace landfill is not well understood, and the exact filling material is also not clear. The landfill is thought to have mostly been active during the 1930s. As this is a period of time no historical aerial photographs are available for, determining the extent using the available information is limited to interpretation. Soil sampling, we are aware of to date is very limited, with most previous investigation targeting groundwater and no specific investigation of the landfill itself has been completed.

Based on the layout of the site between the 1925 and 1940 aerial photos there are certain features (buildings and trees and roads) which have remained in place, and therefore it can be surmised that these areas were at least outside of any original landfilling activities. Similarly, the Heathcote River forms a natural boundary to the north and east, limiting the extent of landfilling in that direction. Capping of the landfill material, based on review of the previous intrusive investigations on the site appears to be at best, a layer of topsoil approximately 0.3 m thick.

Given the above assumptions, we have determined those areas where the landfill is unlikely to be located based on the changes noted in the aerial photographs, and from intrusive investigation data contained in the previous reports, refer to *Drawing 520809-0000-REP-KF-0001-02-A*, Appendix A. Note that this boundary is approximate only and derived solely from the available desktop data. Confirmation of the true landfill extent could only be completed with intrusive investigation.

4 Preliminary Conceptual Site Model

4.1 Introduction

The CSM outlines the potential source-pathway-receptor linkages that may be present. The CSM defines what contaminants could be present at a site, how they may travel and what receptors they could affect by doing so. Establishing these factors is essential to guide the preparation of an investigation plan.

4.1.1 Area of Relevance

To assist with aligning the CSM with the site area, an area of relevance has been defined.

The lateral extent of this area of relevance includes the entirety of the site extent as shown in *Drawing 520809-0000-DRG-KF-0001-01-A*, Appendix A. The CSM therefore includes the library building itself, and the remainder of the CCC owned land to the south.

4.2 Potential Sources

Potential for contamination to have occurred on the site from:

- *Landfilling (unknown contaminants, but likely heavy metals, hydrocarbons, and organic compounds, asbestos possible if landfilling activities extended up until the 1960s)*
- *Hydrocarbon storage, leaks and spills (associated with three USTs removed in the 1990s)*
- *Historical buildings and demolitions across the site (uncontrolled filling, asbestos, lead paints)*
- *Possible gas works waste used for weed control along Hunter Terrace (anecdotal evidence)*

4.3 Pathways

Pathways for contaminant exposure and offsite migration of contaminants generally include the transport of contaminants via air, solid phase, and water. The potential pathways identified from the desk information are:

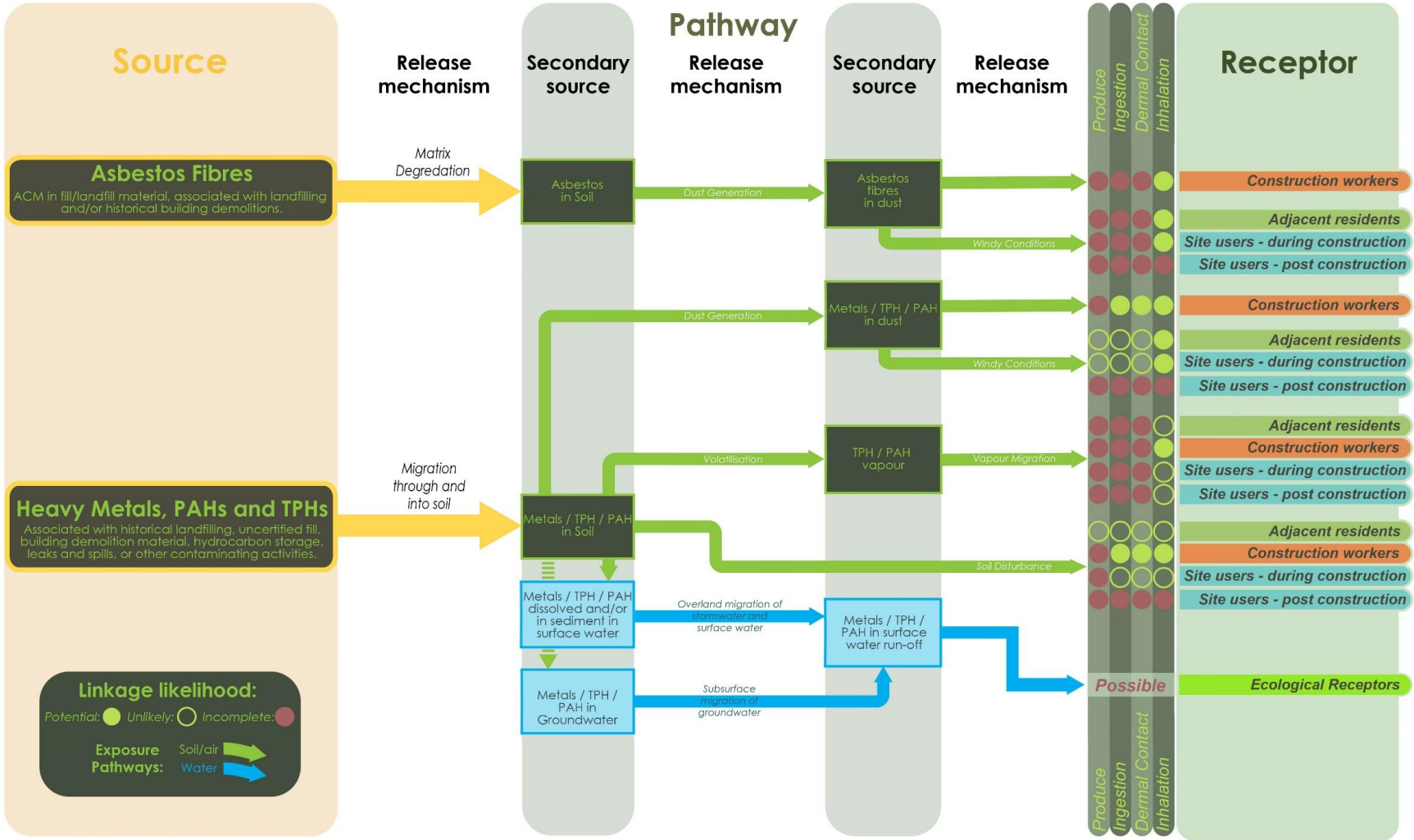
- *Direct contact (dermal and ingestion)*
- *Inhalation of contaminated dust*
- *Overland transport of contaminated sediment in surface water*
- *Migration of contaminants from the site via surface water runoff and groundwater*

4.4 Receptors

Receptors include people and the environment (for example surface water ecosystems) that are or may be adversely affected by the identified contaminants. The potential receptors identified in the assessment include:

- *Future site users*
- *Maintenance and construction/excavation workers*
- *Adjacent residents*
- *Ecology within the Heathcote River and its downstream environs*
- *Groundwater*

Figure 1: Conceptual Site Model.



5 Summary and Recommendations

5.1 Summary

Christchurch City Council (CCC) engaged Aurecon New Zealand Limited (Aurecon) to undertake a contaminated land Preliminary Site Investigation (PSI) for the South Christchurch Library at 66 Colombo Street, Cashmere, Christchurch.

Historical aerials and records show the site has been used for various activities over the last 100 years, with notable changes including landfilling, multiple building demolitions, use as a cartage company premises, a rifle/gun club and current uses as a library with surrounding greenspace and parking area, plus a waterworks site and associated infrastructure in the south of the site.

The soils directly beneath the current library location may therefore be, at least in part, comprised of landfill material. With no readily available third party information specific to the subgrade encountered in the original construction of the library, this remains unknown. The extent of the landfill has not been determined in detail by any past investigations but is likely extend across much of the site.

Based on the available information for the library site, and the wider CCC owned piece of land, the Conceptual Site Model has been used to identify a potential risk of exposure to contaminants for construction workers associated with any repair of the foundations of the library building, as well as potential health risks to off-site adjacent residents, and to public users of the site. There are also potential pathways in which there is a risk of contamination of shallow groundwater, and to ecological receptors in the nearby Heathcote River.

5.2 Recommendations

Based on the information collated in this report, Aurecon recommend that:

- consideration be given to further intrusive investigation of the possible landfill extent and composition in relation to the proposed repairs. From a construction programme perspective, this would ideally be completed once the design of the repairs has been finalised and the locations, quantity and depths of any soil disturbance works are known. However, if there are other factors, such as tight timelines and consenting implications, it may be worthwhile working in parallel as the design progresses so that contaminated land can work collaboratively with other disciplines.
- if further consideration to the overall landfill extent is required, a Detailed Site Investigation (DSI) be undertaken to quantify the extent and level of contamination within the proposed areas of soil disturbance.
- the information and conclusions in this report be shared and incorporated into future discussions around additional development on the site.

6 Reference List

Aurecon 2021, *Christchurch South Library – Conceptual Geotechnical Foundation Repair Feasibility Report*. Prepared by Aurecon New Zealand Limited for Christchurch City Council. Dated 24 November 2021. Report Ref: 520809

Ministry for the Environment (MfE) 2011a, *Contaminated Land Management Guidelines No. 1. Reporting on Contaminated Sites in New Zealand (Revised 2011),* ME number: 1071, Ministry for the Environment, Wellington.

Ministry for the Environment (MfE) 2011b, *Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand*, Ministry for the Environment, Wellington.

Ministry for the Environment (MfE) 2012, *Users' Guide. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health)*, ME number: 1092, Ministry for the Environment, Wellington.

Parliamentary Counsel Office 2011, *Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011*, Parliamentary Counsel Office, Wellington.

A

Drawings

aurecon
www.aurecongroup.com

CLIENT: Christchurch City Council

REV	DATE	REVISION DETAILS	APPROVED
A	26.11.21	PRELIMINARY	

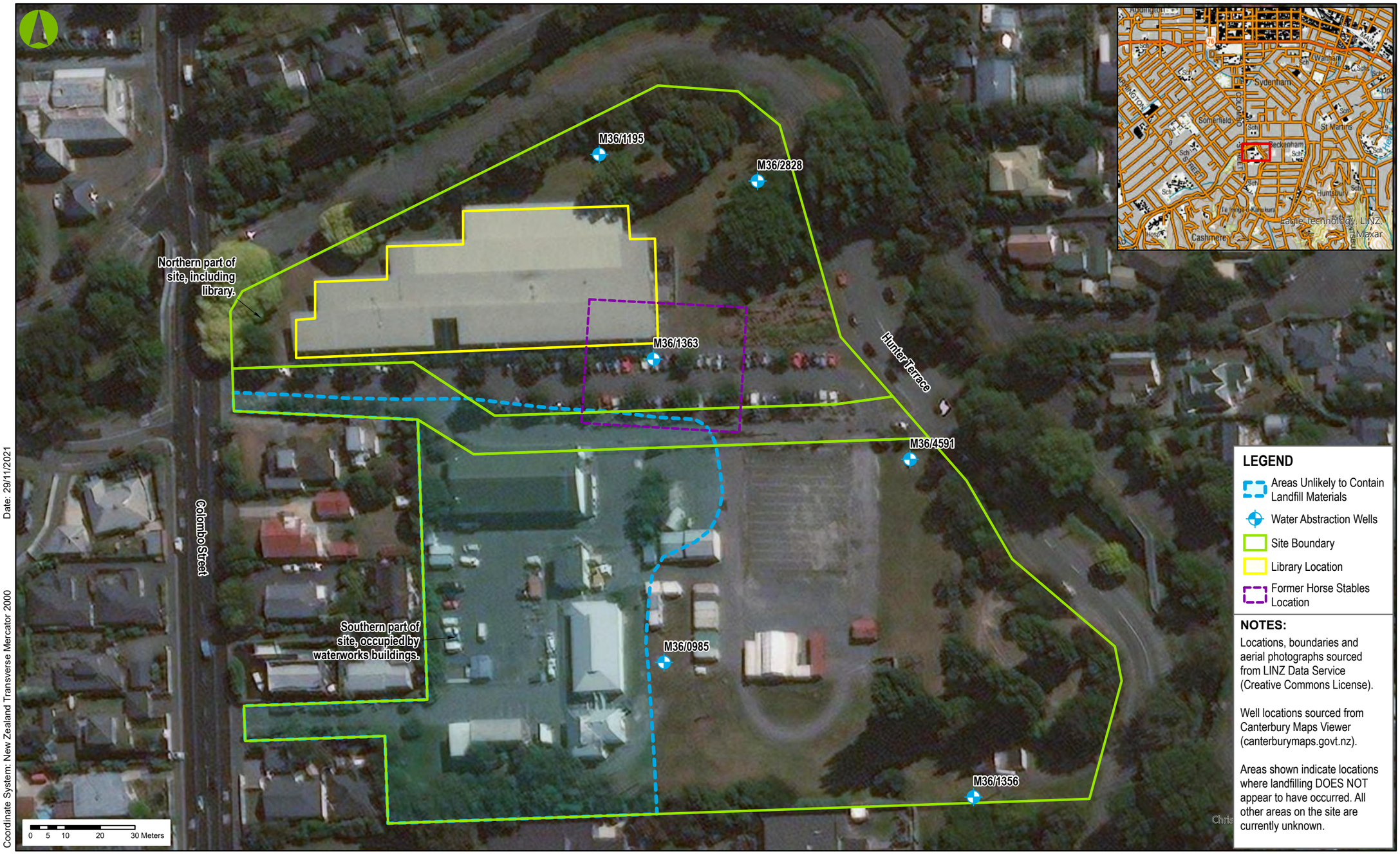
SCALE	1:1,000
SIZE	A3
DRAWN	F. MONTEITH
REVIEWED	M. ELFORD
VERIFIED	R. LARKIN

PRELIMINARY
FOR INFORMATION

APPROVED
DATE 29.11.21
C. GIBBONS

PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	SITE LAYOUT AND LOCATION PLAN

DOCUMENT	PROJECT	WBS	TYPE	DISC	NUMBER	SHEET	REVISION
	520809	0000	DRG	KF	0001	01	A



aurecon
www.aurecongroup.com

CLIENT: Christchurch City Council

REV	DATE	REVISION DETAILS	APPROVED
A	26.11.21	PRELIMINARY	

SCALE	1:1,000
SIZE	A3
DRAWN	F. MONTEITH
REVIEWED	M. ELFORD
VERIFIED	R. LARKIN

PRELIMINARY
FOR INFORMATION

APPROVED
DATE 29.11.21
C. GIBBONS

PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	AREAS OF SITE UNLIKEY TO BE LANDFILL

DOCUMENT	PROJECT	WBS	TYPE	DISC	NUMBER	SHEET	REVISION
	520809	0000	DRG	KF	0001	02	A

B

LLUR Property Statement

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345
Christchurch 8140

P. 03 365 3828
F. 03 365 3194
E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Dear Sir/Madam

Thank you for submitting your property enquiry from our Listed Land Use Register (LLUR). The LLUR holds information about sites that have been used or are currently used for activities which have the potential to cause contamination.

The LLUR statement shows the land parcel(s) you enquired about and provides information regarding any potential LLUR sites within a specified radius.

Please note that if a property is not currently registered on the LLUR, it does not mean that an activity with the potential to cause contamination has never occurred, or is not currently occurring there. The LLUR database is not complete, and new sites are regularly being added as we receive information and conduct our own investigations into current and historic land uses.

The LLUR only contains information held by Environment Canterbury in relation to contaminated or potentially contaminated land; additional relevant information may be held in other files (for example consent and enforcement files).

Please contact Environment Canterbury if you wish to discuss the contents of this property statement.

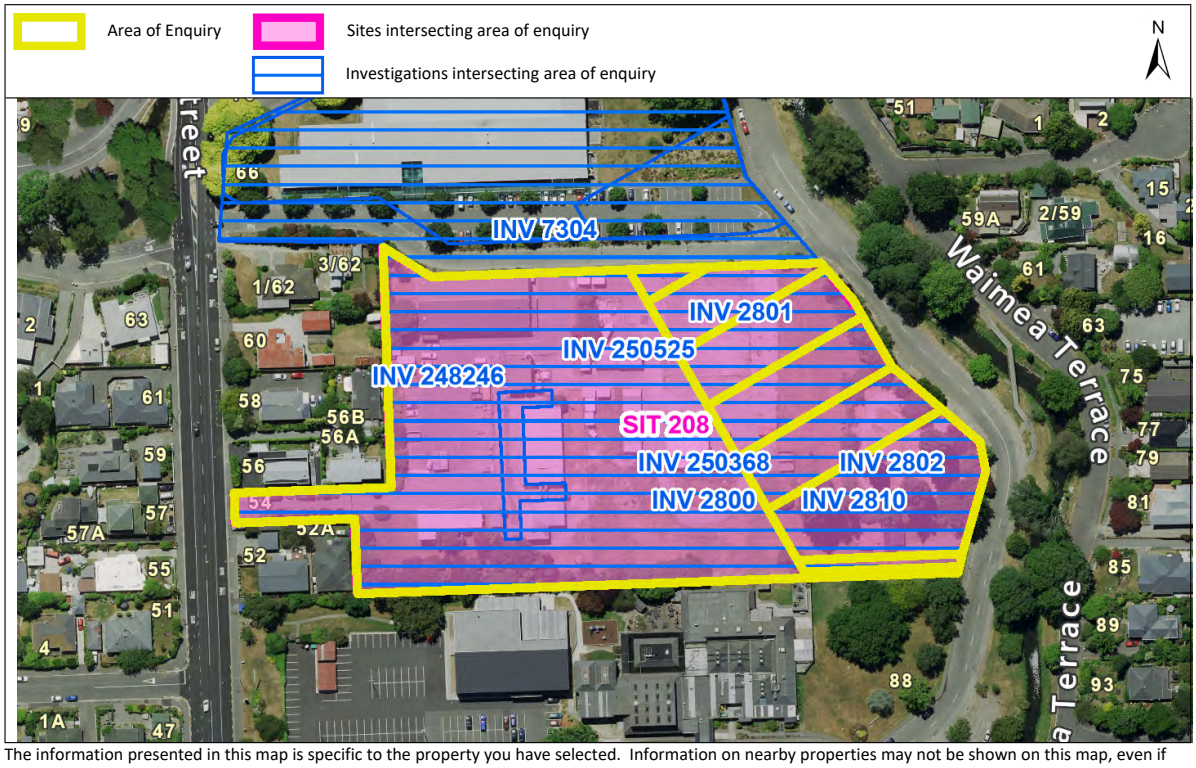
Yours sincerely

Contaminated Sites Team

Property Statement
from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or
contact Customer Services at ecan.govt.nz/contact/ and quote ENQ301006

Date generated: 21 November 2021
Land parcels: Part Lot 17 DP 2527
Part Lot 15 DP 2527
Part Lot 18 DP 2527
Part Rural Section 138
Part Lot 18 DP 2527
Part Lot 16 DP 2527
Part Lot 14 DP 2527
Part Lot 13 DP 2527



The information presented in this map is specific to the property you have selected. Information on nearby properties may not be shown on this map, even if the property is visible.

Sites at a glance

Sites within enquiry area

Site number	Name	Location	HAIL activity(s)	Category
208	CCC Waterworks	54 Colombo Street, Christchurch	A17 - Storage tanks or drums for fuel, chemicals or liquid waste;G3 - Landfill sites;	Partially Investigated

More detail about the sites

Site 208: CCC Waterworks (Intersects enquiry area.)

Category: Partially Investigated
Definition: Verified HAIL has been partially investigated.

Location: 54 Colombo Street, Christchurch
Legal description(s): Rural Section 138; Pt Lot 13-18 DP 2527

HAIL activity(s):

Period from	Period to	HAIL activity
?	present	Storage tanks or drums for fuel, chemicals or liquid waste
?	1965	Landfill sites

Notes:

24 Feb 2000 1993 DG Licence: 3 underground storage tanks (USTs) containing class 3c product with a combined capacity of 6,750 L.

1994 Christchurch City Council Information: 3 USTs with a capacity of 1,500 L and 2 aboveground storage tanks (ASTs) with a capacity of 1,400 L.

Investigations:

INV 2801 **Soil Test Report: Christchurch City Council Waterworks, 54 Colombo Street, Christchurch**
Royds Consulting Ltd - Detailed Site Investigation
1 Nov 1994

INV 2800 **Environmental Assessment at Christchurch City Council (CCC) Water Pumping Station at 54 Colombo Street, Christchurch**
Pattle Delamore Partners Ltd - Detailed Site Investigation
3 Mar 1995

INV 2802 **Further sampling at CCC Waterworks water pumping station, 54 Colombo Street, Christchurch**
Pattle Delamore Partners Ltd - Detailed Site Investigation
28 Jul 1995

INV 2810 **Further sampling at CCC Waterworks water pumping station, 54 Colombo Street, Christchurch**
Pattle Delamore Partners Ltd - Detailed Site Investigation
7 Nov 1995

Summary of investigation(s):

Site is a Christchurch City Council water pumping station. Three 2,200L diesel underground storage tanks were removed from the site in November 1994, two of which were found to be holed. Petroleum hydrocarbons were observed at the base of the tank pit. The tanks were replaced by a 5,000 L above ground storage tank. Two further above ground storage tanks are located on site, both with a capacity of 1,500 L, and both used for storing petrol.

The site is located within the confined aquifer zone. There are a number of public water supply wells located within the site that extract water from approximately 30 m below ground level. Shallow non-artesian aquifer occurs at 1.3 - 1.9 m below ground level, and it is considered as sensitive (MfE, 1999). The Heathcote River is the nearest surface waterway, located between 100 and 200 m from the current and historic tank locations.

Three samples were collected from the base of the tank pit at 1 m below ground level, and submitted for an unbanded total petroleum hydrocarbon (TPH) analysis. Concentrations of TPH in the three samples varied between 3,500 and 12,700 mg/kg, indicating that a non-aqueous phase has formed. Subsequently, spoil was partially removed by excavating down to approximately 1.6 - 1.9 m. Two observational bores were installed within the backfill of the excavation.

Additional soil sampling was conducted during the drilling of three boreholes for installation of new groundwater monitoring bores. Two boreholes were placed between the tank pit and the Heathcote River: in the north-east and south-easterly direction from the tank pit and distanced approximately 10 m and 20 m from the tank pit respectively. The last borehole was placed within the tank pit excavation. Two samples were collected from each bore, one within 1 m of the ground level and one immediately above the observed groundwater level. All were submitted for an unbanded TPH analysis, with the two samples collected from the within the tank pit excavation also analysed for Polycyclic Aromatic Hydrocarbons (PAH). Total petroleum hydrocarbons were only detected in the two samples collected from the borehole drilled within the tank pit excavation, reporting concentrations of 54 mg/kg and 4,640 mg/kg. Both samples contained PAHs compounds below the applicable guideline values.

Three groundwater monitoring events were carried out at the site: on February, July and October 1995. Groundwater samples were analysed for TPH. A February 1995 sample collected from the borehole within the tank pit excavation was also submitted for a PAH analysis.

A non-aqueous phase product was observed on two occasions in two of the three monitoring bores located within the tank pit excavation. The maximum thickness of 4 mm was observed during the February 1995 monitoring round, reducing to 1 mm in July 1995. Non non-aqueous phase layer was observed in October 1995; however a petroleum sheen and odour were noted in the water bailed from the three bores within the tank pit excavation.

Total petroleum hydrocarbons were not detected above the laboratory limits of detection in groundwater collected from outside of the tank pit excavation and in a water sample collected from the public supply suction tank. Shallow groundwater TPH concentrations were elevated in vicinity of the tank pit excavation,

with TPH concentrations of 30 mg/l and 1.5 mg/l recorded in February and October 1995 respectively. Benzo[a]pyrene was recorded above the NZ Drinking Water Standards during the first monitoring event.

The contaminant source was partially removed offsite, and the results of a limited groundwater monitoring programme indicated that the impact on groundwater was relatively isolated. It is therefore considered unlikely that the residual contamination continues to pose a risk to groundwater and surface water. Further work should be undertaken to determine the risk to human health posed by the residual soil contamination. Given the limited scope of the investigation, and the ongoing storage of fuel at the site, it is proposed that the site is classified as 'Partially Investigated'.

INV 7304 **Phase 1 Desk Study of 66 Colombo Street**
Pattle Delamore Partners Ltd - Preliminary Site Investigation
10 Aug 2010

Summary of investigation(s):

Phase 1 Desk Study of 66 Colombo Street, Christchurch – Pattle Delamore Partners Ltd.:

The primary objectives of the desk study was to assist Christchurch City Council determine potential risks in terms of land contamination for the proposed "Mid Heathcote River Master Plan" in the area located around the site. The development plans include cut to fill activities involving the excavation and re-contouring of soils along the Heathcote River bank. The information sourced for the report included interviews with previous site owners and official submitted material from previous works in the local area.

The site has had a mixed use. The information gathered initially stated the site as previously being a landfill but the landfill footprint could not be identified. An interview was conducted with the family of the previous landowner and he confirmed that quarrying and backfilling had occurred on the site. The content of the landfill was not confirmed. Some unexpected items such as vehicles have been uncovered at the site. The information from City Care bore logs addresses specific areas of the site and cannot be extrapolated across the entire investigated area. If there was a landfill located on the site, the age of the indicated filling (around 1930s) suggests that gas and liquid leachate would potentially be past its peak concentrations.

The ECan LLUR identifies petroleum hydrocarbon contamination associated with the removal of underground storage tanks for the CCC Water Works facility which is located approximately 25m south of the site. This contamination is expected to be localised and occur at a distance of approximately 50m from the proposed re-development works and should not be an issue. The site history account in the report adequately identified HAIL activities in the vicinity of the site. Potential contaminants of concern are identified in the report and suggested soil analysis of heavy metals and other selected organic compounds is undertaken.

INV 248246 **Hand Auger Soil Sampling - Colombo Street Drinking Water Treatment Plant**
Sephira Environmental Ltd - Detailed Site Investigation
20 May 2019

Summary of investigation(s):

Environment Canterbury has received a Detailed Site Investigation report that includes all or part of the property you have selected.

A DSI seeks to identify the type, extent and level of contamination (if any) in an area. Soil, soil-gas or water samples will have been collected and analysed.

This investigation has not been summarised.

INV 250368 **WHSIP Desk-based Contamination Assessment for Main Pumps Wellheads**
Beca Limited - Preliminary Site Investigation
5 Jul 2019

Summary of investigation(s):

Environment Canterbury has received a Preliminary Site Investigation report that includes all or part of the property you have selected.

A Preliminary Site Investigation seeks to identify potential sources of contamination resulting from current and historical land uses.

The preliminary site investigation may not have found any potential sources of contamination on the property you have enquired about. Where potential sources of contamination have been identified, a site identification number (e.g. SIT 1234) and land uses from the Hazardous Activities and Industries List (HAIL) will be shown on your statement.

This investigation has not been summarised.

INV 250525 **Main Pumps Pumping Station - Groundwater Contamination Investigation**
Beca Limited - Detailed Site Investigation
1 Oct 2019

Summary of investigation(s):

Environment Canterbury has received a Detailed Site Investigation report that includes all or part of the property you have selected.

A DSI seeks to identify the type, extent and level of contamination (if any) in an area. Soil, soil-gas or water samples will have been collected and analysed.

This investigation has not been summarised.

Disclaimer

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Environment Canterbury Regional Council
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Listed Land Use Register

What you need to know

Everything is connected

What is the Listed Land Use Register (LLUR)?

The LLUR is a database that Environment Canterbury uses to manage information about land that is, or has been, associated with the use, storage or disposal of hazardous substances.

Why do we need the LLUR?

Some activities and industries are hazardous and can potentially contaminate land or water. We need the LLUR to help us manage information about land which could pose a risk to your health and the environment because of its current or former land use.

Section 30 of the Resource Management Act (RMA, 1991) requires Environment Canterbury to investigate, identify and monitor contaminated land. To do this we follow national guidelines and use the LLUR to help us manage the information.

The information we collect also helps your local district or city council to fulfil its functions under the RMA. One of these is implementing the National Environmental Standard (NES) for Assessing and Managing Contaminants in Soil, which came into effect on 1 January 2012.

For information on the NES, contact your city or district council.

How does Environment Canterbury identify sites to be included on the LLUR?

We identify sites to be included on the LLUR based on a list of land uses produced by the Ministry for the Environment (MfE). This is called the Hazardous Activities and Industries List (HAIL)[1]. The HAIL has 53 different activities, and includes land uses such as fuel storage sites, orchards, timber treatment yards, landfills, sheep dips and any other activities where hazardous substances could cause land and water contamination.

We have two main ways of identifying HAIL sites:

- We are actively identifying sites in each district using historic records and aerial photographs. This project started in 2008 and is ongoing.
- We also receive information from other sources, such as environmental site investigation reports submitted to us as a requirement of the Regional Plan, and in resource consent applications.

[1] The Hazardous Activities and Industries List (HAIL) can be downloaded from MfE's website www.mfe.govt.nz, keyword search HAIL

How does Environment Canterbury classify sites on the LLUR?

Where we have identified a HAIL land use, we review all the available information, which may include investigation reports if we have them. We then assign the site a category on the LLUR. The category is intended to best describe what we know about the land use and potential contamination at the site and is signed off by a senior staff member.

Please refer to the Site Categories and Definitions factsheet for further information.

What does Environment Canterbury do with the information on the LLUR?

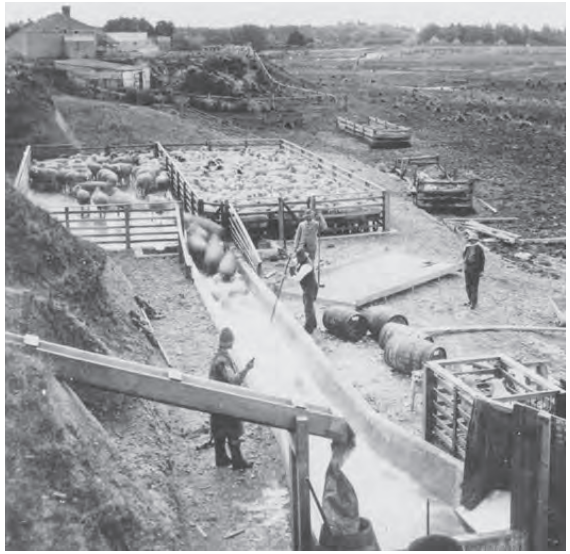
The LLUR is available online at www.llur.ecan.govt.nz. We mainly receive enquiries from potential property buyers and environmental consultants or engineers working on sites. An inquirer would typically receive a summary of any information we hold, including the category assigned to the site and a list of any investigation reports.

We may also use the information to prioritise sites for further investigation, remediation and management, to aid with planning, and to help assess resource consent applications. These are some of our other responsibilities under the RMA.

If you are conducting an environmental investigation or removing an underground storage tank at your property, you will need to comply with the rules in the Regional Plan and send us a copy of the report. This means we can keep our records accurate and up-to-date, and we can assign your property an appropriate category on the LLUR. To find out more, visit www.ecan.govt.nz/HAIL.

IMPORTANT!

The LLUR is an online database which we are continually updating. A property may not currently be registered on the LLUR, but this does not necessarily mean that it hasn't had a HAIL use in the past.



Sheep dipping (ABOVE) and gas works (TOP) are among the former land uses that have been identified as potentially hazardous. (Photo above by Wheeler & Son in 1987, courtesy of Canterbury Museum.)

My land is on the LLUR – what should I do now?

IMPORTANT! Just because your property has a land use that is deemed hazardous or is on the LLUR, it doesn't necessarily mean it's contaminated. The only way to know if land is contaminated is by carrying out a detailed site investigation, which involves collecting and testing soil samples.

You do not need to do anything if your land is on the LLUR and you have no plans to alter it in any way. It is important that you let a tenant or buyer know your land is on the Listed Land Use Register if you intend to rent or sell your property. If you are not sure what you need to tell the other party, you should seek legal advice.

You may choose to have your property further investigated for your own peace of mind, or because you want to do one of the activities covered by the National Environmental Standard for Assessing and Managing Contaminants in Soil. Your district or city council will provide further information.

If you wish to engage a suitably qualified experienced practitioner to undertake a detailed site investigation, there are criteria for choosing a practitioner on www.ecan.govt.nz/HAIL.

I think my site category is incorrect – how can I change it?

If you have an environmental investigation undertaken at your site, you must send us the report and we will review the LLUR category based on the information you provide. Similarly, if you have information that clearly shows your site has not been associated with HAIL activities (eg. a preliminary site investigation), or if other HAIL activities have occurred which we have not listed, we need to know about it so that our records are accurate.

If we have incorrectly identified that a HAIL activity has occurred at a site, it will be not be removed from the LLUR but categorised as Verified Non-HAIL. This helps us to ensure that the same site is not re-identified in the future.

Contact us

Property owners have the right to look at all the information Environment Canterbury holds about their properties.

It is free to check the information on the LLUR, online at www.llur.ecan.govt.nz.

If you don't have access to the internet, you can enquire about a specific site by phoning us on (03) 353 9007 or toll free on 0800 EC INFO (32 4636) during business hours.

Contact Environment Canterbury:

Email: ecinfo@ecan.govt.nz

Phone:
Calling from Christchurch: (03) 353 9007
Calling from any other area: 0800 EC INFO (32 4636)

Environment Canterbury Regional Council
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Promoting quality of life through balanced resource management.

www.ecan.govt.nz E13/101

Listed Land Use Register

Site categories and definitions

When Environment Canterbury identifies a Hazardous Activities and Industries List (HAIL) land use, we review the available information and assign the site a category on the Listed Land Use Register. The category is intended to best describe what we know about the land use.

If a site is categorised as **Unverified** it means it has been reported or identified as one that appears on the HAIL, but the land use has not been confirmed with the property owner.

If the land use has been confirmed but analytical information from the collection of samples is not available, and the presence or absence of contamination has therefore not been determined, the site is registered as:

Not investigated:

- A site whose past or present use has been reported and verified as one that appears on the HAIL.
- The site has not been investigated, which might typically include sampling and analysis of site soil, water and/or ambient air, and assessment of the associated analytical data.
- There is insufficient information to characterise any risks to human health or the environment from those activities undertaken on the site. Contamination may have occurred, but should not be assumed to have occurred.

If analytical information from the collection of samples is available, the site can be registered in one of six ways:

At or below background concentrations:

The site has been investigated or remediated. The investigation or post remediation validation results confirm there are no hazardous substances above local background concentrations other than those that occur naturally in the area. The investigation or validation sampling has been sufficiently detailed to characterise the site.

Below guideline values for:

The site has been investigated. Results show that there are hazardous substances present at the site but indicate that any adverse effects or risks to people and/or the environment are considered to be so low as to be acceptable. The site may have been remediated to reduce contamination to this level, and samples taken after remediation confirm this.

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Managed for:

The site has been investigated. Results show that there are hazardous substances present at the site in concentrations that have the potential to cause adverse effects or risks to people and/or the environment. However, those risks are considered managed because:

- the nature of the use of the site prevents human and/or ecological exposure to the risks; and/or
- the land has been altered in some way and/or restrictions have been placed on the way it is used which prevent human and/or ecological exposure to the risks.

Partially investigated:

The site has been partially investigated. Results:

- demonstrate there are hazardous substances present at the site; however, there is insufficient information to quantify any adverse effects or risks to people or the environment; or
- do not adequately verify the presence or absence of contamination associated with all HAIL activities that are and/or have been undertaken on the site.

Significant adverse environmental effects:

The site has been investigated. Results show that sediment, groundwater or surface water contains hazardous substances that:

- have significant adverse effects on the environment; or
- are reasonably likely to have significant adverse effects on the environment.

Contaminated:

The site has been investigated. Results show that the land has a hazardous substance in or on it that:

- has significant adverse effects on human health and/or the environment; and/or
- is reasonably likely to have significant adverse effects on human health and/or the environment.

If a site has been included incorrectly on the Listed Land Use Register as having a HAIL, it will not be removed but will be registered as:

Verified non-HAIL:

Information shows that this site has never been associated with any of the specific activities or industries on the HAIL.

Please contact Environment Canterbury for further information:

(03) 353 9007 or toll free
on 0800 EC INFO (32 4636)
email ecinfo@ecan.govt.nz

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

E13/102

Environment Canterbury
Regional Council
Kaunihera Taiao ki Waitaha

Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345
Christchurch 8140

P. 03 365 3828
F. 03 365 3194
E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Dear Sir/Madam

Thank you for submitting your property enquiry from our Listed Land Use Register (LLUR). The LLUR holds information about sites that have been used or are currently used for activities which have the potential to cause contamination.

The LLUR statement shows the land parcel(s) you enquired about and provides information regarding any potential LLUR sites within a specified radius.

Please note that if a property is not currently registered on the LLUR, it does not mean that an activity with the potential to cause contamination has never occurred, or is not currently occurring there. The LLUR database is not complete, and new sites are regularly being added as we receive information and conduct our own investigations into current and historic land uses.

The LLUR only contains information held by Environment Canterbury in relation to contaminated or potentially contaminated land; additional relevant information may be held in other files (for example consent and enforcement files).

Please contact Environment Canterbury if you wish to discuss the contents of this property statement.

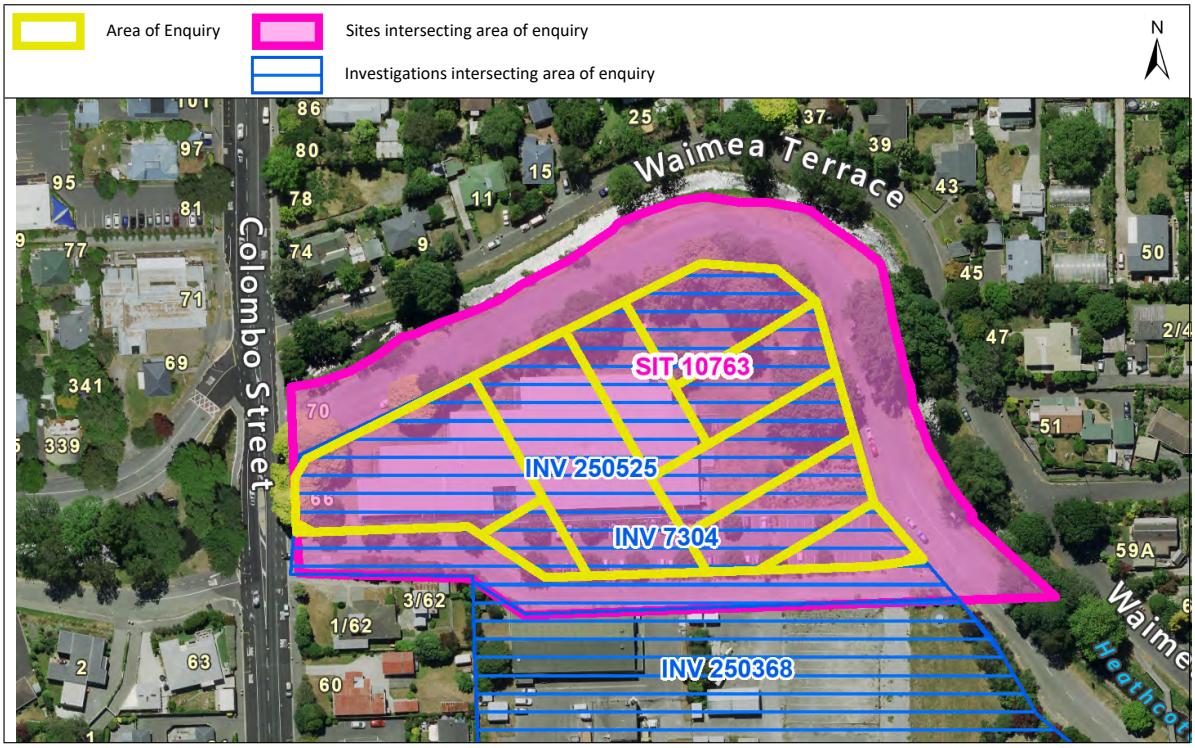
Yours sincerely

Contaminated Sites Team

Property Statement
from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or
contact Customer Services at ecan.govt.nz/contact/ and quote ENQ301007

Date generated: 21 November 2021
Land parcels: Part Lot 2 DP 24288
Part Lot 1 DP 24288
Part Lot 6 DP 2527
Part Lot 13 DP 2527
Part Lot 12 DP 2527
Part Lot 14 DP 2527
Part Lot 7 DP 2527
Part Lot 9 DP 2527
Part Lot 8 DP 2527
Part Lot 10 DP 2527
Part Lot 11 DP 2527



The information presented in this map is specific to the property you have selected. Information on nearby properties may not be shown on this map, even if the property is visible.

Sites at a glance

Sites within enquiry area

Site number	Name	Location	HAIL activity(s)	Category
10763	66 & 70 Colombo Street Landfill, northern portion of Christchurch Landfill #51	66 & 70 Colombo Street, Beckenham, Christchurch	G3 - Landfill sites;	Partially Investigated

More detail about the sites

Site 10763: 66 & 70 Colombo Street Landfill, northern portion of Christchurch Landfill #51 (Intersects enquiry area.)

Category: Partially Investigated
Definition: Verified HAIL has been partially investigated.

Location: 66 & 70 Colombo Street, Beckenham, Christchurch
Legal description(s): Part Lot 1 DP 24288,Part Lot 10 DP 2527,Part Lot 11 DP 2527,Part Lot 12 DP 2527,Part Lot 13 DP 2527,Part Lot 14 DP 2527,Part Lot 2 DP 24288,Part Lot 6 DP 2527,Part Lot 7 DP 2527,Part Lot 8 DP 2527,Part Lot 9 DP 2527,Section 1 SO 321170,Section 1 SO 336314,Section 2 SO 336314,Section 3 SO 336314

HAIL activity(s):

Period from	Period to	HAIL activity
pre 1926	?	Landfill sites

Notes:

11 Apr 2012 Sources of information regarding the northern portion of CCC landfill #51 include CCC Webmap, Old Landfills of Christchurch City, CCC rating unit properties, 1926, 46, 55 aerial photos, PDP desktop study, PDP management plan, PDP site investigation report.

This site reportedly had uncontrolled filling in the 1920s.

Investigations:

INV 7304 **Phase 1 Desk Study of 66 Colombo Street**
Pattle Delamore Partners Ltd - Preliminary Site Investigation
10 Aug 2010

Summary of investigation(s):

Phase 1 Desk Study of 66 Colombo Street, Christchurch – Pattle Delamore Partners Ltd.:

The primary objectives of the desk study was to assist Christchurch City Council determine potential risks in terms of land contamination for the proposed "Mid Heathcote River Master Plan" in the area located around the site. The development plans include cut to fill activities involving the excavation and re-contouring of soils along the Heathcote River bank. The information sourced for the report included interviews with previous site owners and official submitted material from previous works in the local area.

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INV 250368 **WHSIP Desk-based Contamination Assessment for Main Pumps Wellheads**
Beca Limited - Preliminary Site Investigation
5 Jul 2019

Summary of investigation(s):

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This investigation has not been summarised.

INV 250525 **Main Pumps Pumping Station - Groundwater Contamination Investigation**
Beca Limited - Detailed Site Investigation
1 Oct 2019

Summary of investigation(s):

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Environment Canterbury Regional Council
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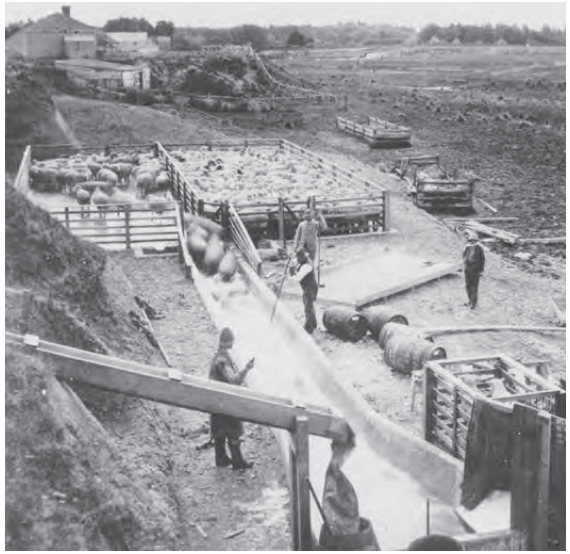

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www.ecan.govt.nz E13/101

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Site categories and definitions

When Environment Canterbury identifies a Hazardous Activities and Industries List (HAIL) land use, we review the available information and assign the site a category on the Listed Land Use Register. The category is intended to best describe what we know about the land use.

If a site is categorised as **Unverified** it means it has been reported or identified as one that appears on the HAIL, but the land use has not been confirmed with the property owner.

If the land use has been confirmed but analytical information from the collection of samples is not available, and the presence or absence of contamination has therefore not been determined, the site is registered as:

Not investigated:

- A site whose past or present use has been reported and verified as one that appears on the HAIL.
- The site has not been investigated, which might typically include sampling and analysis of site soil, water and/or ambient air, and assessment of the associated analytical data.
- There is insufficient information to characterise any risks to human health or the environment from those activities undertaken on the site. Contamination may have occurred, but should not be assumed to have occurred.

If analytical information from the collection of samples is available, the site can be registered in one of six ways:

At or below background concentrations:

The site has been investigated or remediated. The investigation or post remediation validation results confirm there are no hazardous substances above local background concentrations other than those that occur naturally in the area. The investigation or validation sampling has been sufficiently detailed to characterise the site.

Below guideline values for:

The site has been investigated. Results show that there are hazardous substances present at the site but indicate that any adverse effects or risks to people and/or the environment are considered to be so low as to be acceptable. The site may have been remediated to reduce contamination to this level, and samples taken after remediation confirm this.

Managed for:

The site has been investigated. Results show that there are hazardous substances present at the site in concentrations that have the potential to cause adverse effects or risks to people and/or the environment. However, those risks are considered managed because:

- the nature of the use of the site prevents human and/or ecological exposure to the risks; and/or
- the land has been altered in some way and/or restrictions have been placed on the way it is used which prevent human and/or ecological exposure to the risks.

Partially investigated:

The site has been partially investigated. Results:

- demonstrate there are hazardous substances present at the site; however, there is insufficient information to quantify any adverse effects or risks to people or the environment; or
- do not adequately verify the presence or absence of contamination associated with all HAIL activities that are and/or have been undertaken on the site.

Significant adverse environmental effects:

The site has been investigated. Results show that sediment, groundwater or surface water contains hazardous substances that:

- have significant adverse effects on the environment; or
- are reasonably likely to have significant adverse effects on the environment.

Contaminated:

The site has been investigated. Results show that the land has a hazardous substance in or on it that:

- has significant adverse effects on human health and/or the environment; and/or
- is reasonably likely to have significant adverse effects on human health and/or the environment.

If a site has been included incorrectly on the Listed Land Use Register as having a HAIL, it will not be removed but will be registered as:

Verified non-HAIL:

Information shows that this site has never been associated with any of the specific activities or industries on the HAIL.

Please contact Environment Canterbury for further information:

(03) 353 9007 or toll free
on 0800 EC INFO (32 4636)
email ecinfo@ecan.govt.nz

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

E13/102

C

Historical Aerial Photographs

Christchurch City Council

Date: 23/11/2021
Coordinate System: New Zealand Transverse Mercator 2000

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A	23.11.21	PRELIMINARY	

SCALE	1:1,000
SIZE	A3
DRAWN	F. MONTEITH
REVIEWED	M. ELFORD
VERIFIED	R. LARKIN

PRELIMINARY
FOR INFORMATION

APPROVED
DATE 23.11.21
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PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	HISTORICAL AERIAL IMAGERY: 1925-1929

DOCUMENT	PROJECT	WBS	TYPE	DISC	NUMBER	SHEET	REVISION
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REVIEWED: M. ELFORD
VERIFIED: R. LARKIN

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PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	HISTORICAL AERIAL IMAGERY: 1940-1944

DOCUMENT	PROJECT	WBS	TYPE	DISC	NUMBER	SHEET	REVISION
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VERIFIED	R. LARKIN

PRELIMINARY
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PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	HISTORICAL AERIAL IMAGERY: 1945-1949

DOCUMENT	PROJECT	WBS	TYPE	DISC	NUMBER	SHEET	REVISION
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REVIEWED: M. ELFORD
VERIFIED: R. LARKIN

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PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	HISTORICAL AERIAL IMAGERY: 1955-1959

DOCUMENT	PROJECT	WBS	TYPE	DISC	NUMBER	SHEET	REVISION
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PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	HISTORICAL AERIAL IMAGERY: 1965-1969

DOCUMENT	PROJECT	WBS	TYPE	DISC	NUMBER	SHEET	REVISION
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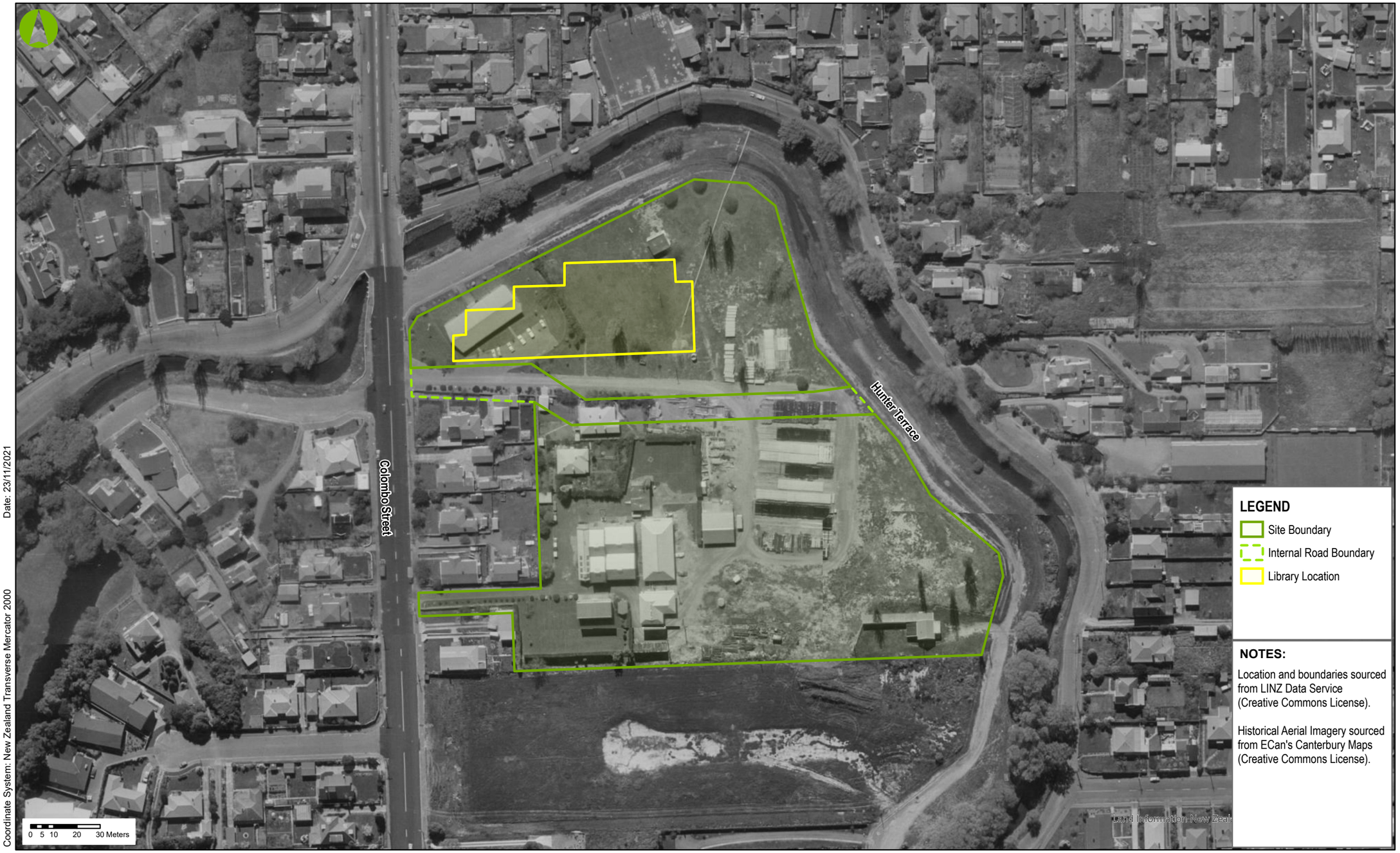

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TITLE	HISTORICAL AERIAL IMAGERY: 1970-1974

DOCUMENT	PROJECT		WBS		TYPE		DISC		NUMBER		SHEET		REVISION
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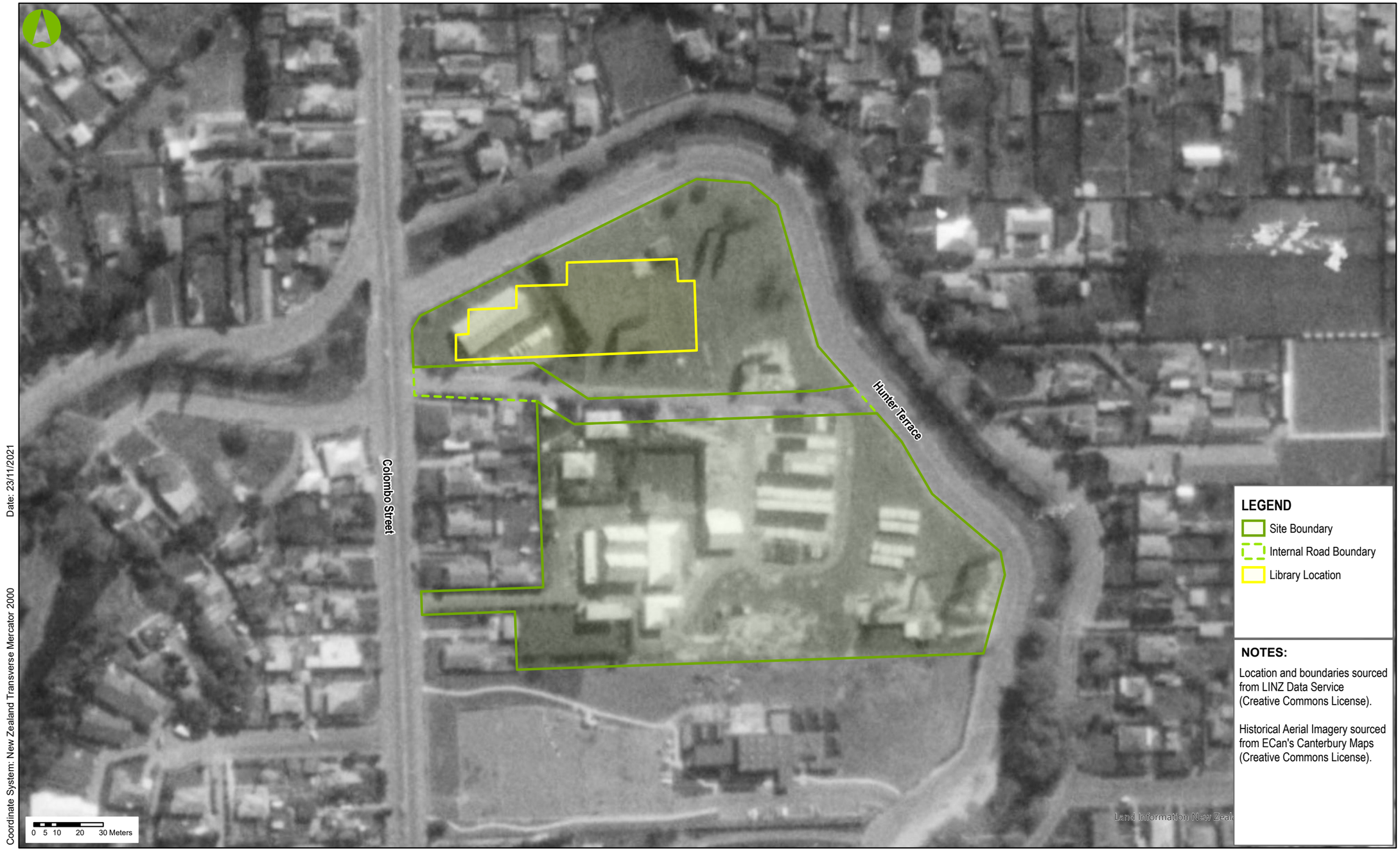

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PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	HISTORICAL AERIAL IMAGERY: 1975-1979

DOCUMENT	PROJECT		WBS		TYPE		DISC		NUMBER		SHEET		REVISION
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TITLE	HISTORICAL AERIAL IMAGERY: 1980-1984

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Date: 23/11/2021

Coordinate System: New Zealand Transverse Mercator 2000

LEGEND

- Site Boundary
- Internal Road Boundary
- Library Location

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TITLE	HISTORICAL AERIAL IMAGERY: 1985-1989

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TITLE	HISTORICAL AERIAL IMAGERY: 1990-1994

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PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	HISTORICAL AERIAL IMAGERY: 1995-1999

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TITLE	HISTORICAL AERIAL IMAGERY: 2000-2004

DOCUMENT	PROJECT	WBS	TYPE	DISC	NUMBER	SHEET	REVISION
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TITLE	HISTORICAL AERIAL IMAGERY: 2010-2014

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PROJECT	SOUTH CHRISTCHURCH LIBRARY - CONTAMINATED LAND PRELIMINARY SITE INVESTIGATION
TITLE	HISTORICAL AERIAL IMAGERY: 2015-2019

DOCUMENT	PROJECT	WBS	TYPE	DISC	NUMBER	SHEET	REVISION
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Document prepared by

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South Christchurch Library / Te Kete Wānanga o Wai Mōkihi

CONCEPT DESIGN REPORT - SEISMIC STRENGTHENING

December 2021

lewis bradford
CONSULTING ENGINEERS

South Christchurch Library / Te Kete Wānanga o Wai Mōkihi
Concept Design Report - Seismic Strengthening
December 2021

Contents

Report Prepared By:

[redacted]

Joe Byrne
ASSOCIATE
CMEngNZ, CPEng

Report Reviewed By:

[redacted]

Helen Trappitt
DIRECTOR
FEngNZ

1. Introduction

Lewis Bradford Consulting Engineers (LBCE) has been engaged by Christchurch City Council to provide structural engineering assistance with decision making around the future of the South Christchurch Library. In particular, this report is focused on seismic strengthening works.

The South Christchurch Library was damaged by the Canterbury Earthquake Sequence. The building was subsequently assessed by Opus as earthquake prone and temporary strengthening works were carried out in 2012. Several reports relating to damage assessment and strengthening options have been produced since this time and a more permanent solution is now required.

2. Site and Geotechnical

South Christchurch Library is located within a large open site at 66 Colombo Street, Christchurch. The site is bordered by Hunter Terrace to the north and east, Colombo Street to the west, and a driveway accessing the carpark to the south. The Heathcote River is approximately 50m to the north.

Site Location Plan

Aurecon have produced a geotechnical report dated 1st December 2021 (Rev. 1) to assist with the structural design. Based on this report, the ground conditions at the site are summarised as follows:

*Variable topsoil / landfill material to 2.6m below ground.
*Medium dense gravel and sand to 5.5m below ground.
*Soft to firm silty sand / silt to 15m below ground.
*Dense sandy gravel to depth (Riccarton Gravels).

The silt and sand layers below the water table (approximately 2.0m below ground) are expected to liquefy in both SLS and ULS earthquakes. Expected settlement ranges from 15-45mm (SLS) to 45-60mm (ULS). There is a low risk of lateral spreading towards the Heathcote River. The ground performance in a ULS seismic event is expected to be similar to that observed during the 22nd February 2011 earthquake.

lewis bradford
CONSULTING ENGINEERS

3. Existing Structure and Seismic Rating

The existing library building is a single-storey structure with plan area of approximately 2500m2. Built in 2002, it consists of a light-weight saw-tooth shaped roof over various purlin types. The purlins span east-west between structural steel portal frames which are typically 250UB31 rafters supported by 150UC23 columns. There are partial-height precast concrete panels to the south perimeter and internally around the toilet block. There is a concrete moat structure around the perimeter of the building.

The foundations consist of a 100-225mm thick reinforced concrete slab on-grade and local thickenings under the columns and posts. The slab on-grade has extensive isolation, contraction, expansion, and tied joints to deal with thermal movements associated with the in-slab heating system.

The lateral structure consists of very flexible structural steel portal frames in both orthogonal directions. The columns rely on weak-axis flexure in the east-west direction. Detailing of these frames is poor. There is roof bracing in sporadic locations which appears to have an incomplete loadpath. The precast concrete panels are supported for face load by cantilever stubs from the rafters above.

CCC has provided us with a 2012 Detailed Engineering Evaluation by Opus. This report assessed the building at 10-20%*NBS (IL3)*, which we agree with. According to the New Zealand Society for Earthquake Engineering, this puts building occupants at approximately 25 times greater risk during an earthquake compared to a new, code compliant building.

The building was subsequently strengthened to 34%*NBS (IL3)* in 2012 by the installation of temporary propping to the precast panels along the south perimeter. This propping was designed by Opus / WSP who also inspected it in 2019 to confirm it remains fit for purpose.

4. Damage to Building

CCC has provided us with the following reports in relation to building damage, all produced by Opus / WSP:

*Opening up works summary (2012)
*Foundation damage assessment report (2013)
*Damage assessment report (2015)
*Structural repair and strengthening schemes report (2016)

Based on these reports and our site inspection on 18th October 2021, the earthquake damage is summarised below:

*Differential slab settlement, approximately 90mm.
*Total slab settlement, approximately 245 - 335mm.
*Cracking to the slab, foundations, and external moat.
*Cracking to precast panels, particularly at connections to structural steel elements.
*Cracking to wall and ceiling linings.

There was no obvious damage to the structural steel portal frames. This is likely due to seismic load being resisted by the internal linings instead, as they provide a stiffer load path. Similarly for the roof bracing system, there was no obvious load path to activate this. Note it is possible that further damage exists but was not visible during our observations - i.e. intrusive investigations would be required to identify this.

Beyond structural and amenity implications, the slab settlement also significantly increases the flood risk to the building. The design finished floor level (FFL) is 16.350m RL (Christchurch Drainage Datum). Based on the settlement figures above, current FFL is approximately 16.015 - 16.105m RL. CCC Asset Planning advise that the District Plans requires an FFL of 15.890m RL. Appropriate advice should be sought with regards to floor level requirements and flood hazard.

We understand from CCC that the function of the in-slab heating pipes has been compromised. However, this is not necessarily due to earthquake damage alone.

There may also be damage to non-structural building elements. We recommend condition surveys are carried out as required.

5. Seismic Strengthening and Repairs

Client Requirements

CCC is investigating strengthening works to increase the current 34%*NBS (IL3)* rating to 100%*NBS (IL3)*. We note that, given the current rating, there is no legislative requirement to carry out strengthening works on this building. However, given the building is damaged and relies on temporary propping to achieve this low rating, we consider further strengthening to be prudent.

We understand CCC has the following requirements in relation to any strengthening works:

1) The solution must be insurable and obtain a building consent. This means the strengthening works and finished floor level must meet NZ Building Code and Territorial Authority requirements.
2) The solution must achieve a suitable level of seismic resilience, as measured by the 100%*NBS (IL3)* target.
3) The solution must achieve a level of environmental sustainability.

Previous Strengthening Schemes

A number of concept strengthening schemes have been prepared by Opus.

The first of these, dated 2013, involves re-levelling the superstructure and construction of a new suspended slab. This impractical scheme involves removing the entire existing slab on-grade, installing 226 new screw piles, 57 new pile caps, and new tie beams between these - all within an existing building.

Estimated to cost over $6.6million - a figure that is almost certainly out of date - this solution will not achieve requirements 1 and 2 above. This solution is unlikely to be seen as sustainable given the existing slab is removed and replaced with significantly more structure. Extensive excavations are required to install the piles, jacking beams, and jacks. Finally, the gap between the excavations and new slab will be filled with grout.

The second scheme, dated 2016, has several options as outlined below:

A) Repair and strengthen superstructure only.

B) Repair and strengthen building, replace slab.

C) Repair, strengthen, and re-level building, replace slab.

These are all designed for 100*%NBS (IL3)* and so achieve requirement 2 above. Options A and B do not raise the finished floor level so are unlikely to be insurable from a flood hazard perspective, meaning requirement 1 is only partially achieved. These partial repair options would also likely create issues with warranties, guarantees, and complicate the construction contracts. Note, it is likely building consent would be obtained given the works render the building no less compliant than its current condition (i.e. Section 112 of NZ Building Act).

The three options achieve various levels of sustainability. All require new structural steelwork within the superstructure to achieve seismic resilience. In addition, Options B and C require removal of the existing slab to enable construction of a new 400mm thick reinforced concrete raft slab and associated excavations to facilitate this. We understand the site is potentially contaminated so resource consent and disposal would need to be considered.

Option C also requires grout injection to re-level the entire building, although the practicalities of this are not covered in the Opus report. There are also non-structural implications which are covered later in this section.

Proposed Strengthening Scheme

Our proposed strengthening scheme is summarised below:

1) Remove all existing internal walls, including precast concrete and timber-framed. The concrete walls in particular add to the seismic loads and restrict future layout flexibility.

2) Install new 300mm thick reinforced concrete raft slab over the existing slab on-grade. Depending on the chosen finished floor level, high points on the existing slab may need to be locally removed to achieve a consistent slab thickness. This would also likely be required at local slab thickenings under the new columns. Similarly, local areas of compacted hardfill or site concrete may be required over low points.

This foundation system has been reviewed and endorsed by Aurecon as the geotechnical engineer and is expected to perform better than the original slab during a future earthquake.

3) Install new 310UB / 410UB structural steel columns adjacent to the existing columns and connect these to the existing 250UB31 rafters. The existing columns act as temporary props to support the roof and will be removed after the new columns are installed.

4) Install new 310UB / 410UB structural steel mullions along the Grid J perimeter panels to provide out-of-plane support.

5) Install new tension-only cross bracing and brace struts within the roof and wall planes. These are also required within the clerestories between adjacent sections of saw-tooth roof.

Refer to attached concept issue drawings for more details.

With reference to the CCC requirements, this strengthening scheme will be insurable, obtain building consent, and restore the finished floor level to provide improved resilience against flooding. It will also achieve the seismic resilience criteria with a rating of 100%NBS (IL3).

In terms of sustainability, the superstructure works are similar to Options A-C from the 2016 Opus report. However, given this solution requires limited (if any) removal of the existing slab on-grade, no bulk excavation, smaller replacement foundations, and no grout injection, it is considerably more sustainable in this respect.

Implications on Non-Structural Elements

All options, both Opus and LBCE, presented above impact on non-structural elements to varying extents. In all cases, strengthening of the superstructure will require removal and reinstatement of the ceiling and services in the ceiling void.

All re-levelling options, both Opus and LBCE, require removal and reinstatement of the internal partitions and fit-out. Similar will be required for the exterior envelope although the extent may be reduced for Opus Option C given the perimeter foundations are being raised to level (as opposed to rebuilt at level).

In-slab and below slab services will need to be replaced in all cases. Note that the reinforced concrete raft slab options are not compatible with reinstatement of the current in-slab hydronic heating system. This would require an insulation layer and separate topping slab over the raft slab, resulting in additional excavation quantity or higher finished floor level.

Finally, it is important to consider the condition / design life of existing non-structural elements that need replacement as part of the strengthening works. These elements may have deferred maintenance or even require replacement in the near future given the building is almost 20 years old.

Comparison to New-Build Option

Given the extent of strengthening and repair works, the significant impact on non-structural elements, and risk compared with new build construction (refer Section 6), we recommend a new build option is considered.

From a seismic performance perspective, a new building will always be better than an existing building that has been strengthened. This is because the *%NBS* rating only addresses ULS performance and life-safety. In addition, current detailing, design standards, and design practice have improved compared to 20 years ago.

Amenity of the building should also be considered. Is the existing building still fit for purpose? If so, will this be compromised by the strengthening works? For example, our re-leveling option will reduce the clearance at the roof low points. This could be addressed by raising the new ceiling level but how does this affect services? The external ground levels will also need to be revised due to the increased floor level - how does this impact on the carpark, pathways, and landscaping?

We understand sustainability is an important consideration for CCC with respect to the future of this building. On the face of it, strengthening an existing building appears to be a more sustainable solution than a new building. However, in order to meet CCC's other key requirements, a significant amount of new structural and non-structural elements are required. With the exception of the roof cladding, almost every other major element is impacted to some extent.

For an equivalent new building, the structure would be similar to what is currently proposed for the strengthening works. Most importantly, the same reinforced concrete raft slab could be used over the existing foundations. This removes the need for extensive excavation and backfilling which is usually required for such foundation systems in new builds.

Finally, based on our experience with similar projects and initial conversations with the project quantity surveyor, we expect the cost of strengthening will be similar to that for a new build. We also expect that a new building would be faster and simpler to construct.

6. Construction Risk and Safety In Design

By default, strengthening and repair works are carried out within existing buildings. The design stage is informed by existing building documentation (which can be limited for older buildings and not accurately reflect the as-built conditions) and on-site investigations.

Construction risk and complexity is also increased for strengthening and repair projects. Examples of increased risk compared to new build construction are outlined below:

*As-built conditions require changes in documentation.

*Increased risk to workers (e.g. hazardous materials within existing building / working in confined spaces).

*Inefficient and complex construction methodologies (e.g. limited crane access under existing roof / temporary propping / working around existing building elements).

*Increased construction duration.

*More complex contractual arrangements.

*Warranty / guarantee issues given existing building elements are retained.

*Increased contingency required due to less defined scope (e.g. extent of building fabric retained vs. replaced).

The chosen contractor should have relevant experience in strengthening projects.

South Christchurch Library / Te Kete Wānanga o Wai Mōkihi

CONCEPT DESIGN STAGE - STRUCTURAL DRAWINGS

Dec 2021

lewis bradford
CONSULTING ENGINEERS

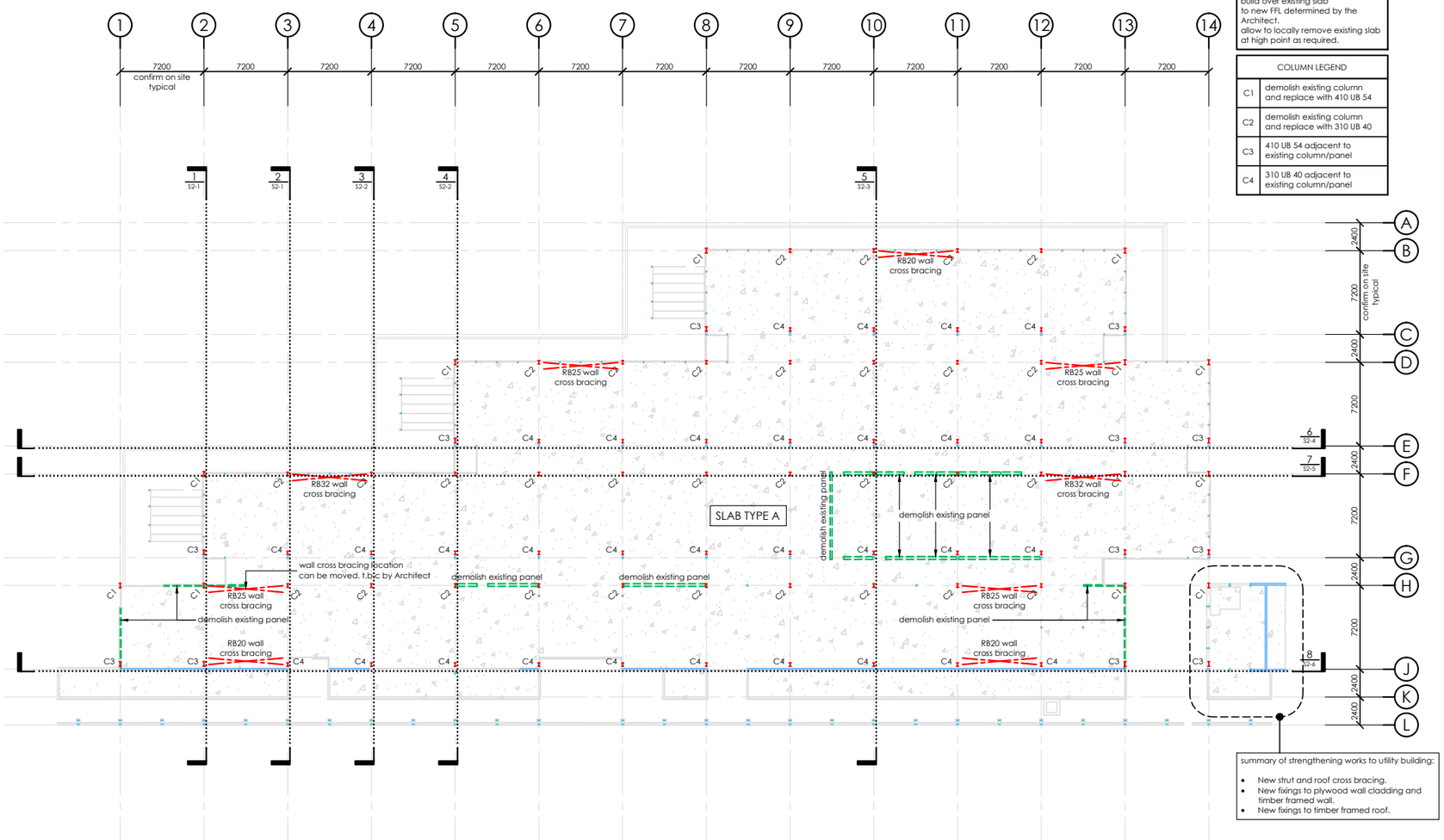
lewis bradford
CONSULTING ENGINEERS

Christchurch City Council

Note:
This concept issue covers proposed strengthening work to the superstructure only (100%NBS, IL3)
Foundation and slab works require Geotechnical input.
These drawings present an indicative structural design intended for information only.
Geometry is based on original building CAD and not an as built survey.

Structural Drawing Index - Concept Issue 7th December 2021

South Christchurch Library / Te Kete Wānanga o Wai Mōkihi
SEISMIC STRENGTHENING
6 6 C o l o m b o S t r e e t , C h r i s t c h u r c h



GROUND FLOOR PLAN
1:200

Note:

Only new structural members are called up U.N.O.

SLAB TYPE A
300 thick insitu concrete ground floor slab with 150 kg / m³ reinforcing content build over existing slab to new FFL determined by the Architect.
allow to locally remove existing slab at high point as required.

COLUMN LEGEND	
C1	demolish existing column and replace with 410 UB 54
C2	demolish existing column and replace with 310 UB 40
C3	410 UB 54 adjacent to existing column/panel
C4	310 UB 40 adjacent to existing column/panel

summary of strengthening works to utility building:

- New strut and roof cross bracing.
- New fixings to plywood wall cladding and timber framed wall.
- New fixings to timber framed roof.

CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE
REFER TO ARCHITECT'S DRAWING FOR ALL SETOUTS

NOTES:

- Not for Construction.
- Suitable for high-level costing/estimation only.
- Member sizes/details subject to detailed design and building consent.
- Construction staging t.b.c. between Engineer and Contractor prior to commencing work on site.

COLOUR LEGEND:

- denotes Existing
- denotes New
- denotes To be demolished

REV.	DATE	AMENDMENT	BY
1	07.12.21	CONCEPT ISSUE	MMI

CLIENT: Christchurch City Council

lewis bradford
CONSULTING ENGINEERS

PROJECT:
SOUTH CHRISTCHURCH LIBRARY
SEISMIC STRNGTHENING

DRAWING TITLE:
GROUND FLOOR PLAN

DRAWN: MMI		SCALE: 1:200 at A1 1:400 at A3	
ENGINEER: EL			
CHECKED: JDB/HRT			
FILE: 120054	DRAWING NO. S1-1	REV. 1	

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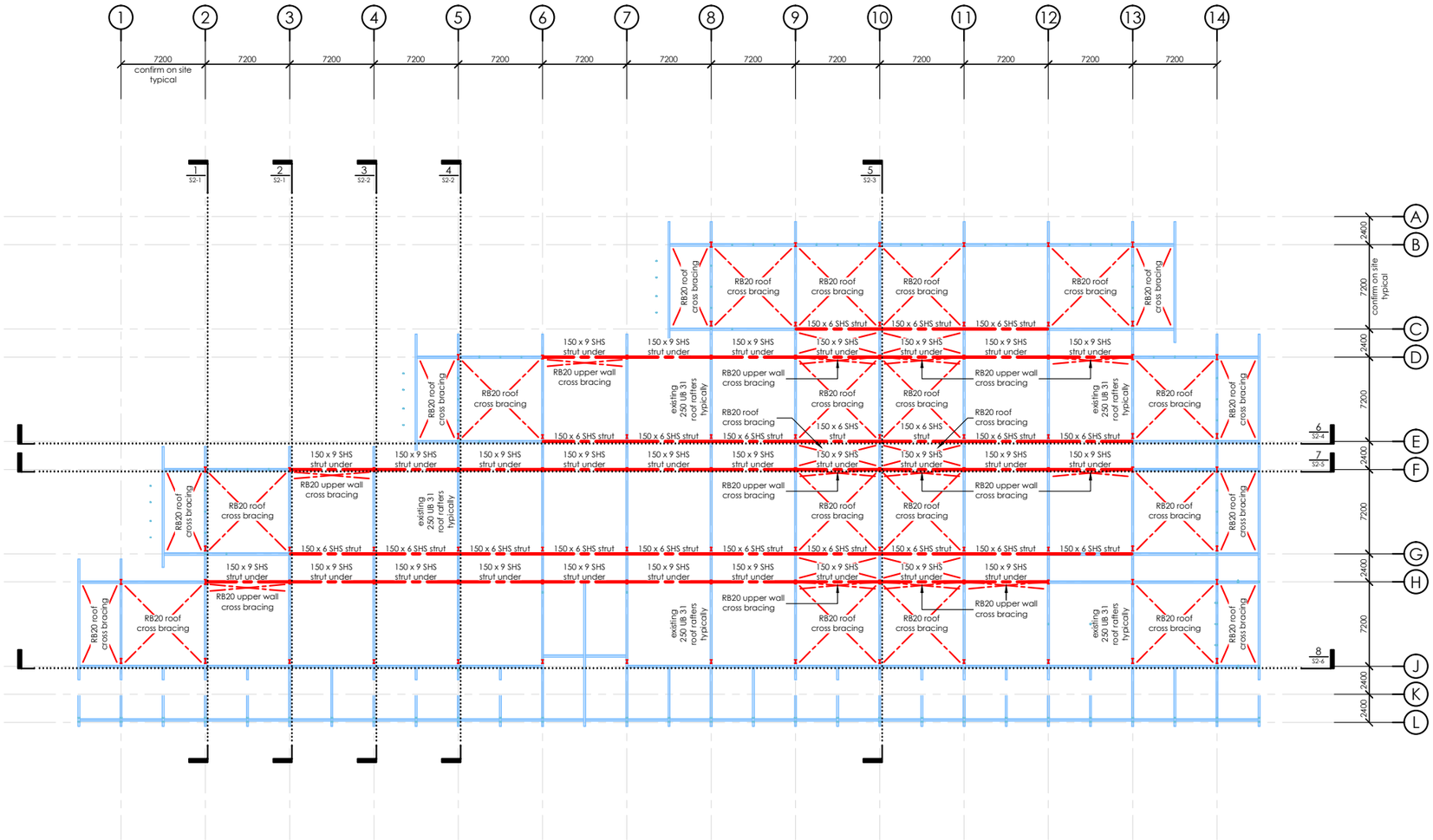
Item 10
Attachment C



ROOF FRAMING PLAN
1:200

Note:

Only new structural members are called up U.N.O.

CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE
REFER TO ARCHITECT'S DRAWING FOR ALL SETOUTS

NOTES:

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CONSULTING ENGINEERS

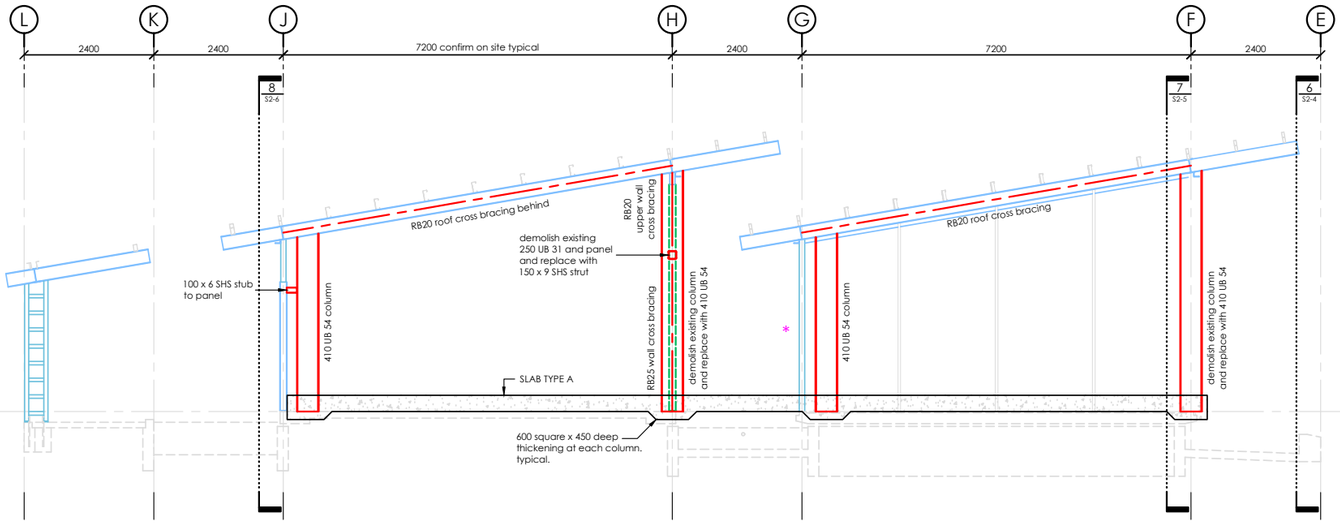
PROJECT:
SOUTH CHRISTCHURCH LIBRARY
SEISMIC STRNGTHENING

DRAWING TITLE:
ROOF FRAMING PLAN

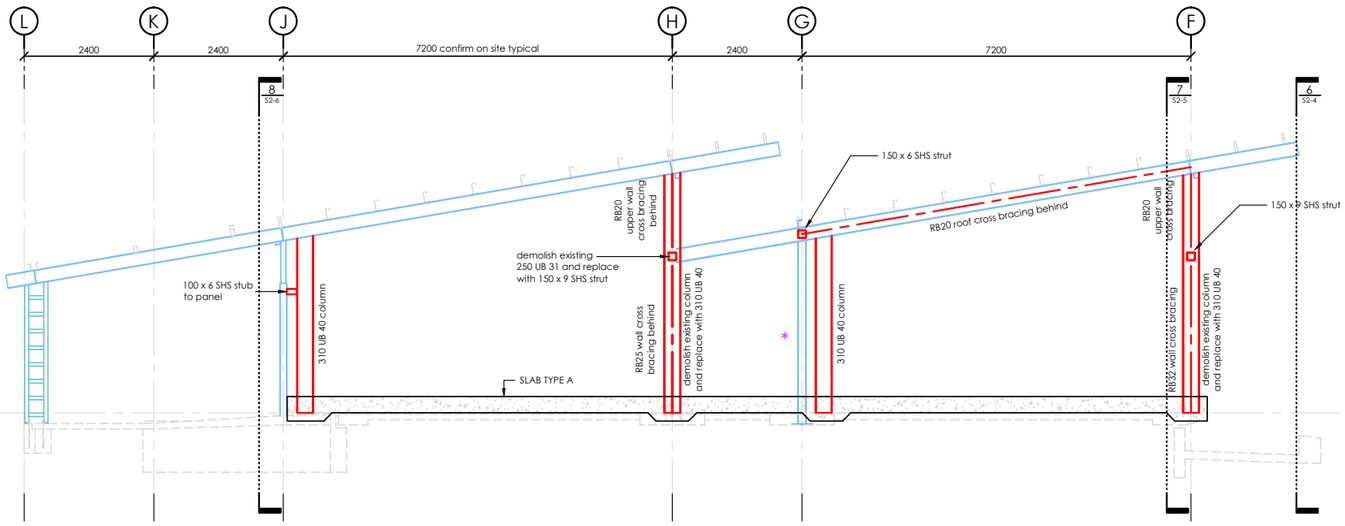
DRAWN: MMI	SCALE: 1:200 at A1, 1:400 at A3	
ENGINEER: EL		
CHECKED: JDB/HRT		
FILE: 120054	DRAWING NO. S1-2	REV. 1

Item 10

Attachment C



1 S1-1 / 1 S1-2 FRAME ELEVATION - GRIDLINE 2 1:50



2 S1-1 / 2 S1-2 FRAME ELEVATION - GRIDLINE 3 1:50

note: * denotes existing columns remain as temporary structure. Remove after installation of new columns and bracing.

note: Foundation strengthening t.b.c. following Geotechnical Engineering investigation.

SLAB TYPE A
300 thick insitu concrete ground floor slab with 150 kg / m³ reinforcing content build over existing slab to new FFL determined by the Architect.
allow to locally remove existing slab at high point as required.

CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE
REFER TO ARCHITECT'S DRAWING FOR ALL SETOUTS

NOTES:
- Not for Construction.
- Suitable for high-level costing/estimation only.
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CONSULTING ENGINEERS

PROJECT:
SOUTH CHRISTCHURCH LIBRARY
SEISMIC STRNGTHENING

DRAWING TITLE:
FRAME ELEVATION
GRIDLINES 2 AND 3

DRAWN: MMI	SCALE: 1:50 at A1, 1:100 at A3		
ENGINEER: EL			
CHECKED: JDB/HRT			
FILE: 120054	DRAWING NO. S2-1	REV. 1	

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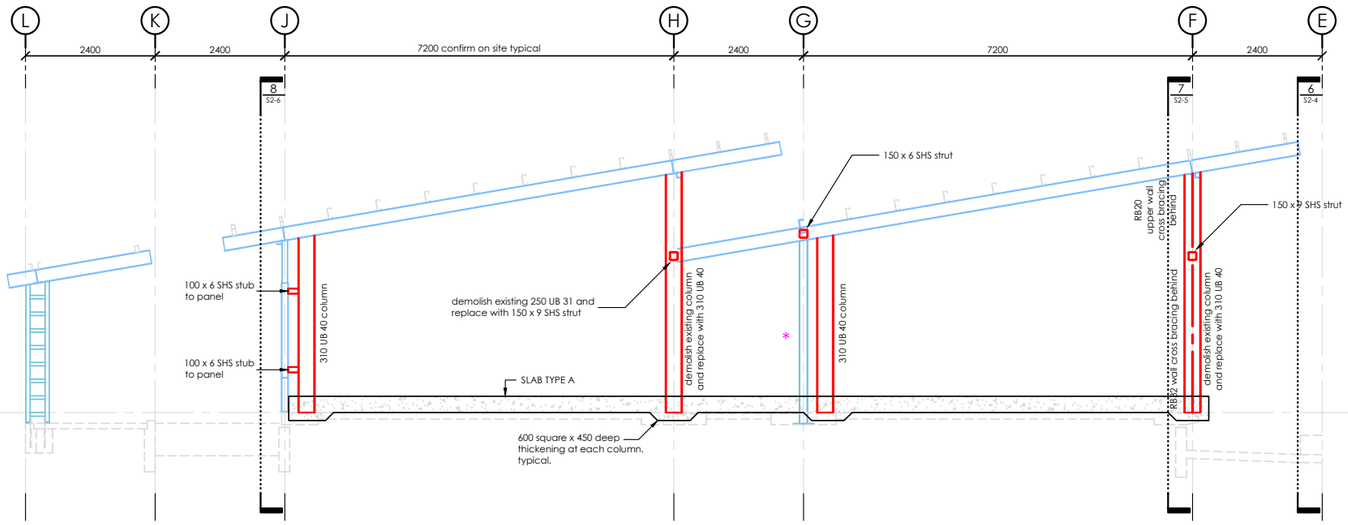
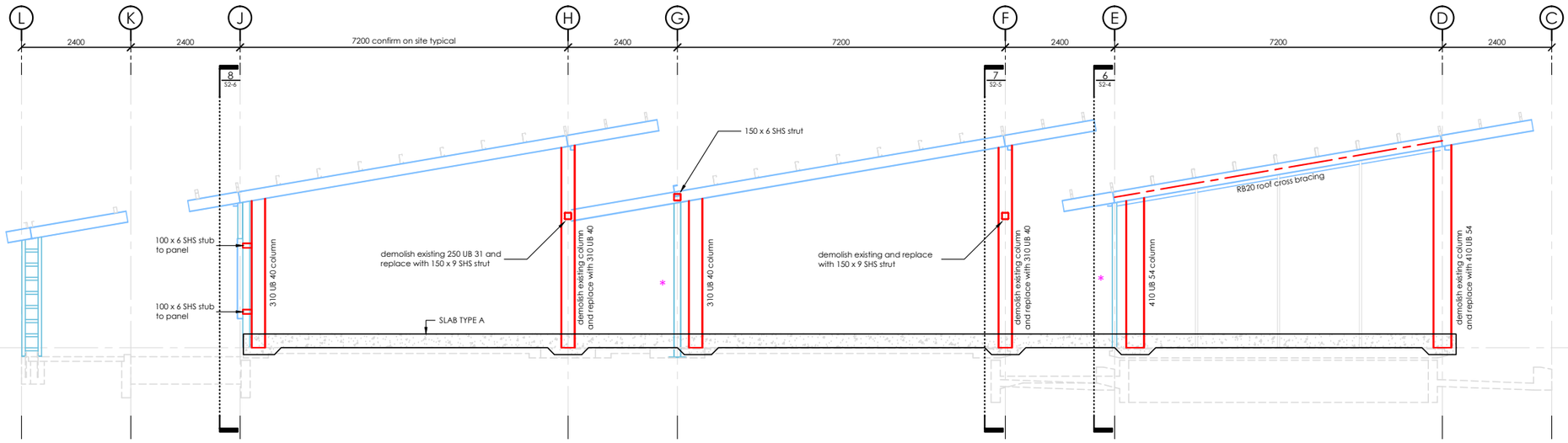


3 S1-1 3 S1-2 FRAME ELEVATION - GRIDLINE 4 1:50



4 S1-1 4 S1-2 FRAME ELEVATION - GRIDLINE 5 1:50

note: * denotes existing columns remain as temporary structure. Remove after installation of new columns and bracing.

note: Foundation strengthening t.b.c. following Geotechnical Engineering investigation.

SLAB TYPE A
300 thick insitu concrete ground floor slab with 150 kg / m³ reinforcing content build over existing slab to new FFL determined by the Architect.
allow to locally remove existing slab at high point as required.

CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE
REFER TO ARCHITECT'S DRAWING FOR ALL SETOUTS

NOTES:
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COLOUR LEGEND:
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CONSULTING ENGINEERS

PROJECT:
SOUTH CHRISTCHURCH LIBRARY
SEISMIC STRNGTHENING

DRAWING TITLE:
FRAME ELEVATION
GRIDLINES 4 AND 5

DRAWN: MMI	SCALE: 1:50 at A1, 1:100 at A3		
ENGINEER: EL			
CHECKED: JDB/HRT			
FILE: 120054	DRAWING NO. S2-2	REV. 1	

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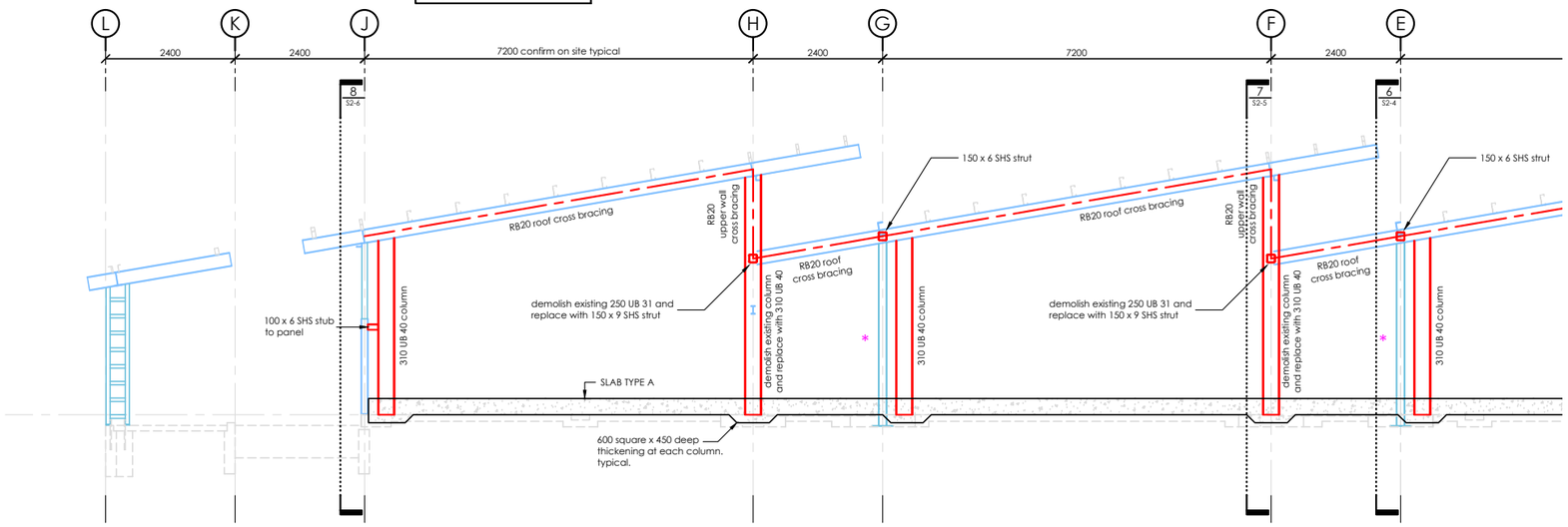
Item 10
Attachment C

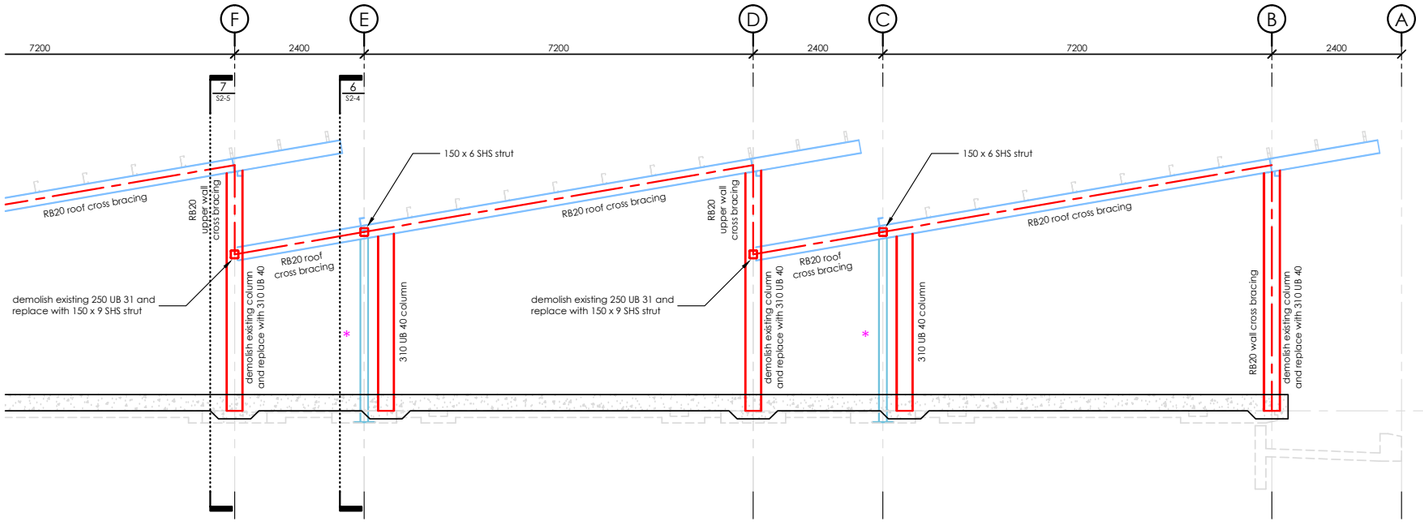
note: * denotes existing columns remain as temporary structure. Remove after installation of new columns and bracing.

note: Foundation strengthening t.b.c. following Geotechnical Engineering investigation.

SLAB TYPE A
300 thick insitu concrete ground floor slab with 150 kg / m³ reinforcing content build over existing slab to new FFL determined by the Architect.
allow to locally remove existing slab at high point as required.



5 S1-1 5 S1-2 FRAME ELEVATION - GRIDLINE 10 (PART 1)
1:50



5 S1-1 5 S1-2 FRAME ELEVATION - GRIDLINE 10 (PART 2)
1:50

CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE
REFER TO ARCHITECT'S DRAWING FOR ALL SETOUTS

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CONSULTING ENGINEERS

PROJECT:
SOUTH CHRISTCHURCH LIBRARY
SEISMIC STRNGTHENING

DRAWING TITLE:
FRAME ELEVATION
GRIDLINE 10

DRAWN: MMI	SCALE: 1:50 at A1, 1:100 at A3		
ENGINEER: EL			
CHECKED: JDB/HRT			
FILE: 120054	DRAWING NO. S2-3	REV. 1	

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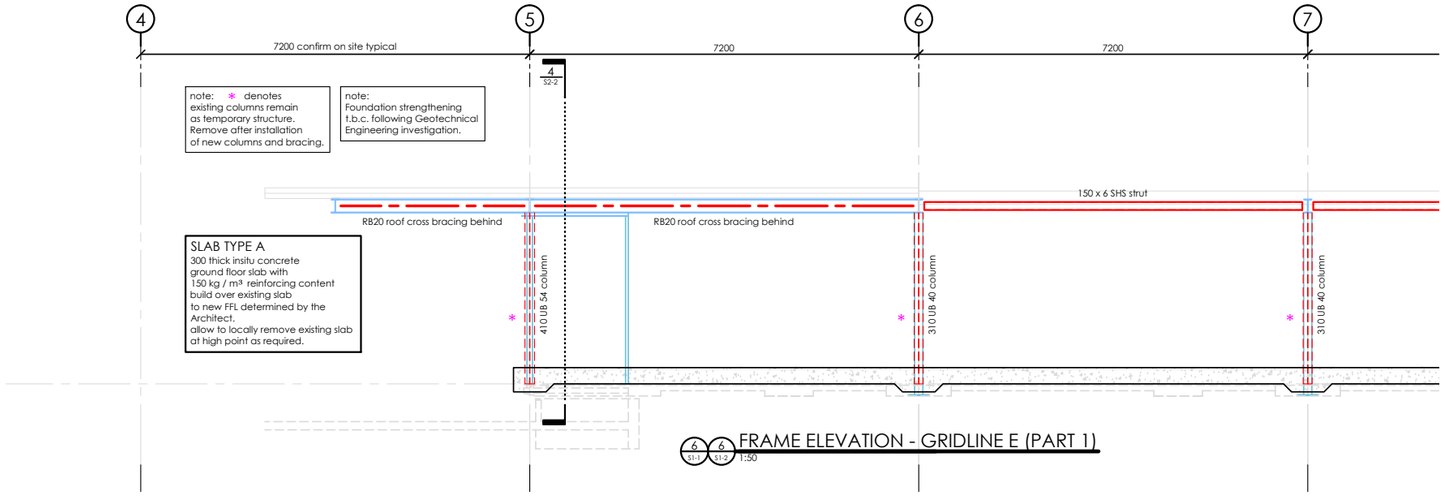
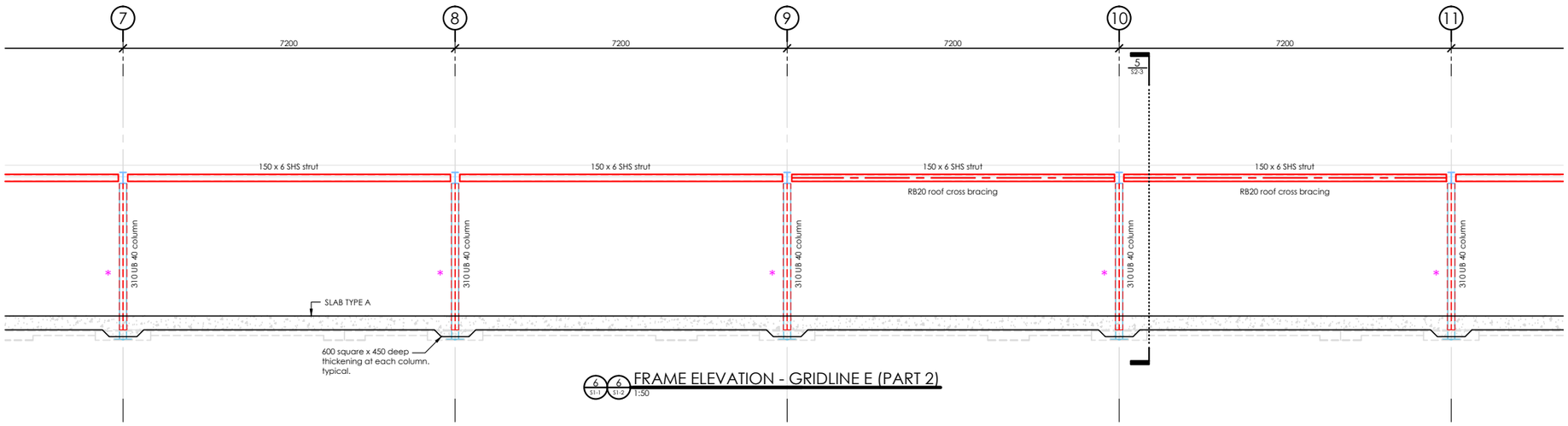


FRAME ELEVATION - GRIDLINE E (PART 1)



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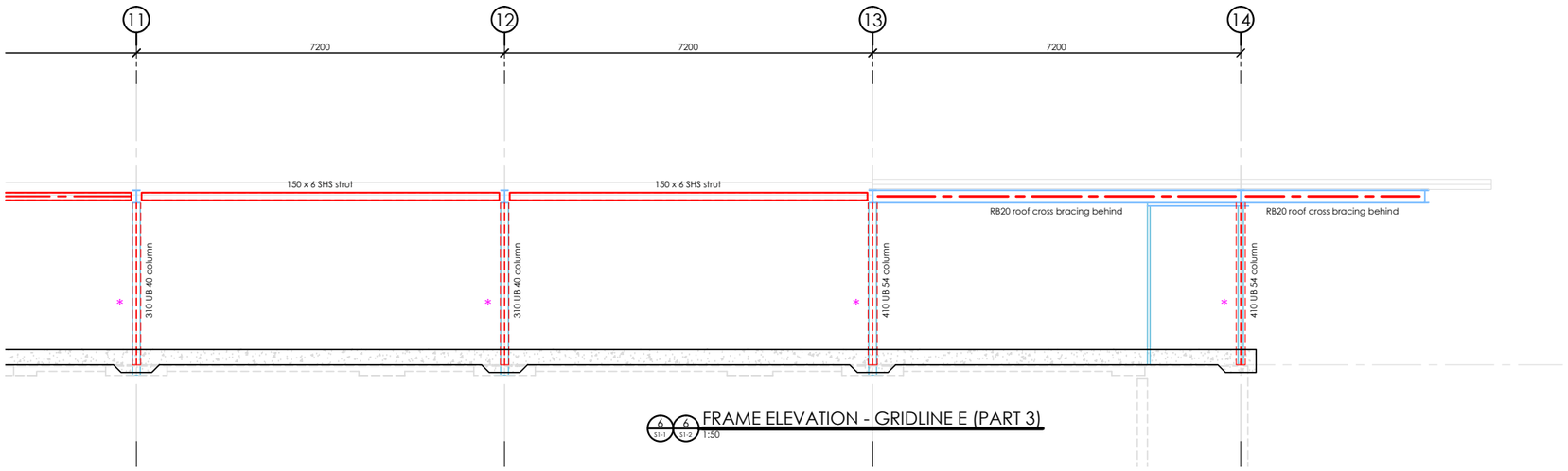

FRAME ELEVATION - GRIDLINE E (PART 3)

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REFER TO ARCHITECT'S DRAWING FOR ALL SETOUTS

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PROJECT:
SOUTH CHRISTCHURCH LIBRARY
SEISMIC STRNGTHENING

DRAWING TITLE:
FRAME ELEVATION
GRIDLINE E

DRAWN: MMI	SCALE: 1:50 at A1 1:100 at A3		
ENGINEER: EL			
CHECKED: JDB/HRT			
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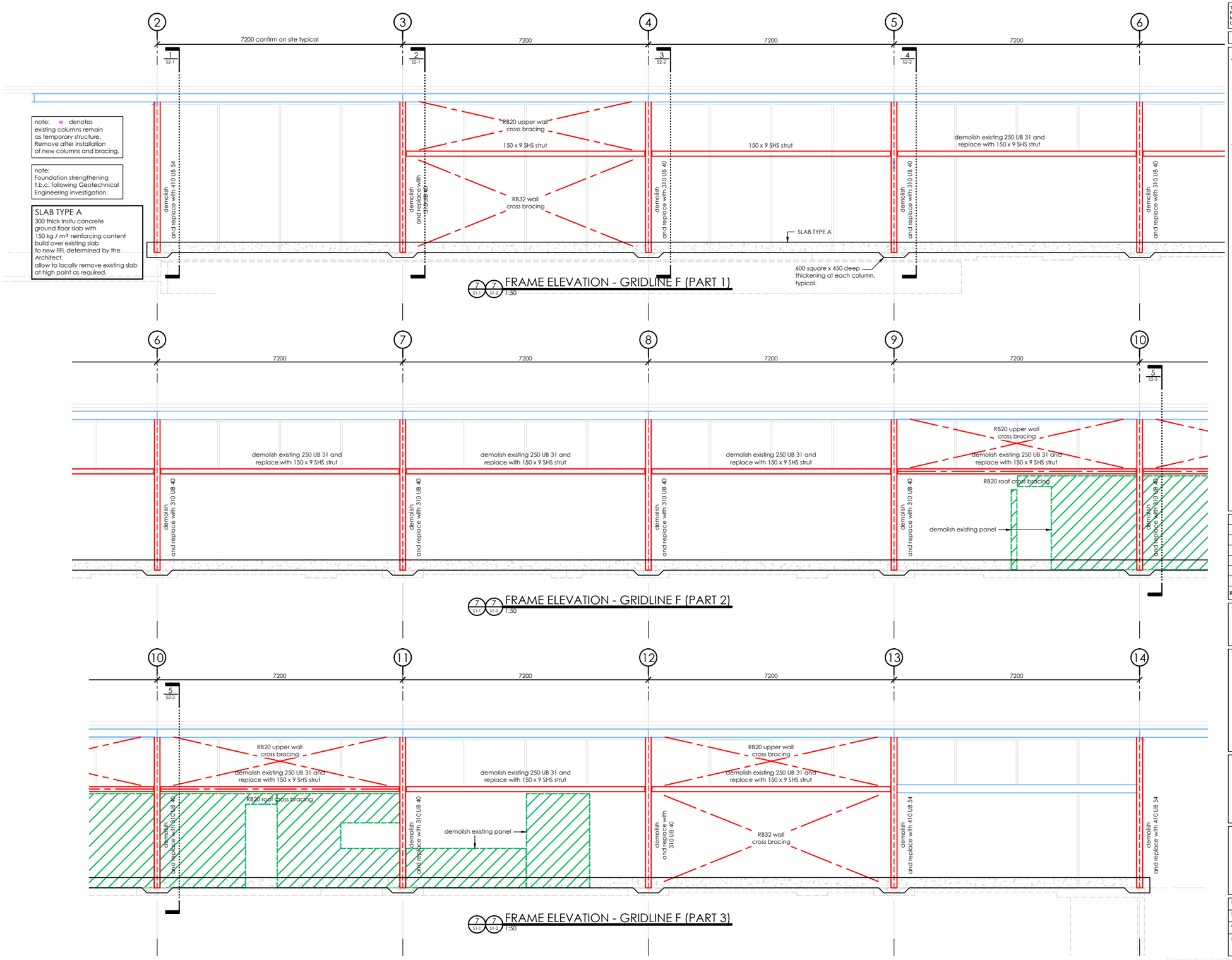

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PROJECT:
SOUTH CHRISTCHURCH LIBRARY
SEISMIC STRNGTHENING

DRAWING TITLE:
FRAME ELEVATION
GRIDLINE F

DRAWN: MMI	SCALE: 1:50 at A1, 1:100 at A3	
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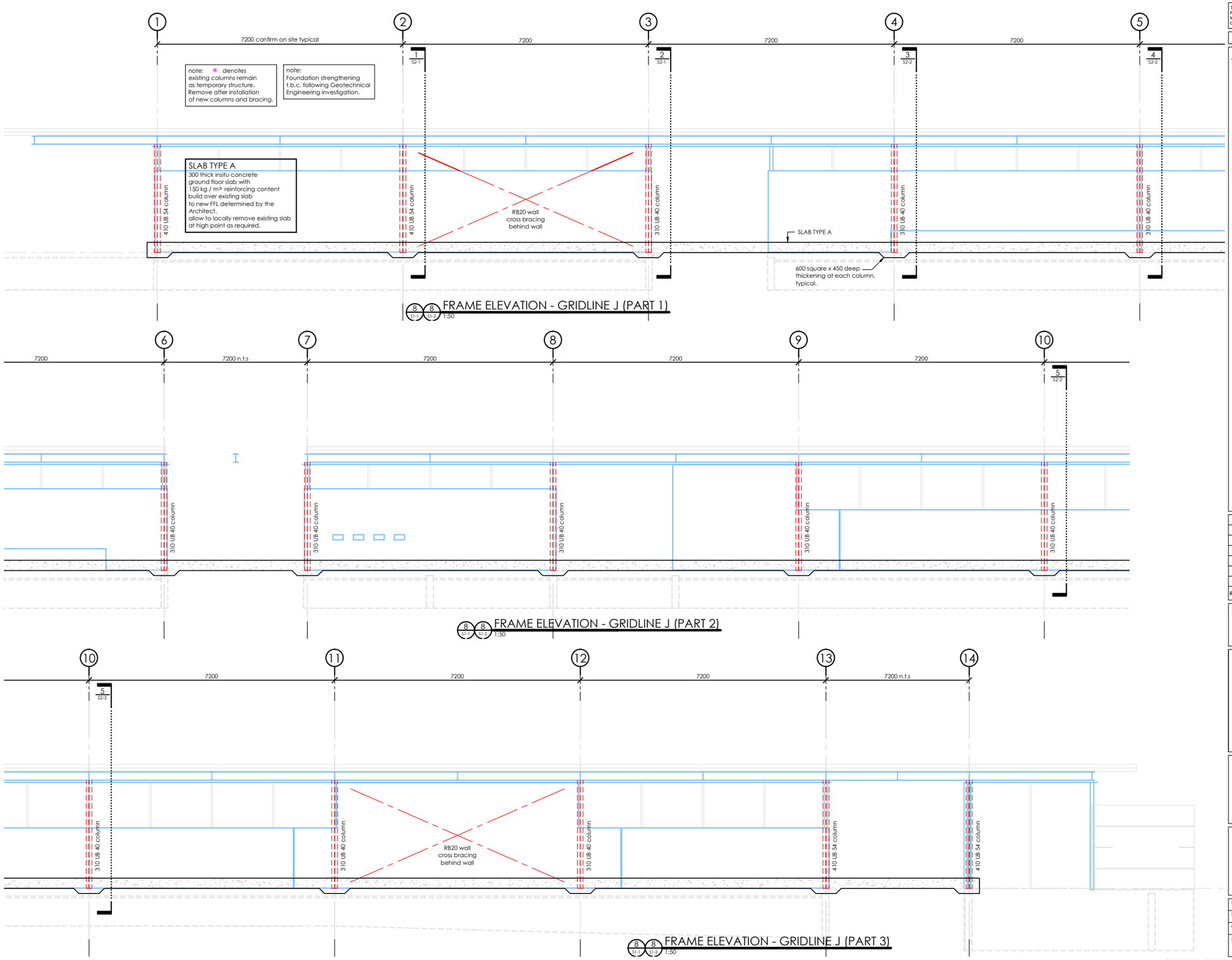
CHECKED: JDB/HRT		
FILE: 120054	DRAWING NO. S2-5	REV. 1



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CONSULTING ENGINEERS

PROJECT:
SOUTH CHRISTCHURCH LIBRARY
SEISMIC STRNGTHENING

DRAWING TITLE:
FRAME ELEVATION
GRIDLINE J

DRAWN: MMI		SCALE: 1:50 at A1 1:100 at A3	
ENGINEER: EL			
CHECKED: JDB/HRT			
FILE: 120054	DRAWING NO. S2-6	REV. 1	

South Christchurch Library

JASMAX

EQ Refurbishment Report

Document Prepared by Jasmax for
Christchurch City Council Ltd.
21 January 2022

Rev B

Revision history

Date	Revision	Description
21/12/2021	Rev A	Draft for review and pricing
21/01/2022	Rev B	Final Issue

Terms of Reference

Jasmax has been engaged by Christchurch City Council (CCC) to provide information about the future earthquake repair of the South Christchurch Library. The 2,462m² community facility is located on Colombo Street at the foot of the Christchurch Port Hills with the Heathcote River to the east and north, and sits within a generous park landscape.

During the sequence of Christchurch earthquakes, the South Christchurch Library was damaged. The building was assessed by Opus and temporary seismic strengthening works were carried out in 2012. Since then, several partial conditions investigations have been carried out. No significant permanent repair work has been completed, aside from ongoing maintenance and essential repairs to keep the facility operational.

CCC and Lewis Bradford Consulting Engineers have provided Jasmax with the following reports and drawings of the building for review and to inform this report.

- Warren and Mahoney Architectural Drawings (2002)
- Warren and Mahoney Feasibility Options Report (2015)
- Newfield Roofing Condition Report (2016)
- Aurecon Preliminary Site Investigation – Contamination (2021)
- Lewis Bradford Existing Floor Level Mark-up (2021)
- Lewis Bradford Structural Repair Concept (2021)
- Enlightened Fire Solutions - Means of Escape Preliminary Fire Report (2022)

The South Christchurch Library is approaching a 20-year life span, which brings several building elements to their considered “end of life” and will require replacement in the near future. The necessary structural repairs require building consent, and due to Building Code changes since the building was consented and constructed, elements of the building design and fabric will require upgrade.

Jasmax are engaged to compare two options for facility upgrades, providing architectural scope definition based on the proposed structural repair design, and commentary on buildability, insurability, sustainability and Building Code compliance.

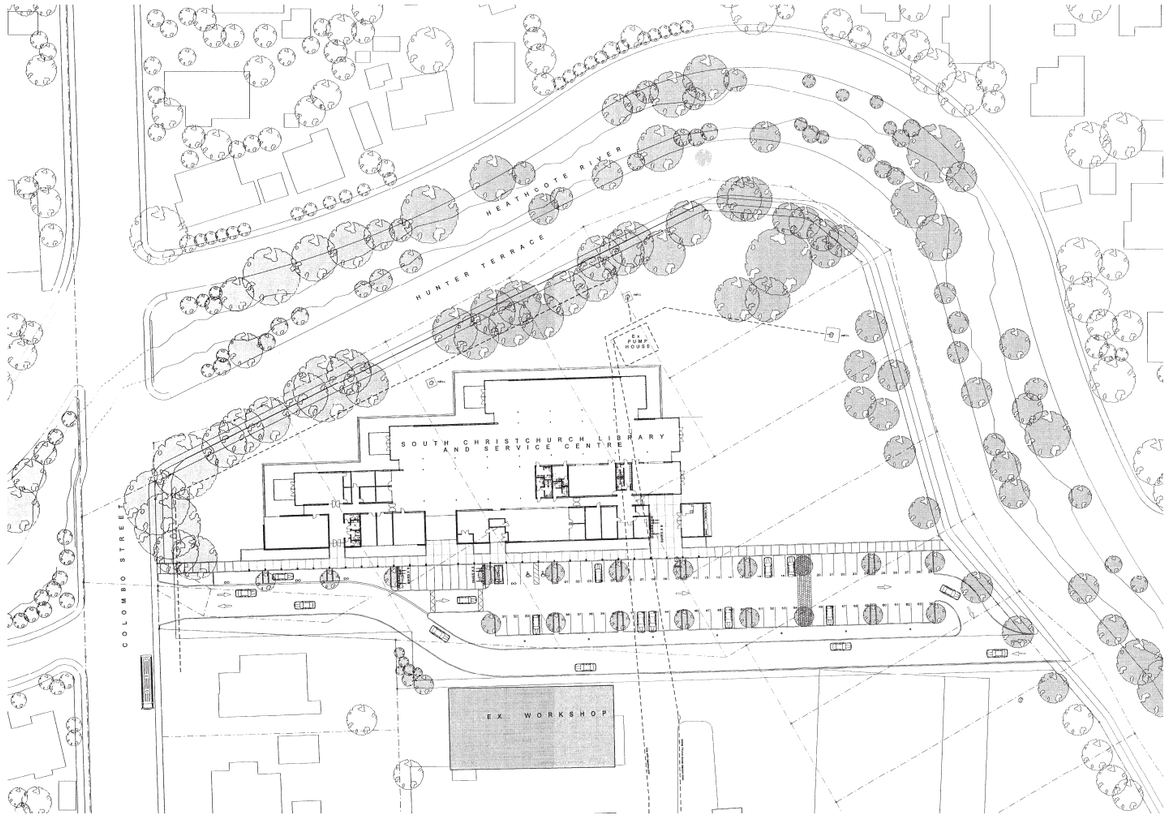


Figure 1. Site Plan, Warran and Mahoney original plans

Executive Summary

The two potential options considered in this report for the future of the South Christchurch Library are:

Option A - Comprehensive repair and refurbishment of the existing building.

Option B - A new building slab and superstructure of the same footprint on top of the existing concrete slab and foundations.

Each option is summarised in the adjacent table by outlining the pros and cons against key decision criteria. Pros are highlighted in blue with cons noted in red.

The next section of this report 'Assessment Review', provides a comprehensive description of the likely repair scope, and detailed options comparison and commentary under the following headings:

1. Sustainability.
2. Functionality and fitness for future use.
3. Implications of insurance.
4. Compliance and building code upgrades.
5. Buildability and construction sequencing.

Recommendations for next steps and commentary around the level of information available, is made under each of the above sections.

Decision Criteria	Option A	Option B
Cost, whole of life cost against the remaining life of any reused components	- High risk of being more expensive due to complexity and programming for building sequencing. - Increased contingency and additional unknown costs with altering existing.	-Traditional building programme with reduced construction risk = reduced cost. - Life expectancy for entire building is extended with all elements new.
Flood management zone and associated finished floor level requirements.	-Satisfactory proposed finished floor level.	-Satisfactory proposed finished floor level.
Insurability, code compliance, warranties	-Likely that not all warranties will be available. -Risk of compromise on durability - Quantity of unknowns may result in insurance issues post compliance. -Minimum code compliance (only) may be acheivable for some aspects, with compromises (eg head height) - Intensive repair completed to code requirements.	- New code compliant building with all associated warranties and fully insurable. - Opportunities to design cost effectively whilst achieving above code performance. - Greater opportunity to reduce maintenance and facilities management cost and time.
Comfort and ease of operation (building services)	- Building services solutions impacted by height and weight limitations, no opportunity for underfloor heating, risk of comfort and sustainability compromises - New higher performing facade to north and potential for higher thermally performing roof.	- Opportunity for new services, heating and ventilation solutions designed to a a future brief, without impediments. New higher performing envelope for higher thermal comfort.
Constructability - risk, time and Health & Safety	- Higher health and safety risk with partial demolishion and repair strategy. - Longer duration of works, due to complexity and risk associated with the extensive refurbishment and partial demolishion.	- Traditional construction methodology and process.
Sustainability considerations (Carbon emissions and Life Cycle Analysis in particular)	- Partial reuse of the existing steel with current structural solution. - Keep southern basalt cladding and facade system. - Utilise existing slab as a sub-slab to remove requirement for ground improvement work. - Requires a new slab and a significant amount of additional steel which have a high carbon footprint.	- Existing steel elements are only recycled, with less opportunity for reuse (in this or other projects). - Existing concrete pre-cast panels crushed and used as fill - Simplification of structure and opportunity for an alternative material solution. - Utilise existing slab as a sub-slab to remove requirement for ground improvement work. - Larger opportunity to improve operational energy efficiency of the building through passive design and mechanical systems. - Requires a new slab and a significant amount of additional steel which have a high carbon footprint.
Future functionality and the benefits/constraints of new planning vs reuse of existing planning	- Additional structure (columns and braces) protrude into the existing footprint. - Opportunity to alter the planning with all internal walls removed.	- Controlled by slab footprint for new building planning. - Opportunity to alter grid spacing and provide a more open plan/flexible interior.
Continuity of use and operational considerations (decant and recant, continuity of staffing and service in the area)	- Relocation to another facility is required. - Longer expected construction programme.	- Relocation to another facility is required. - Shorter expected construction programme.

Assessment Review

1. Sustainability

There is a direction from CCC to consider all sustainability implications with respect to the future repair of the South Christchurch Library building. The environmental sustainability comparison of the two proposed options is based on whole-life thinking, including likely remaining lifespan to replacement and end of life disposal/reuse.

It is noted that Christchurch Council adopted a Climate Resilience Strategy in 2021. This includes targets for net zero greenhouse gas emissions by 2045, and a 50% reduction from the baseline financial year 2016/2017 levels, by 2030. Life cycle carbon use will therefore be used as a key metric for decision making. The strategy also closely aligns to the United Nations Sustainable Development Goals , which can also be used to shape any proposed solution.

Option A repair strategy aims to re-life the existing built facility. Re-lifing refers to the process of rejuvenating/extending a building's lifespan by retaining the inherently valuable elements of a building, replacing the end-of-life building elements, and upgrading all aspects to acheive current code compliance while optimising the operational and commercial performance of the built asset. Re-lifing can be a sustainable alternative to new construction. When considering re-lifing the South Christchurch Library under the proposed Repair and Refurbish solution (Option A), the building elements that require replacement (the structure) also have the largest embodied carbon footprint (concrete and steel). The proposed structural repair design aims to retain the steel roof purlins, rafters and some of the pre-cast concrete panels and steel columns. The design necessitates most of the non-structural fabric of the building to be replaced, proposes a new 300mm thick reinforced concrete slab across the entire building floor plate and adds significant quantity of additional steel columns, struts, and braces. Further, the quantum of non-structural building fabric which must be replaced as a result of the necessary structural repairs is unlikely to be able to be carried out efficiently (reducing waste/construction time and energy) due to the complexity in buildability and sequencing.

For both options, some of the building materials may be separated and recycled or components (such as internal/external joinery) reused elsewhere. In the case of a new superstructure built over the existing slab and foundations (Option B), there is greater scope for the building design to improve insulation and reduce operational energy (and therefore operational carbon) use, and minimise embodied carbon by using low-carbon alternatives or salvaged material. For example, use of timber structure, existing concrete panels crushed and used as clean fill, structural steel recycled, and basalt cladding tiles reused. The structural solution can be more efficient, along with more efficient building services driven by improved thermal envelope performance. Building on top of the existing slab removes risks around known poor ground conditions and contamination, and extends the life of the existing high-carbon intensity concrete foundation elements.

To comprehensively compare sustainability across the two options, the life cycle of all elements should be considered (from raw materials through to disposal or reuse). Option A offers a greater level of re-lifing to existing building fabric. Option B offers the greatest potential to improve the environmental impact of the structure, thermal performance, servicing strategy, comfort and daily performance of the building. An embodied carbon emissions comparison of structure and building fabric will be carried out in the next phase of this assessment.

Both options will impact operational carbon use over the life of the building so this will also be considered in the assessment.

2. Functionality and fitness for future use.

Jasmax has attended a workshop with staff and managers associated with the building to listen and engage in an open discussion around how the building is being used and what aspects of the building could be improved from a functionality perspective. Refer to the appended Improvements Plan which visually captures all the items discussed at the workshop.

Within Option A, the structural concept necessitates removing all internal walls and fitout elements for a new slab to be installed, allowing scope for spatial arrangement changes within the current floor plate. However, the inclusion of the new concrete slab, steel columns and cross braces have both a functional and visual impact. The added concrete slab signifcantly reduces the head height clearances and changes the internal proportions of the space. The added steel columns are significantly larger and intrude on useable space. The additional internal cross braces reduce the flexibility of spaces inside the library. Height constraints mean heating (and ventilation) will likely be mounted below the existing ceiling height rather than under floor. The combined visual effect inside the building will be very different to the current building, with a much more enclosed feel, considerably lower ceilings and thick columns and wall structure.

In Option B, the structural grid system can be simplified to allow for greater flexibility through open plan areas. The roof form can be simplified to reduce moisture ingress risks generated by the length of internal gutters and enable opportunities like solar panels and warm roof design, which cannot be entertained in Option A due to the weight limitation of the retained roof purlins/structure.

With wholesale changes to interior fabric required for both options, it is strongly advised that additional briefing is completed to understand and optimise building function and efficiency, providing best value for future library and community use.

3. Implications of Insurance

The solution for the South Christchurch Library needs to enable the best possible insurance position for the Christchurch City Council going forward. Whether considering the repair strategy of Option A or a new build of Option B, all existing earthquake damage will need to be rectified, and the building consented under the Building Act.

The South Christchurch Library is adjacent to the Heathcote River, and is directly affected by the Flood Management Zone within Christchurch. This Flood Management Zone dictates the required finished floor level (FFL) of the building to be 15.890m RL for code compliance. As per Lewis Bradford's floor level assessment, the current building is sitting between 245-335mm

Figure 2. Library main entrance external access

Figure 4. Internal view through central section of the library

Figure 3. Internal view through northern section of the library with existig structural columns

below the original designed FFL of 16.350m RL. The analysis indicates an existing variation of 16.015 – 16.105m RL across the floor plate which, is above the required code compliance minimum - hence both options will comply.

For Option A, the structural design proposes a 300mm reinforced concrete slab over the existing slab FFL. This structural slab needs to be finished level and insulated for compliance. This can be achieved by installing insulation underneath, or by adding a separate insulated floating slab. A minimum total additional thickness of 400mm above existing FFL has been estimated. The lower side of the steel portals (along grids D, F and H) will determine the final slab design and thickness/type of insulation to ensure compliant head heights are retained in these areas. For Option B, a similar slab design is proposed, however underfloor heating can be utilised as the design will not have areas of restricted head height due to a new superstructure design. The reduced head height in Option A creates a design risk for any overhead heating and ventilation ductwork/services design.

It is also noted that climate change will continue to have a greater impact on finance and insurance through legislation (eg. climate related disclosures) introduced under the Zero Carbon Act to support New Zealand's committments under the Paris Agreement.

4. Compliance and Building Code Upgrades

The current building has been reviewed at a high level in relation to code compliance. For Option A, the proposed structural repair is significant and will trigger several additional building upgrades to ensure the proposed construction is code compliant. Key considerations are noted below. Option B does not have any significant building compliance risks to note, however for both options, access to the higher internal floor level will need to be managed by introducing new ramps and gradients external to the building. This is likely to affect/require changes to the existing carparking area and entry verandah.

B1 – Structure

This building code section sets out the requirements for the combination of loads that buildings and building elements are likely to experience. The performance requirements outline how buildings should be stable and withstand physical conditions to protect lives and other neighbouring properties. It makes specific allowance for the intended use of the building and consequence of failure.

The structural concept provided by Lewis Bradford will bring the current building structure up to code compliance, changing it from the current 34%NBS (IL3) to 100%NBS (IL3). The design solution will add a new 300mm reinforced concrete slab over the existing slab, with isolated areas of slab potentially needing to be removed to ensure a consistent thickness and allow for thickening under the new columns. All internal walls (both timber frame and concrete pre-cast) are to be removed, and additional steel columns, cross braces, and struts are added. Refer to the Lewis Bradford report for further information.

There is still a level of risk and assumption within the current repair design due to the early design stage and lack of as-built information. Lewis Bradford have outlined this risk in their report, and it will need to be accounted for within the cost assessment of the repair strategy.

B2 – Durability

This section of the building code must always be considered when demonstrating compliance with each of the other clauses of the building code. The consideration of specified building materials, components and construction methods are required to be sufficiently durable to ensure that a building will intend to satisfy the function and performance requirements of the building code throughout its intended life. B2 specifies minimum durability periods building elements must meet, with only normal maintenance, being not less than 50, 15 or 5 years (depending on the element). The building is coming up to a 20-year lifespan, which means some building materials will be at the end of their expected lifespan. We recommenda a full building condition report be provided before assessing which elements of the existing building fabric are suitable for an extended life expectancy.

Since the consenting and construction of the South Christchurch Library, minimum durability requirements of timber-based building products have been updated (2014). The Building Code update outlined the requirement for treated timber within New Zealand construction. The specification of timber used within the current building is unknown, which generates a level of risk to the building envelope (all internal timber walls will be removed under the current structural solution). If there are any areas of the envelope with untreated timber construction (external walls and roof) these will need to be replaced with treated timber (H1.2 – H3.1) to achieve a minimum 50-year durability performance.

A compliance review of the existing external glazing against NZS4223.2:2016 in particular, is recommended to be undertaken by a registered supplier. This standard provides the minimum current requirements for the strength and durability charactaristics of insulated glazing units. These factors impact the deemed suitability of the units for continued use, versus replacement.

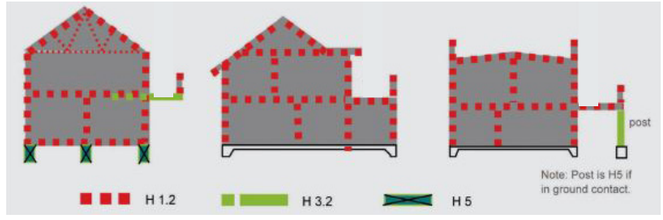


Figure 6. NZBC B2 Timber durability requirements

C1-C5 – Protection from Fire

Sections C1-C5 within the building code set out to safeguard people from an unacceptable risk of injury or illness caused by fire, protect other property from damage caused by fire, and facilitate firefighting and rescue operations. Enlightened Fire Solutions Ltd. have provided a Means of Escape Preliminary Fire Report, reviewing the existing facility against current Building Code Compliance requirements.

In summary Enlightened Fire Solutions have confirmed the following:

- Occupancy of 500 maximum people has been confirmed with a single fire cell and inclusion of a maintained building sprinkler system.
- Escape paths have been confirmed as acceptable, with additional door hardware required and egress signage locations updated.
- Building material group ratings are outlined for the current fire protection requirements, with specific note of the current timber panel interior wall linings.

Note, this is for the existing building layout and design only. When considering both Option A and B further fire egress input will be required if the location of the internal partitions and external doors change.

D1 – Access Routes

This section ensures people can move safely into, within and out of buildings. Access routes include the approach to the main entrance of a building, corridors, doors, stairs, ramps, and lifts.

As noted above, Access routes around and into the building will need to be raised and slopes adjusted to suit the proposed internal floor level. Localised ramps and changes to surfacewater drainage may need to be designed for areas where roads and car parking restrict gradual level changes.

E1 – Surface Moisture

This section of the Building Code outlines the requirements for managing the disposal of rainwater from external surfaces and away from the building to eliminate water entering. It sets out the performance requirements to ensure drainage systems are in place and any blockages/leakages are avoided.

Post Christchurch earthquakes, the South Christchurch Library has been left with an uneven floor slab which directly impacts the levels of the steel superstructure, and therefore the roof, gutters, and cladding/glazing. The roof comprises of areas of both profile zincalume and butyl rubber. The butyl rubber roof is a "flat" roof at minimum falls directing the storm water to both internal and external downpipes. With the change in slab levels across the building, there is a risk that the areas of flat roof are no longer at the correct falls and directing the storm water as intended. A condition assessment of these areas of roof and associated storm water connections is required before determining they are to current code requirements.

E2 – External Moisture

Section E2 looks at the prevention of external moisture causing any undue dampness or damage within the building. It contains requirements for roofs, wall claddings and external openings to prevent water entry; prevent water absorption and transmission; prevent the accumulation of water; and allow for dissipation.

A high-level desktop assessment of the original Warren and Mahoney architectural drawings has been undertaken in relation to the current building code requirements and potential re-use of envelope elements. Jasmax has not completed an on-site assessment of what is constructed or reviewed any as-built drawings. A detailed conditions report is advised if Option A is preferred.

Below is a breakdown of the main building envelope elements, highlighting any potential risks when considering alignment with current E2 requirements.

Northern cladding – 18mm Hardies Compressed Sheet on building paper on timber battens on timber framing.

- The building paper under the compressed sheet cladding is fixed over the timber batten and not under. This results in a non-ventilated cavity which restricts the movement of any moisture within the system or ability to drain to the exterior. The battens and timber framing within the façade system are of an unknown treatment level and durability.

Southern cladding – Basalt cladding on building paper on timber battens fixed to 120 Pre-cast concrete wall panel.

- There is a ventilated cavity behind the basalt cladding allowing any moisture within the cavity to drain the exterior. There is thermal insulation between the building paper and concrete panels, locating the insulation on the exterior of the concrete panels assists with the dew point within the wall build up. The timber battens installed to the exterior of concrete panels are of an unknown treatment level and durability.

Curtain wall cladding – Double glazed aluminium frame curtain wall suite.

- The condition of the air seals is unknown, if there is deterioration in the air seals this will affect the thermal and weather tightness performance of the envelope. There are currently minimal aluminium flashings documented at the sill, head and jamb, with the weather tightness of the building heavily relying on the large roof overhangs and seals around the window suites. The unevenness of the floor slab may have caused racking in the aluminium suites.These elements should therefore be assessed by a certified supplier of aluminium joinery to determine the current condition and useful life left in the units.
- Seismic movement aligned with structural proposal for deflection. A structural engineer will need to review and confirm that the current curtain wall suite will work within the proposed structural design and the SLS movements. This design confirmation is usually undertaken by the window designer/manufacturer and it may be challenging to gain such confirmation for a suite that is no longer in production.

Existing Roof – V-Rib Zincalume long run roofing on building paper on 12mm construction ply sarking.

- There was a condition report completed on the roof of the library in 2016, which states the condition of the V-Rib Zincalume long run is in good condition. However, this report was completed 5 years ago and outlines areas of rust to the exposed structure and decay of roofing screws. If the existing roofing were to be kept, an updated condition report is advised. The timber battens are of an unknown treatment level, so there is a risk that the roof would need to be removed to upgrade the timber underneath and it would be very difficult if not impossible to reinstate the long run with no risk of leaking through existing penetrations.
- The current roof design is a “cold roof”, which locates the insulation below the roof and structure which results in several cold bridges being formed at the steel structure. These cold bridges can cause moisture issues as condensation can form. The V-Rib profile is closed off at each end by foam closure strips which lessens drying potential and further increases the risk of concealed decay within the roof cavity.

Existing Roof – Butyl rubber waterproof membrane on 18mm Construction Ply on timber framing.

- When considering the current floor level analysis provided by Lewis Bradford, there is a considerable risk that the associated internal gutters and butyl rubber roofing is no longer to the required falls and diverting the storm water as originally designed. The butyl rubber roof system is considered a “flat roof” set to minimum falls therefore, the movement in the slab has a direct impact on the roof and external moisture.
- The condition of the membrane is noted in the Newfield Roofing Condition Report, however this was a non-invasive assessment issued in 2016. Therefore, the existing condition of the envelope is unknown and is now reaching its expected “end of life”. The condition of the structural ply and treatment level of the associated timber framing is also unknown which adds to the level of risk.

G1 – Personal Hygiene

This clause confirms facilities for personal hygiene are provided to a required standard and ensure there are amenities for people with disabilities to carry out normal activities. It sets the requirements for privacy and the numbers and location of sanitary fixtures within a facility.

The current toilet calculations appear to be adequate for the building size and function. However, with needing to upgrade the toilet facilities and associated services due to replacement of the concrete slab and in slab services, there is an opportunity to assess the current toilet layout within the building and how the facilities service the users. This in turn will address the current ventilation and drainage issues already experienced by the users.

H1- Energy Efficiency

This section of the Building Code sets out provisions for the efficient

Figure 7. Double glazed aluminium framed curtain wall system

Figure 8. Compressed sheet and Basalt cladding systems

Figure 9. V-Rib zincalume long run roofing

use of energy and sets physical conditions for energy performance. It requires enclosed spaces where temperature or humidity are modified to provide adequate thermal resistance and to limit uncontrollable airflow in certain buildings. It also sets out physical conditions likely to affect energy performance of the building like heating and lighting.

The building was designed with under floor heating as an environment control. We have been advised this system has never worked and is suffering from likely earthquake damage and a lack of maintenance. Therefore, the building has not been performing in the way it was designed, leaving the occupants of the building uncomfortable.

For Option A, it is not possible to reinstating the underfloor heating and return the building to a level of comfort through this heating method. The current requirement for a 300mm concrete slab and additional insulation does not allow for enough head-height to include under floor heating as well. Therefore, a services engineer should be engaged to provide a new heating, cooling and ventilation design for the building as part of the repair strategy.

Restrictions on life cycle carbon use will also be introduced into the Building Code in the coming years so actions to reduce emissions through the proposed LCA will support future consenting requirements.

5. Buildability and Construction Sequencing

To ensure a holistic approach is taken when considering Option A, both the constructability and construction sequencing of the Lewis Bradford structural repair design should be reviewed in parallel with the condition / life expectancy of existing building materials and systems. The structural repair design includes a new reinforced concrete slab across the entire floor, requiring the removal of all internal walls, leaving only the external envelope (façade and roof) to be assessed. Below is a breakdown of each main external envelope element and the implications/risks that are associated to it. These notes can be read in conjunction with the following diagrams.

1. Northern cladding and curtain wall system – Replacement is required.

- The installation of a new 300mm reinforced concrete slab over approximately 100mm insulation directly conflicts with the curtain wall system. To install the concrete slab, the bottom section of the curtain wall system would need to be removed.
- With the post-earthquake floor differential settlement of approximately 90mm, the transoms will not sit parallel to the new floor slab. The out of level curtain wall poses significant risks to the condition of the existing seals and flashings within the system.
- The solid infill sections of Hardies cladding adjacent to the curtain wall are constructed without a draining cavity which is non-compliant to current code requirements. The treatment level of the timber within the wall is also unknown, leaving a large level of risk.
- New columns are proposed to be installed in the same location as the existing ones around the northern perimeter of the building. These columns are significantly larger than the existing and required to sit centre on the grids to connect into the roof structure, impacting the curtain wall either side of the new structure and the alignment of the Hardies cladding, requiring these sections to be replaced.
- A patchwork repair to the system may well be unattainable. It would be difficult to find a contractor to complete the job and there would be an added cost premium for the risk and out of construction sequence of works. The level of risk and unknowns outweigh the benefits of a new system.
- Providing a new modern performing façade system to the northern aspects of the building to the outside line of the new steel structure is required. This solution will remove the risk of any residual earthquake damage and any potential weather tightness issues caused by the condition of existing system. A new continuous façade system will also have a positive impact on the thermal performance of the building and internal comfort level.

2. Southern basalt cladding and window system – Keep intact.

- The basalt cladding is fixed with steel brackets to concrete pre-cast walls. The pre-cast walls are insulated on the exterior and lined with building paper, forming a ventilated cavity behind the basalt panels. For the purposes of this report an assumption has been made that the timber within this system is to a suitable treatment level for durability and this façade system has not been negatively impacted by the past earthquakes. A detailed condition report would need to be completed to confirm these assumptions to ensure the façade system is suitable for reuse and has the required life expectancy.
- On this basis from a desk-top assessment there are no evident risks to warrant removal of this system. However, there are several areas of this façade system that will need to be replaced because of the structural repair requiring the demolition of the external concrete pre-cast panels on grids 1, 13 and H.

3. V-Rib Zincalume long run roofing – Two replacement options.

- The design and construction of this roof does not align with current building practice. The roof system is considered a "cold roof" and has several large thermal bridges created by the exposed steel structure at each end. The Newfield Roofing Condition Report outlines the condition of the roof in 2016 from a non-invasive assessment. This information is now 5 years old and only looks at the aspects of the roof that are visible. The report highlights areas of aggravated corrosion with 10% of the Tek screw fixings showing signs of rust. As well as insufficient and non-compliant flashing details, specifically the absence of back flashings to all roof penetrations cause risk to the long-term durability and weather tightness of the roof system.
- The current architectural drawings show a non-ventilated roof system. This poses an additional durability risk due to the potential for condensation on the internal surface of the long run roofing. The recent roof condition report was non-invasive, meaning the condition of the internal purlins, ply sarking and insulation is unknown, posing a significant risk.
- Option 1 – Replace the existing v-rib profile with new long-run roofing over additional Cavibats to ventilate the roof space. Install all associated flashings and required roof penetrations to current code requirements. The thermal bridges at the ends of the roof created by the steel structure need to be insulated with either PIR board or spray insulation to control the associated dew point and moisture.
- Option 2 – Replace the existing v-rib profile, ply sarking and insulation with a Kingspan trapezoidal roof system. The thermal bridges at the ends of the roof would need the same solution as option 1. This option improves the thermal performance of the building however, with removing the ply sarking (due to weight limitations of the structure), the acoustic performance from rain/hail noise is compromised.

4 Butyl rubber membrane roof – Replacement is required.

- When considering the current floor level analysis provided by Lewis Bradford, there is a large risk that the associated internal gutters and butyl rubber roofing are no longer to the required falls and diverting the storm water as originally designed. The butyl rubber roof system is considered as a "flat roof" set to minimum falls therefore, the movement in the slab has a direct impact on the roof.
- The membrane roofing extends across the gutter and up the face of the envelope to below the clerestory glazing units. The condition of this element is noted in the Newfield Roofing Condition Report, but this was a non-invasive assessment and is 5 years old. Therefore, the existing condition of the envelope is unknown and is now reaching its expected "end of life". The condition of the structural ply and treatment level of the associated timber framing is also unknown which adds to the level of risk.
- In the absence of an invasive conditions report the recommendation is to replace the butyl rubber roofing and associated storm water system to ensure long term durability and weather tightness is achieved for the future of the South Christchurch Library. With a new structural slab being installed, the associated in ground services will also need to be reinstated, allowing for additional storm water connections if required and added overflow preventions.

5. Clerestory / High-level façade system – Replacement is required.

- Like the curtain wall façade system, the structural repair solution has a significant impact on the clerestory window units, with the new steel columns coinciding with the existing glazing units. The floor level differentiation of approximately 90mm, poses significant risk to the condition of the existing seals and flashings within the system.
- With the above, a patch work repair to the system is unattainable with a high level of risk and unknowns outweighed by the benefits of a new system. A new façade system to the outside line of the new steel will provide continuity and simplification of the construction and sequencing with the butyl roof/envelope also requiring replacement. This solution will remove the risk of any residual earthquake damage and any potential weather tightness issues caused by the condition of existing system. A new continuous façade system will also have a positive impact on the thermal performance of the building and internal comfort level.

Option B enables a simple buildability methodology and traditional construction sequence with demolition of all building elements (other than the current concrete slab). This reduces risks associated with assumptions around the current condition of the building materials and elements and enables a holistic design and construction process.

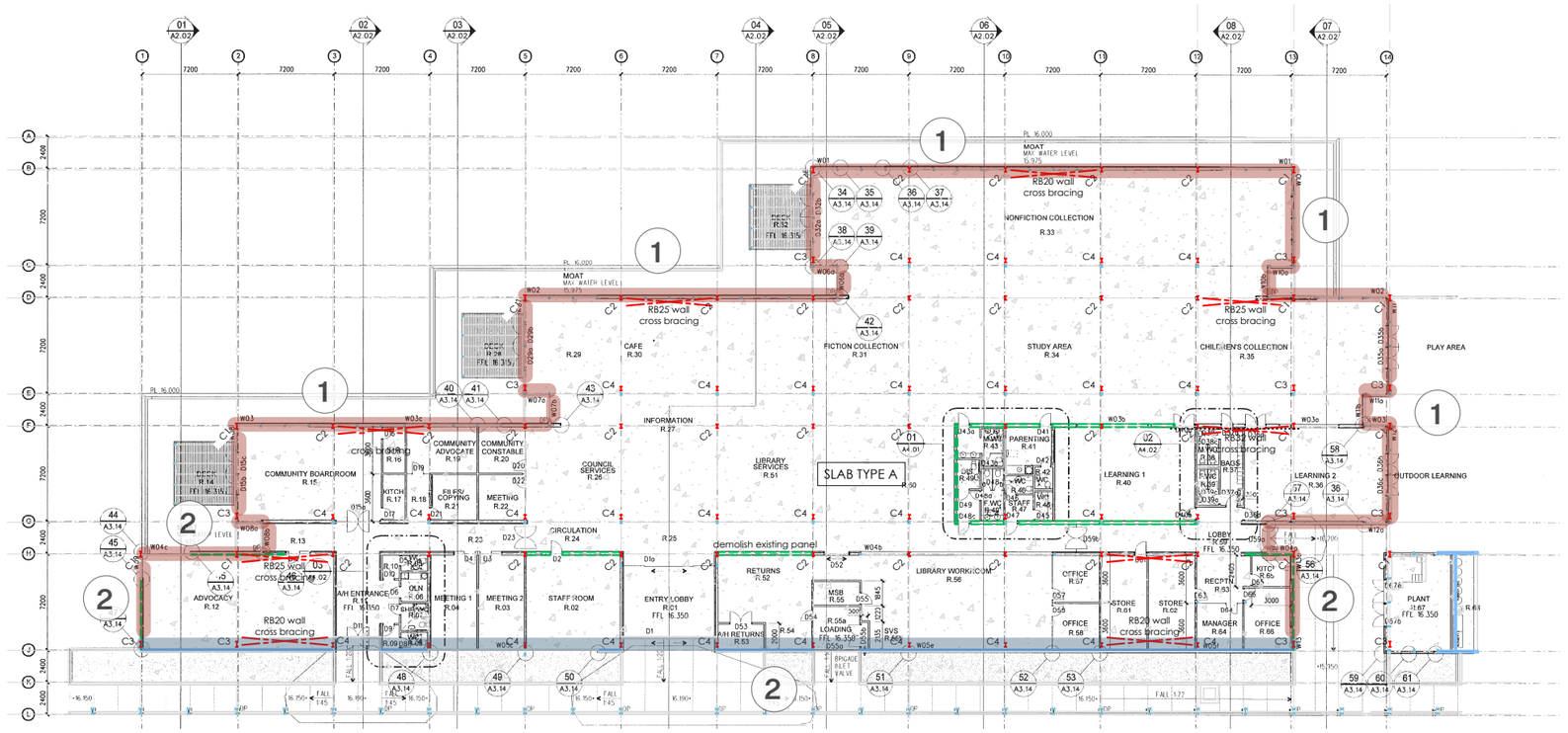
An additional option for a new build in a different location on the site could also be considered, but this option is not covered off in this report. This option would enable the current library to remain functioning while a new one is constructed allowing for continuous operation and seamless decanting from one facility to another. However, risks arising from the unknown extent of existing site contamination, necessity for resource consent and reduced visibility from Colombo Street deem this option as unfavourable.

Option A - Plan Analysis

Each envelope element is highlighted with the corresponding colour to demonstrate visually the extent of what will need to be replaced vs what can potentially stay intact under the current structural repair scheme.

Legend:

- Replacement
- Full or Partial Replacement
- Keep
- Structural repair - Keep
- Structural repair - New
- Structural repair - Demolish

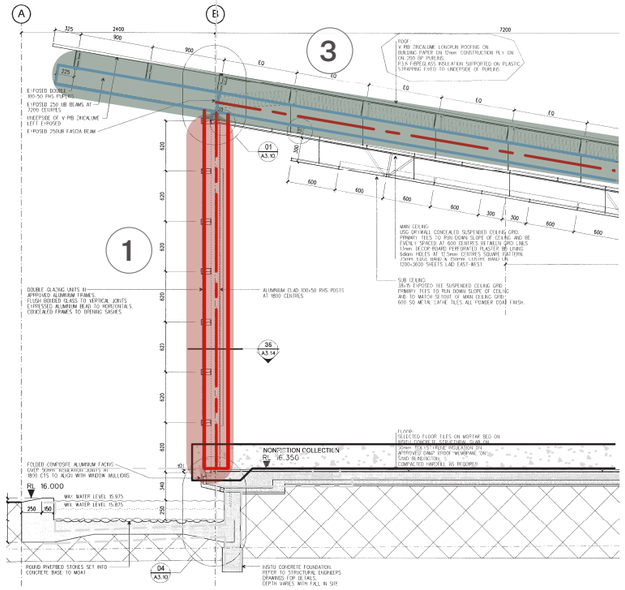


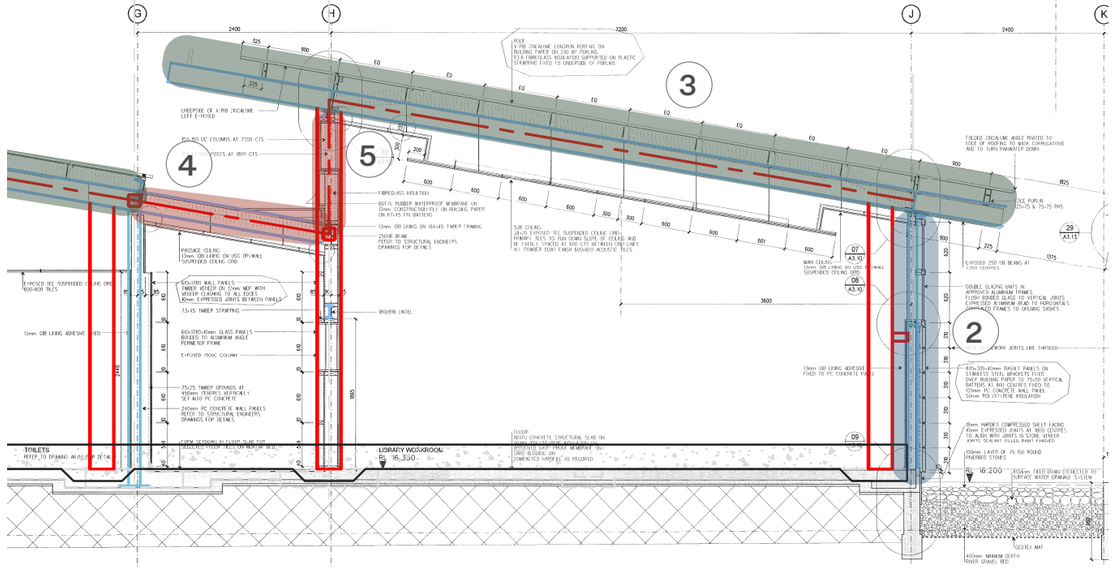
Option A - Section Analysis

Each envelope element is highlighted with the corresponding colour to demonstrate visually the extent of what will need to be replaced vs what can potentially stay intact under the current structural repair scheme.

Legend:

- Replacement
- Full or Partial Replacement
- Keep
- Structural repair - Keep
- Structural repair - New
- Structural repair - Demolish





Appendix

South Library - Improvements Plan

Comments:

1. Define each entry into the building for easier way finding with the ability to monitor foot count at the entry.
2. Clear visibility to council service desk, cafe and into the library.
3. Public computers are only used 30% of the time. More locations and technology support for people to bring their own devices.
4. Exterior and interior sensor lighting for staff and after hours security.
5. Facilities team has a list of suggestions for refurbishment.
6. There is huge demand for bookable meeting rooms, additional and of varying sizes, with some smaller spaces free to the public could be considered.
7. Upgraded and larger playground area would improve exterior amenity.

Additional General Comments:

- More power and data points required.
- Providing flexibility in the building with the way it is can be used and enjoyed by both the staff and public.
- Sensor lighting within the building would provide for a better sustainability and security outcome.
- Moat decommissioned, but could potentially be developed into a new amenity for the building (decking or rain garden).
- Successful open plan library space with associated quiet study/reading areas.
- The original building concept was to create a public “square”, which all spaced connected to.

Legend:

- Building Entry
- Workspace and Boardroom
- Underutilised space
- BOH returns and delivery
- Public toilets
- Bi-folds or similar
- Public “Square”

Relocation of doors would enable the meeting rooms to be within the bookable system and public space.

Underutilised back of house space and out of date service desk design.

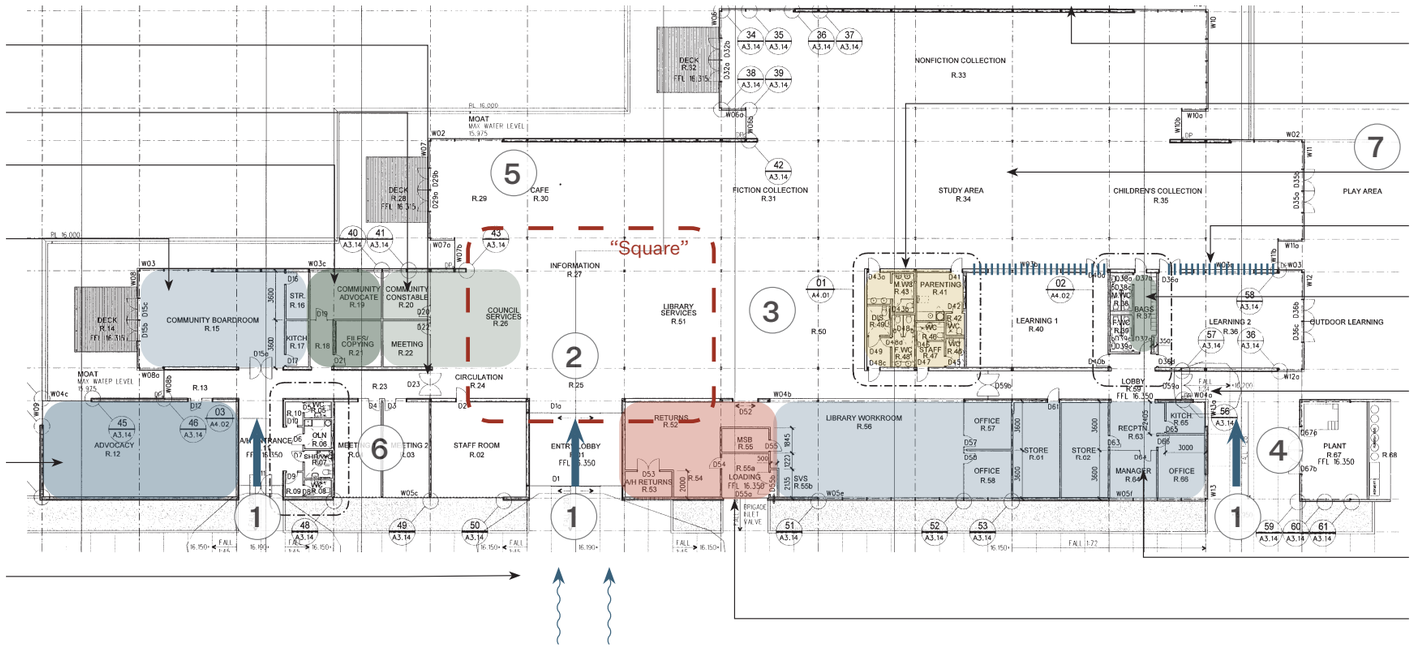
Spaces used by the Civil Defence teams, could be rationalised and utilities by a wider range of people.

Community boardroom - back-up space for Civic Council Chambers.

- Cold in winter and doors open for cooling in summer
- Kitchen facilities could be rationalised
- Adjacent lobby waiting area would assist
- Services/IT upgrade required

Heating and cooling issues, but space is a good size for current staff requirements.

Prevailing southerly weather enters through current wind lobby. Issue with leaves.



Highly utilised bookable exhibition space.

Reconfiguration of public toilets to improve way-finding and upgrade to services

Location of study space in relation to children’s area to be considered

Bi-folds (or similar) to open up the learning spaces to the library

Under utilised storage space.

Alternative external access for Learning Centre for Covid and after hours access.

Shared Workroom for Library and Learning Centre staff.

- Current issues with temperature control

Consideration required of the returns area and delivery process.

- Storage assessment
- Courier delivery and waste management

JASMAX

Revision B
29th November 2021

Thank you.

JASMAX

Christchurch South Library

Whole-of-Life Carbon Report

Document Prepared by Jasmax
17 March 2022

JASMAX

SUSTAINABILITY REPORT

Table of Contents

Christchurch South Library

1

Christchurch South Library
Introduction

Jasmax have been engaged by Christchurch City Council (CCC) to analyse and compare the whole-of-life carbon generated by both Option A (Repair) and Option B (Green Rebuild) for the Christchurch South Library repair.

This report provides detailed life cycle carbon assessments and should be read in conjunction with the "EQ Refurbishment Report" (21 January 2022) issued by Jasmax, which gives background to the extent of the repair for Option A. Option A (Repair) offers a greater level of re-lifing to the existing building fabric. Option B (Green Rebuild) offers greater scope to improve the environmental performance of the structure, envelope, servicing strategy, comfort and operational performance of the building.

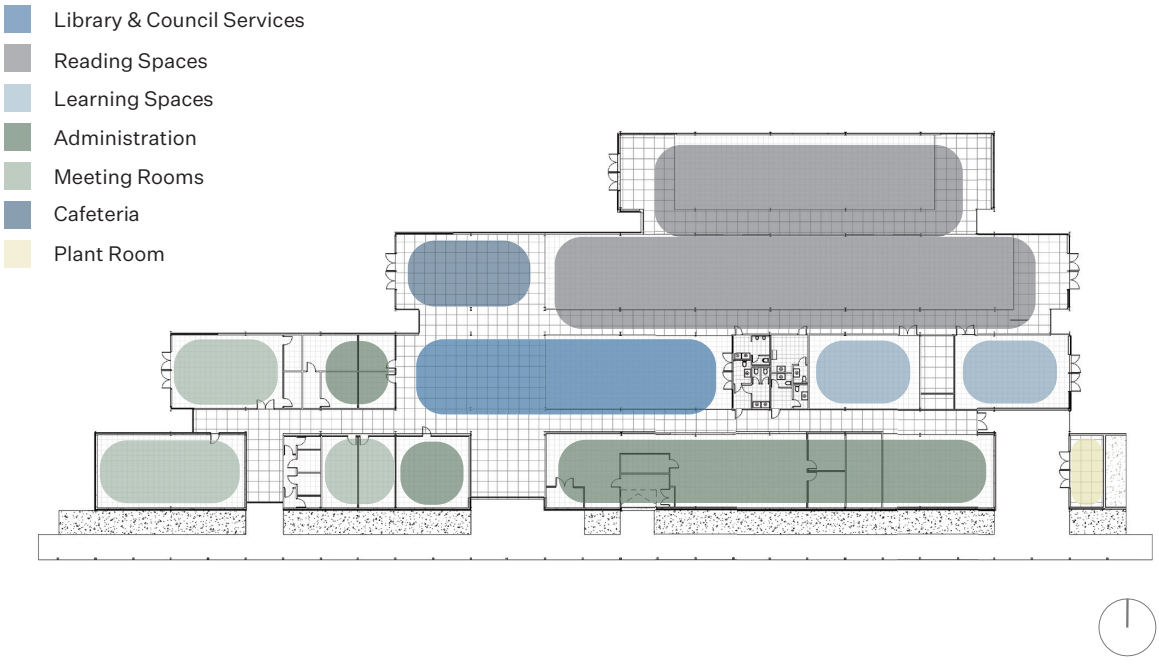
This report then concludes by assessing each option against the CCC Ōtautahi Climate Resilience Strategy issued in 2021. The Strategy sets four Climate Goals for Christchurch, supported by ten Climate Action Programmes on specific areas, to help achieve the regions climate goals in response to the NZ Climate Change Response (Zero Carbon) Amendment Act 2019. The Climate Resilience Strategy also closely aligns to the United Nations Sustainable Development Goals, which can be used to shape the design of both options.

Figure 1: Site Plan, Warren and Mahoney original plans

Project Information

Existing Building

Building Type	Civic & Community
Analysis Date	March 2022
Building Location	Christchurch
Building Completion / Open	2003
Design Life	50 years
Gross Floor Area	2462 m^2
Occupancy	Maximum 500 inc. visitors. 25 Fulltime Staff
Storeys	One
Heating System	Heatpump units, supplementary electric heaters
Cooling System	Passive via opening windows
Use of PVs	No
Use of Rainwater Tanks	No
Energy Use Intensity EUI	115 kW.hr/m^2/yr (estimated)



Carbon Assessment Assumptions

To enable meaningful analysis without detailed design for Option A (Repair) and Option B (Green Rebuild), the following assumptions have been made:

1. Assessment has been carried out under a like-for-like comparison for the primary structure. For example, the original grid setout and spans are used for both Option A and Option B. In reality, if a timber LVL structure were to be selected a bespoke structural grid layout would be designed to maximise timber use efficiency.

2. The Energy Use Intensity (EUI) for the proposed repair (Option A) was based on the existing library's annual kWh usage, with efficiency improvements assumed for the new fan coil units.

3. An EUI of 80kWh/m2/yr was applied to the Option B – Green Repair and this is considered to be a conservative estimate for mixed mode systems. A new design could reasonably achieve lower EUI.

4. Demolition of the existing building fabric cannot be included in the life cycle carbon results as it falls outside the scope of the system boundary, as defined in the International Standard (EN15978). However, there are opportunities for both reuse and recycling of building elements in both options to divert waste going to landfill, reducing the environmental impact of demolition. These opportunities are summarised below.

Demolition and Salvage Opportunities

A significant percentage of building fabric is required to be removed for Option A as a result of the complexity of the structural repair; existing condition of building elements; current code requirements; and considerations towards buildability and programme. The repair strategy retains the following building elements:

- Existing concrete slab - *However, this is primarily to remove risks associated to ground improvement works and a new 300mm reinforced concrete slab is required over the existing one. The same solution is used for Option B.*
- Structural steel elements - *The structural steel purlins, rafters and columns along the south wall and external walkway are retained, with new columns and bracing elements required throughout.*
- External south wall -*The retention of the south wall still requires upgrading to meet more stringent thermal requirement under H1 of the NZ Building Code, which poses potential durability, moisture and thermal risks.*

When comparing these building elements directly against Option B, the steel structure can be reused and recycled; there are opportunities to reuse the south wall Basalt cladding tile in a new building design; and a new envelope provides opportunities for enhanced thermal performance and reduction of operational carbon through passive solar design features. For more detail on the demolition requirements of Option A, refer to the Jasmax "EQ Refurbishment Report" (21 January 2021).

For both Option A and B, all efforts are to be made to ensure reuse firstly, and then recycling of the existing building elements within the demolition strategy. Collaboration with a demolition contractor to assist with minimising the building materials ending up in landfill will be crucial to ensure a positive outcome for either option. Local recycling opportunities consist of and are not limited to the following:

- Clean concrete - Crushed for re-use.
- Glass separated from window joinery units - Window Glass Recovery recycle double glazing.
- Aluminum joinery separated from the glass - Recycling.
- Structural and reinforcing steel - There are a range of scrap metal sites within and around Christchurch. Structural steel can also be assessed onsite for reuse opportunities for non-structural elements.
- Roofing iron - Dependant on condition for reuse.

Further information on these opportunities can be provided.

Christchurch South Library

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Project Information

Option A - Repair

Building Type	Civic & Community
Analysis Date	March 2022
Building Location	Christchurch
Design Life	60 years (10 years beyond 50 year minimum code requirement)
Gross Floor Area	2462 m^2
Occupancy	Maximum 500 inc. visitors. 25 Fulltime Staff
Storeys	One
Heating System	Fan Coil Units (sealed envelope)
Cooling System	Fan Coil Units (sealed envelope)
Use of PVs	No
Use of Rainwater Tanks	No
Energy Use Intensity EUI	115 kW.hr/m^2/yr (estimated)

Option A - Repair overview

Option A is a repair with partial rebuild.

A new 300mm deep reinforced concrete raft slab will be laid on top of the existing out-of-level slab.

The majority of the steel structure within the building will be retained but new steel columns and beams are required to meet 100% New Building Standard (NBS). New tension-cross-bracing is also required in the roof and walls throughout.

A new 'warm-roof' will be installed above the existing steel rafters and purlins.

The glass canopy is retained along with the basalt-clad walls along the south face of the building.

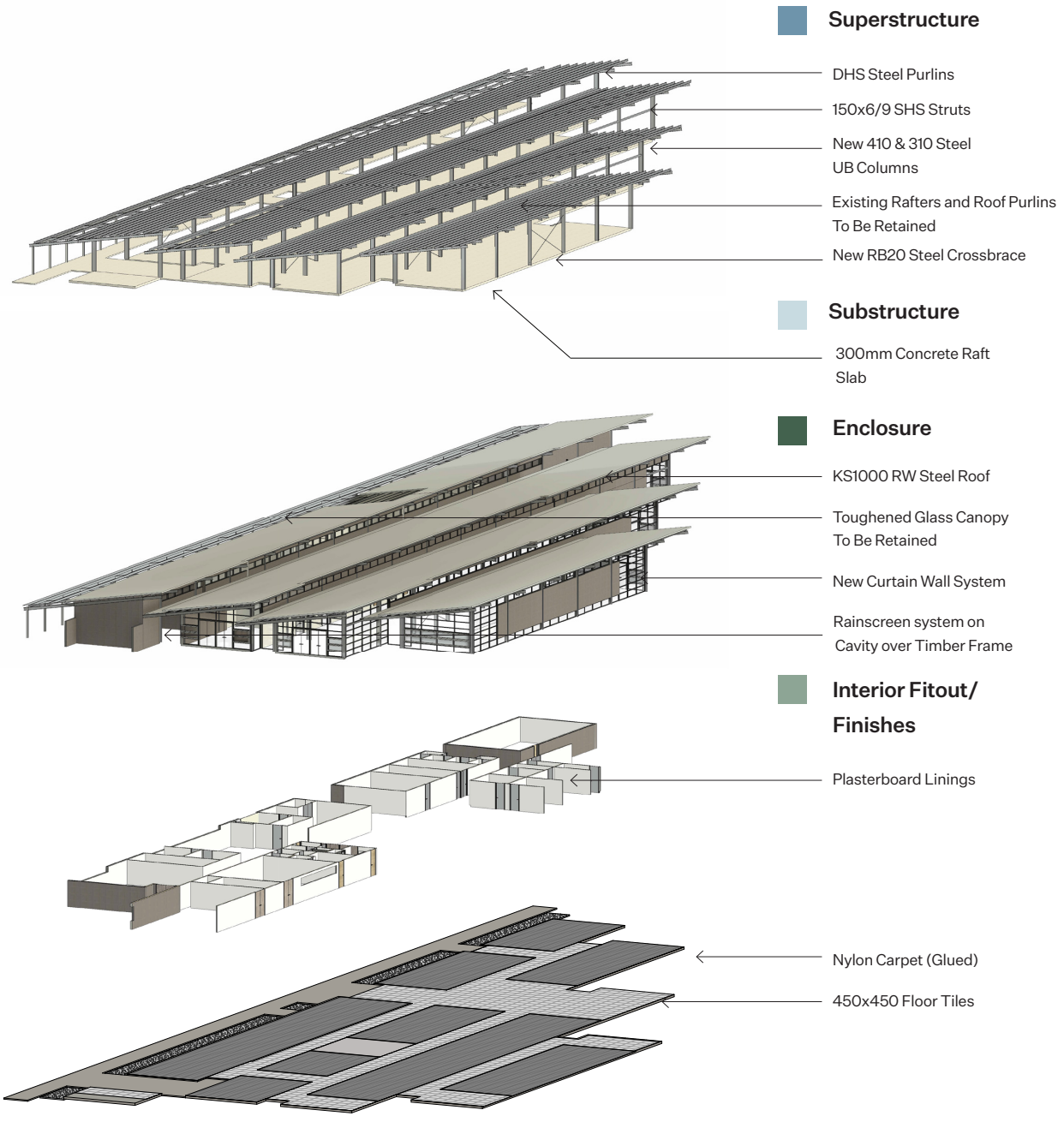
A new curtain wall system is required for remaining elevations with new clerestory windows at roof level.

Operational data has been based on performance of the existing Library with allowances made due to the faulty in-slab heating system and new installed HVAC.

Definition of Building Element Categories

Option A - Repair

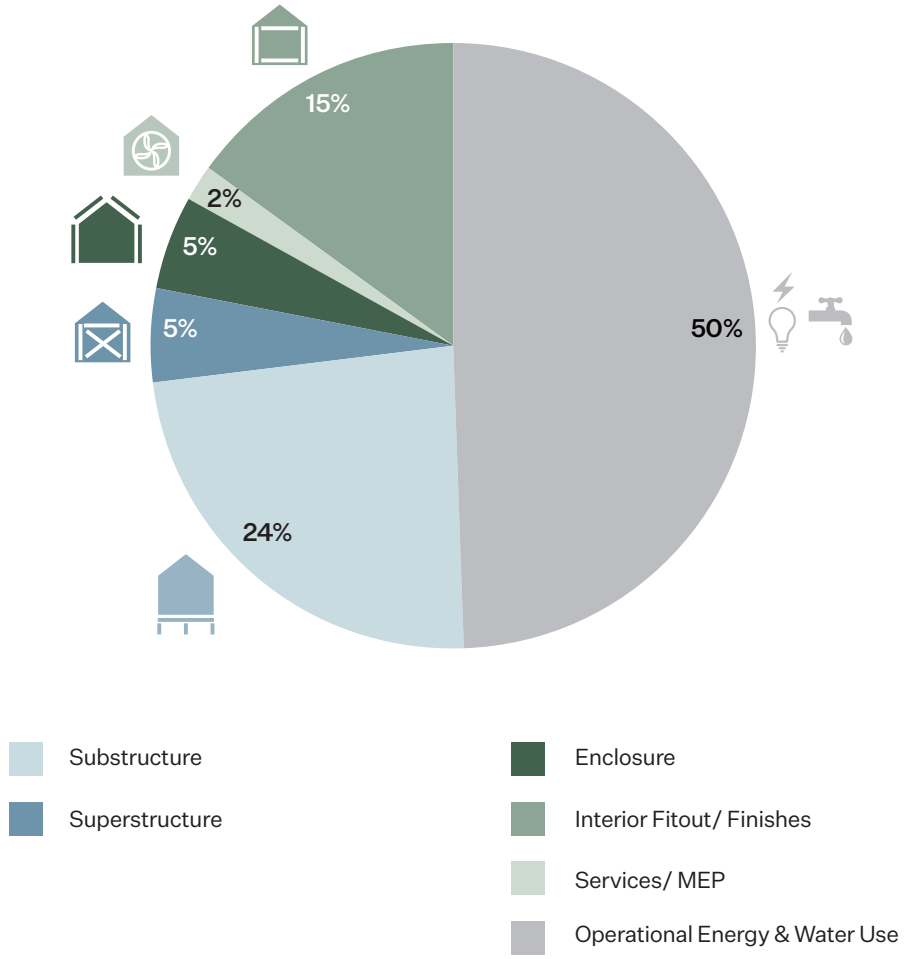
The 3d building model images below summarise the proposed construction of Option A, broken down into building element categories.



Carbon Distribution Across Building Element Categories

Option A - Repair

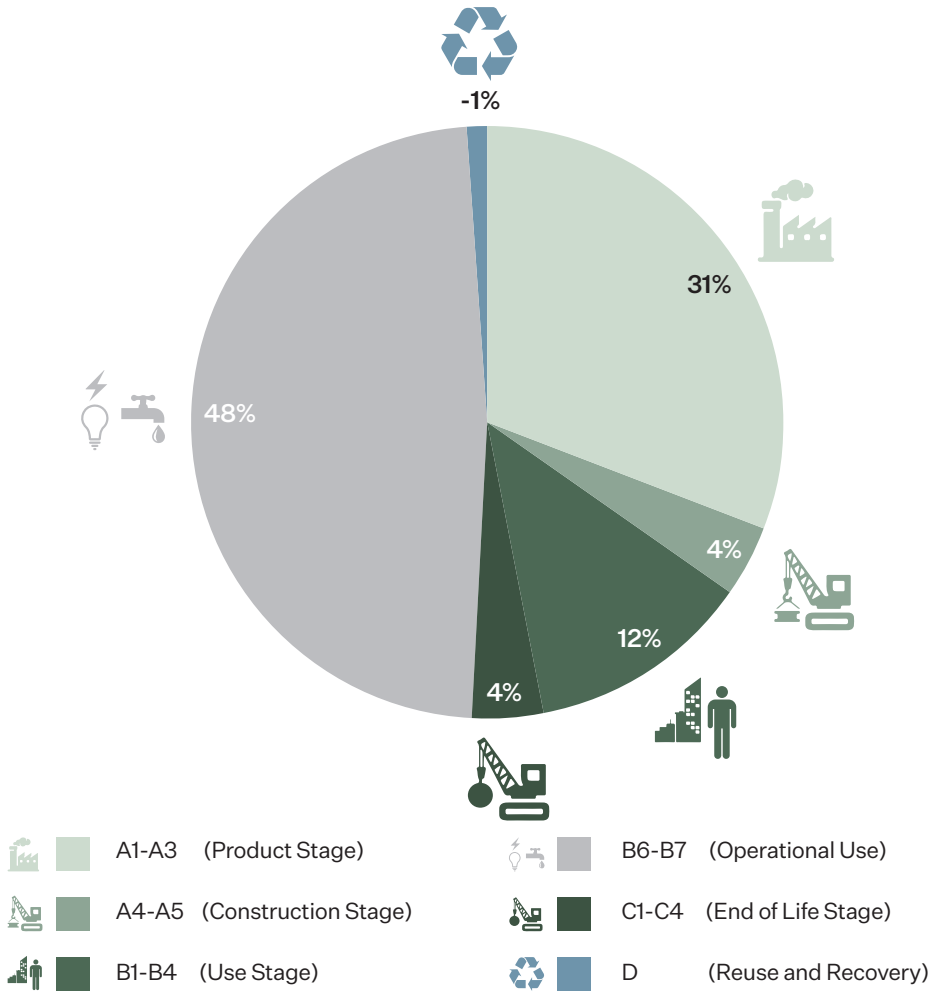
The pie charts to follow illustrate the breakdown of life cycle carbon use when considered across building element categories, life cycle modules and building materials. They all show the same total life cycle carbon but each allows the carbon components to be interrogated differently in order to identify carbon hot-spots, where improvements can then be optioneered against project criteria.



Building Category						Whole-of-Life Carbon Total
Substructure	Superstructure	Enclosure	Interior Fitout/ Finishes	Services/ MEP	Operational Energy & Water Use	$kgCO_2e/m^2$
323.84	66.79	67.39	196.18	27.76	670.91	**1,352.87**

Definition of Building Across Life Cycle Modules

Option A - Repair



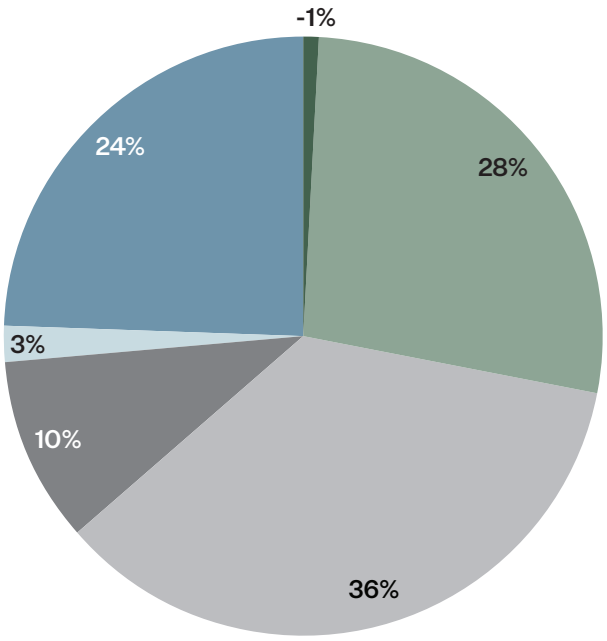
Embodied Carbon (Global Warming potential [$kgCO_2eq.$]) per sq. metre ($kgCO_2e/m^2$)											Operational Carbon ($kgCO_2e/m^2$)	
Materials and Construction			Use Stage			End of Life Stage				Benefits beyond L.C	Embodied Carbon Total	Operational Carbon	Operational Carbon Total
A1-A3	A4	A5	B1	B2	B4	C1	C2	C3	C4	D	*A, B1-B4, C, D*	B6	B7	*B6, B7*
Product Stage	Transport	Construction	In Use	Maintenance	Replacement	Deconstruction and Demo	Transport	Waste processing	Disposal	Reuse	$kgCO_2e/m^2$	Operational Energy Use	Operational Water Use	$kgCO_2e/m^2$
427	60		159.32			53.69				-18.60	**681.4**	670.9		**670.9**

Carbon Distribution Across Building Materials

Option A - Repair

Top 3 Material Impacts:

1. Steel
2. Concrete
3. Miscellaneous



- Timber
- Concrete
- Steel
- Floor Finishes
- Glazing
- Miscellaneous
  - Insulation,
  - Plaster,
  - Fibre Cement,
  - Paint, etc.

Material						Materials Carbon Total
Timber	Concrete	Steel	Floor Finishes	Glazing	Miscellaneous	$kgCO_2e/m^2$
-4.69	175.11	227.37	65.83	15.75	155.13	**634.51**

Christchurch South Library

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Project Information

Option B - Green Rebuild

Building Type	Civic & Community
Analysis Date	March 2022
Building Location	Christchurch
Estimated Lifespan	60 years (10 years beyond 50 year minimum code requirements)
Gross Floor Area	2462 m^2
Occupancy	Maximum 500 inc. visitors. 25 Fulltime Staff
Storeys	One
Heating System	Radiant heating
Cooling System	Mixed Mode
Use of PVs	No
Use of Rainwater Tanks	No
Energy Use Intensity EUI	80 kW.hr/m^2/yr

Option B - Green Rebuild overview

Option B requires a full rebuild of the existing structure and envelope.

The new 300mm deep concrete slab and superstructure will retain the same footprint on top of the existing concrete slab and foundations. A 30% fly-ash concrete blend will be used to reduce the 'product' stage carbon. New timber LVL columns, beams and roof structure will also lower the embodied carbon of structure.

A new 'warm roof', glass canopy and enclosure is required but these will be designed to facilitate passive solar design principles and use of natural ventilation for mixed mode operation and low energy use.

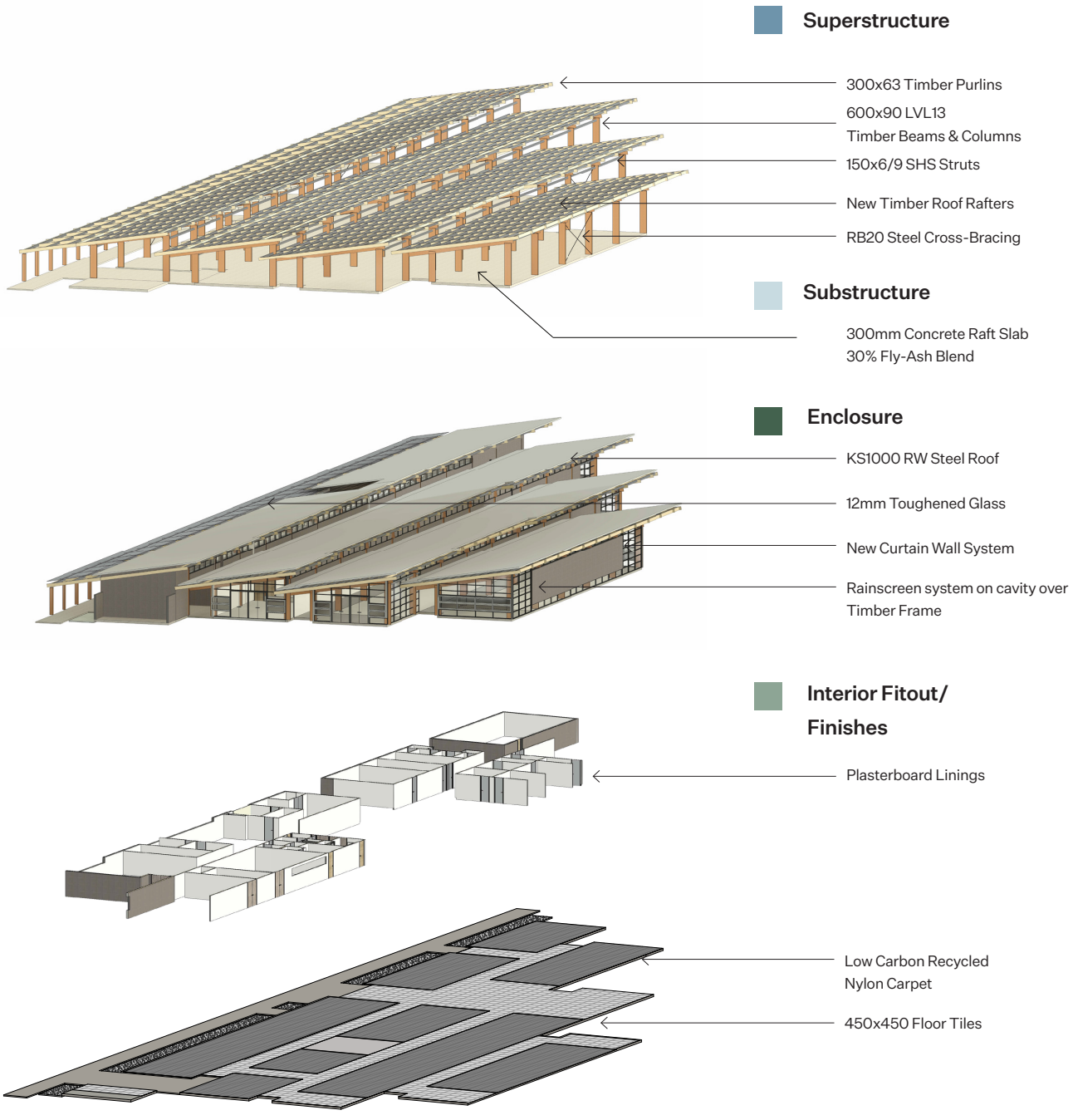
A conservative EUI of 80kW.hr/m2/yr is used to represent the new mixed mode HVAC system, which should be bettered in practice.

Low carbon carpet has been modelled to further lower the embodied carbon of the new building.

Definition of Building Element Categories

Option B - Green Rebuild

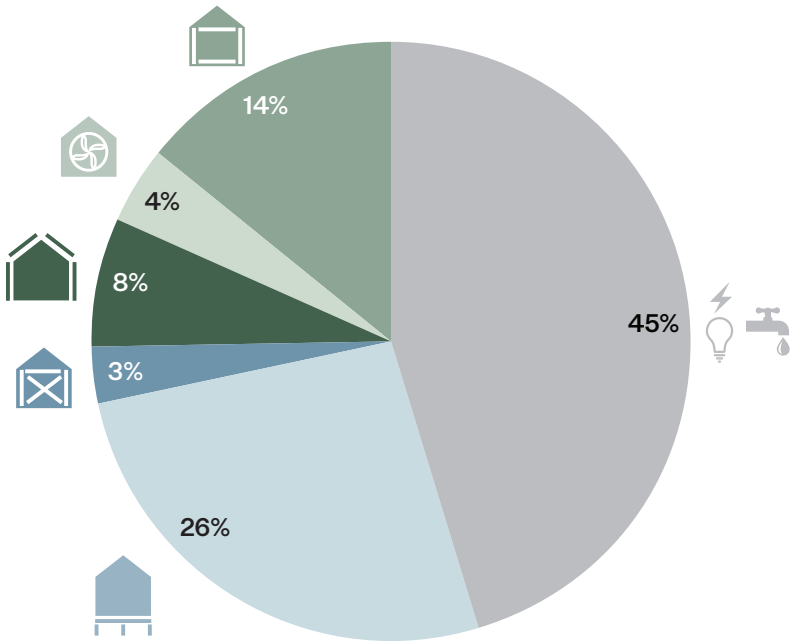
The 3d building model images below summarise the proposed construction of Option A, broken down into building element categories.

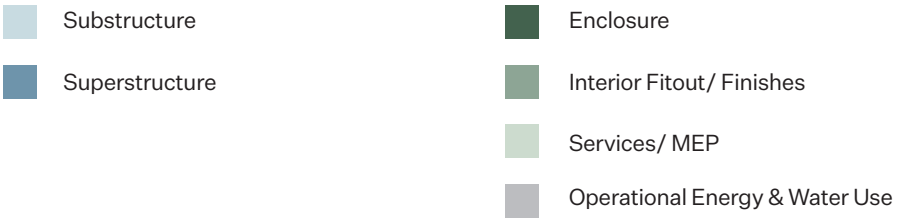


Carbon Distribution Across Building Element Categories

Option B - Green Rebuild

The pie charts to follow illustrate the breakdown of life cycle carbon use when considered across building element categories, life cycle modules and building materials. They all show the same total life cycle carbon but each allows the carbon components to be interrogated differently in order to identify carbon hot-spots, where improvements can then be optioneered against project criteria.

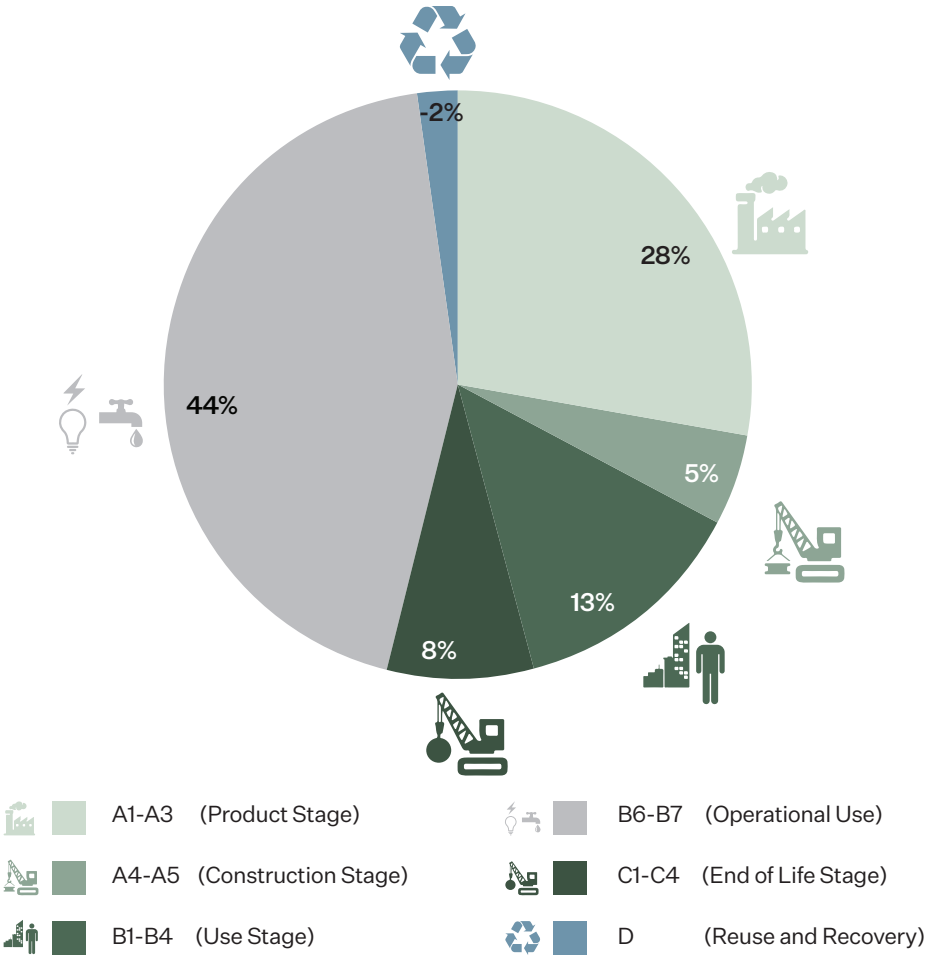




Building Category						Whole-of-Life Carbon Total
Substructure	Superstructure	Enclosure	Interior Fitout/ Finishes	Services/ MEP	Operational Energy & Water Use	$kgCO_2e/m^2$
286.00	33.68	75.10	157.48	45.82	497.45	**1,095.53**

Definition of Building Across Life Cycle Modules

Option B - Green Rebuild



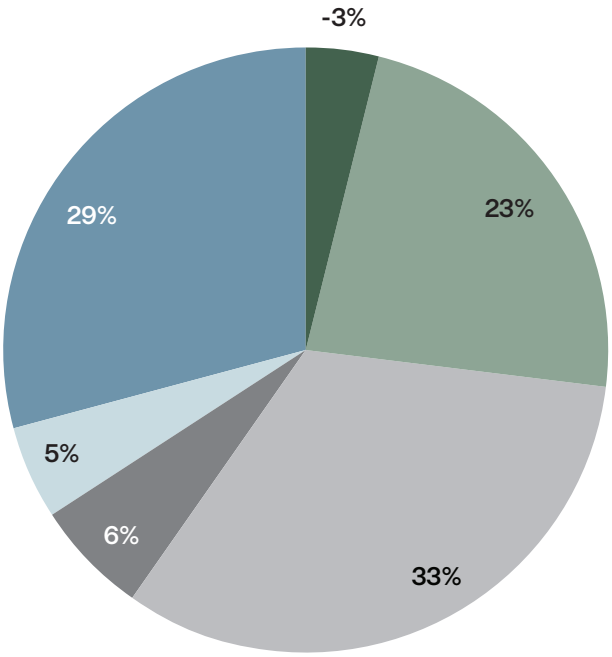
Embodied Carbon (Global Warming potential [$kgCO_2eq.$]) per sq. metre ($kgCO_2e/m^2$)												Operational Carbon ($kgCO_2e/m^2$)	
Materials and Construction			Use Stage			End of Life Stage				Benefits beyond L.C	Embodied Carbon Total	Operational Carbon	Operational Carbon Total
A1-A3	A4	A5	B1	B2	B4	C1	C2	C3	C4	D	*A, B1-B4, C, D*	B6	B7	*B6, B7*
Product Stage	Transport	Construction	In Use	Maintenance	Replacement	Deconstruction and Demo	Transport	Waste processing	Disposal	Reuse	$kgCO_2e/m^2$	Operational Energy Use	Operational Water Use	$kgCO_2e/m^2$
320	58.30		143.46			94.99				-18.10	**598.70**	497.50		**497.50**

Carbon Distribution Across Building Materials

Option B - Green Rebuild

Top 3 Material Impacts:

1. Steel
2. Concrete
3. Miscellaneous



- Timber
- Concrete
- Steel
- Floor Finishes
- Glazing
- Miscellaneous
  - Insulation,
  - Plaster,
  - Fibre Cement,
  - Paint, etc.

Material						Materials Carbon Total
Timber	Concrete	Steel	Floor Finishes	Glazing	Miscellaneous	$kgCO_2e/m^2$
-19.62	138.60	198.72	38.29	27.90	174.76	**558.65**

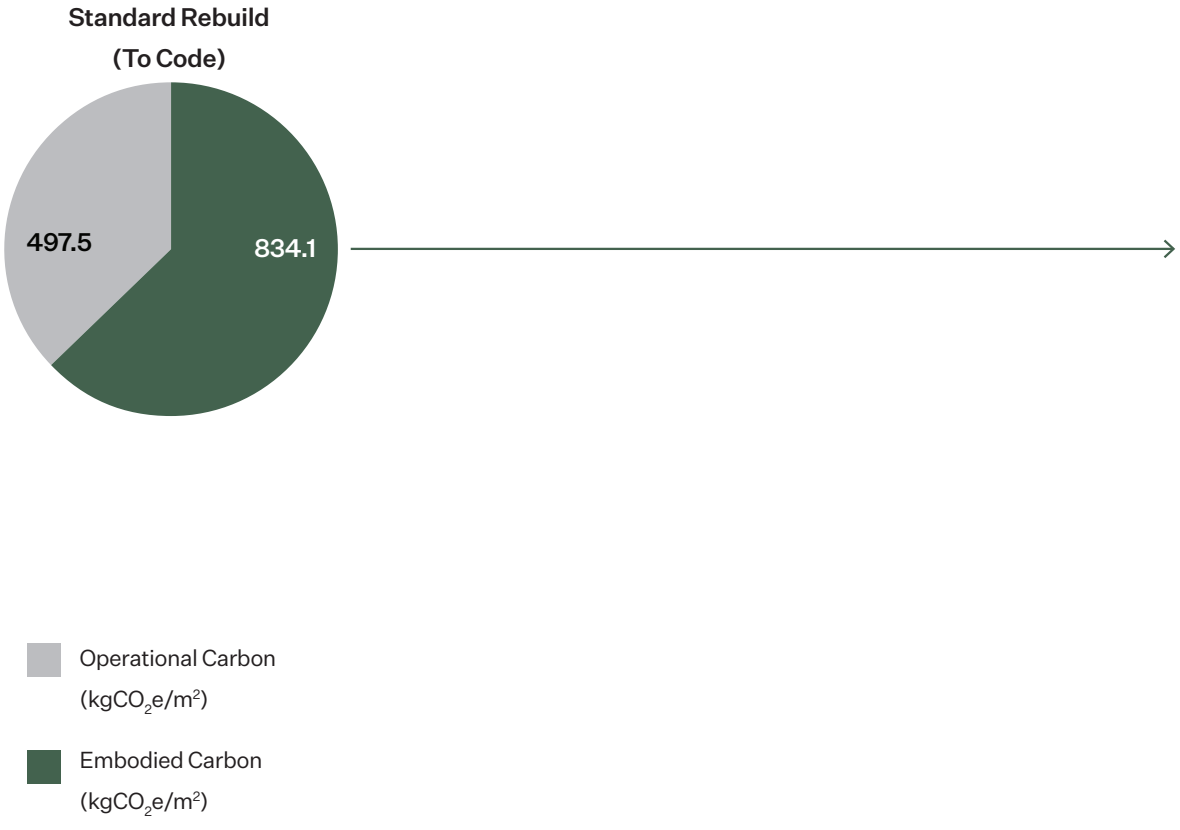
Embodied Carbon Reduction Strategies Summary

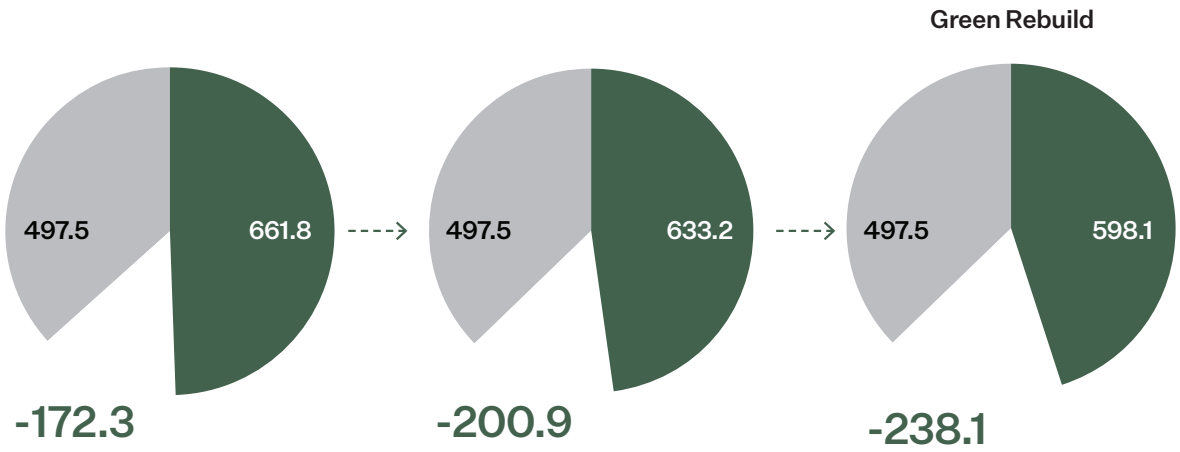
Option B - Green Rebuild

The following charts depict how the 'Green Rebuild' design strategy was formulated with carbon reductions accrued. A standard concrete and steel structure rebuild, built to current New Zealand Building Code, is shown on the left. The use of a full timber superstructure including timber LVL frames resulted in a significant carbon reduction of 172.3kgCO2e/m2 during A1-A3 product stage and then sequestered carbon throughout the product's lifespan.

Substituting a 30% fly-ash blend in the 300mm deep concrete raft slab lowered embodied carbon by a further 28.6kgCO2e/m2. Finally, by using recycled nylon carpet in the building's finishes, an additional carbon reduction of 35.1kgCO2e/m2 can be realised.

These measures result in an overall carbon reduction of 238.1kgCO2e/m2 for the final Option B Green Rebuild.





1. Structure
- Timber Superstructure

1. Structure
- Timber LVL Superstructure

2. Product Substitution
- Low Carbon Concrete

1. Structure
- Timber LVL Superstructure

2. Product Substitution
- Low Carbon Concrete

3. Product Substitution
- Low Carbon Carpet

Christchurch South Library

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Total Life Cycle Carbon Comparison

The table below shows Jasmax 'Net Zero Carbon' targets for the years 2020, 2025, and 2030. Option A – Repair exceeds the 2020 benchmarks for embodied and operational targets however falls short of 2025 and 2030. Option B - Green Rebuild exceeds the 2025 target for embodied carbon and the 2030 target for operational carbon.

Option A - Repair

Metric	Current Benchmark	2020	2025	2030
Embodied Carbon $kgCO_2e/m^2$ (60yr, LCA: A, B1-4, C,D)	1000	750	681	600	500
Operational Carbon $kgCO_2e/m^2$ (60yr, LCA: A, B1-4, C,D)	2310	900	671	600	500

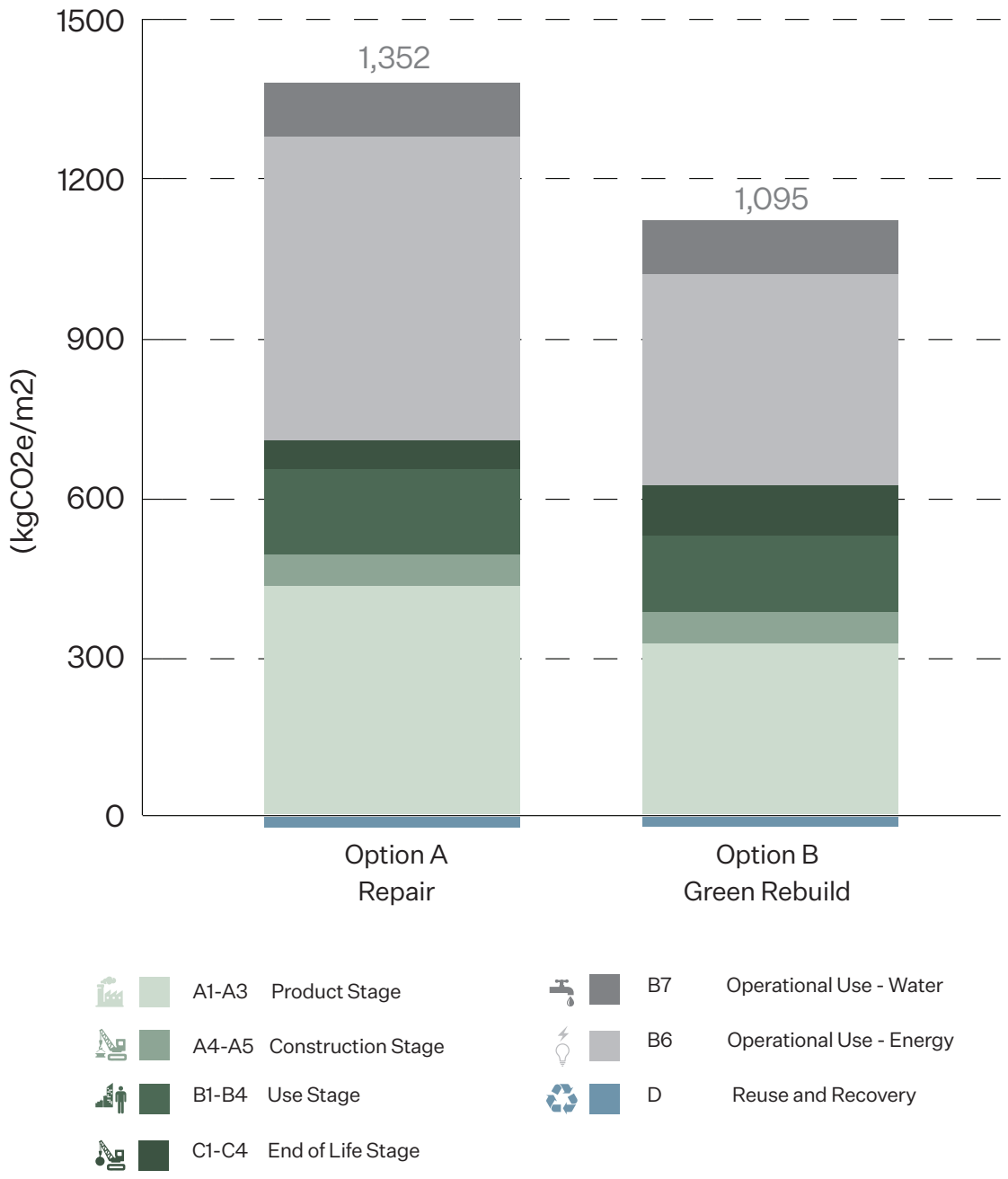
Option B - Green Rebuild

Metric	Current Benchmark	2020	2025	2030
Embodied Carbon $kgCO_2e/m^2$ (60yr, LCA: A, B1-4, C,D)	1000	750	600	598	500
Operational Carbon $kgCO_2e/m^2$ (60yr, LCA: A, B1-4, C,D)	2310	900	600	500	497

1. **Structure**
   - Laminated Lumber Columns and Beams
   - Timber Purlins
   - Timber Rafters
2. **Product Substitution**
   - 30% Fly-Ash Concrete
3. **Product Substitution**
   - Low Carbon CushionBacRE Nylon Modular Carpet

Carbon Comparison - Option A Repair vs Option B Green Rebuild

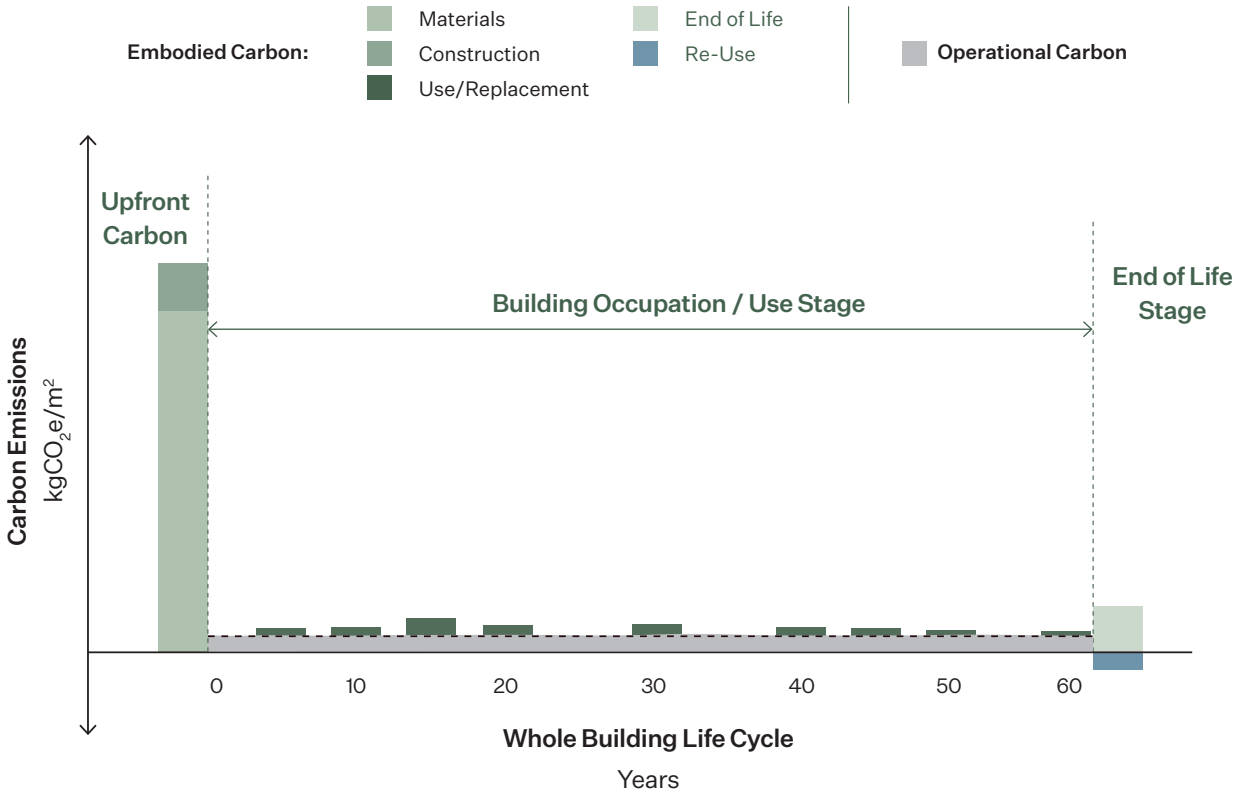
The bar chart below compares the total expected life cycle carbon for each option as well as breakdown by life cycle module. Option B Green Rebuild performs better across all categories except C1-C4 End of Life as the assessment assumes the worse case scenario of all sequestered carbon in the timber being released at this stage.

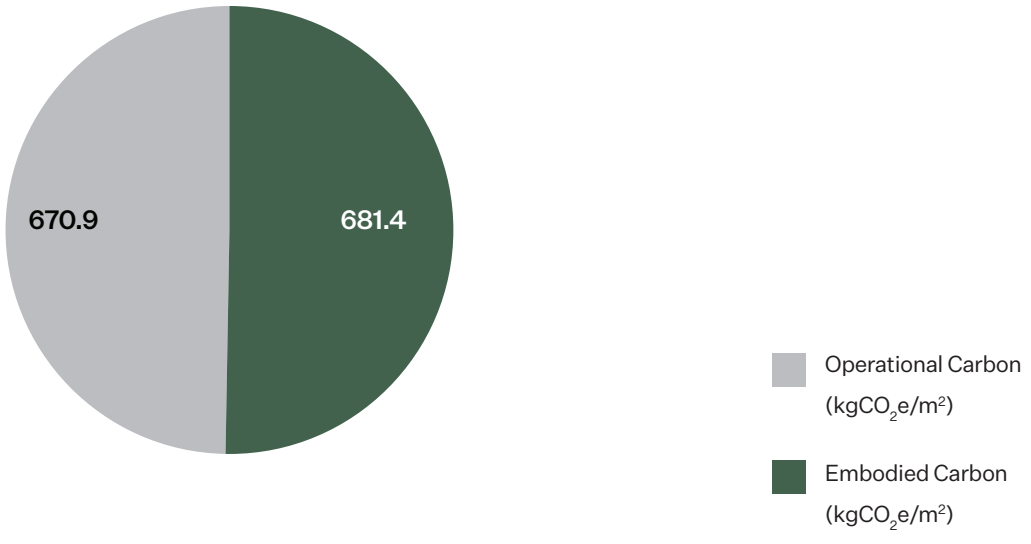


Whole-of-life Carbon Across Building Life Cycle

Option A - Repair

The following charts show the amount of carbon released at each building life cycle stage. Climate change occurs as a result of accumulated greenhouse gases in the atmosphere so limiting upfront carbon is an important strategy to delaying emissions and resulting climate impacts.

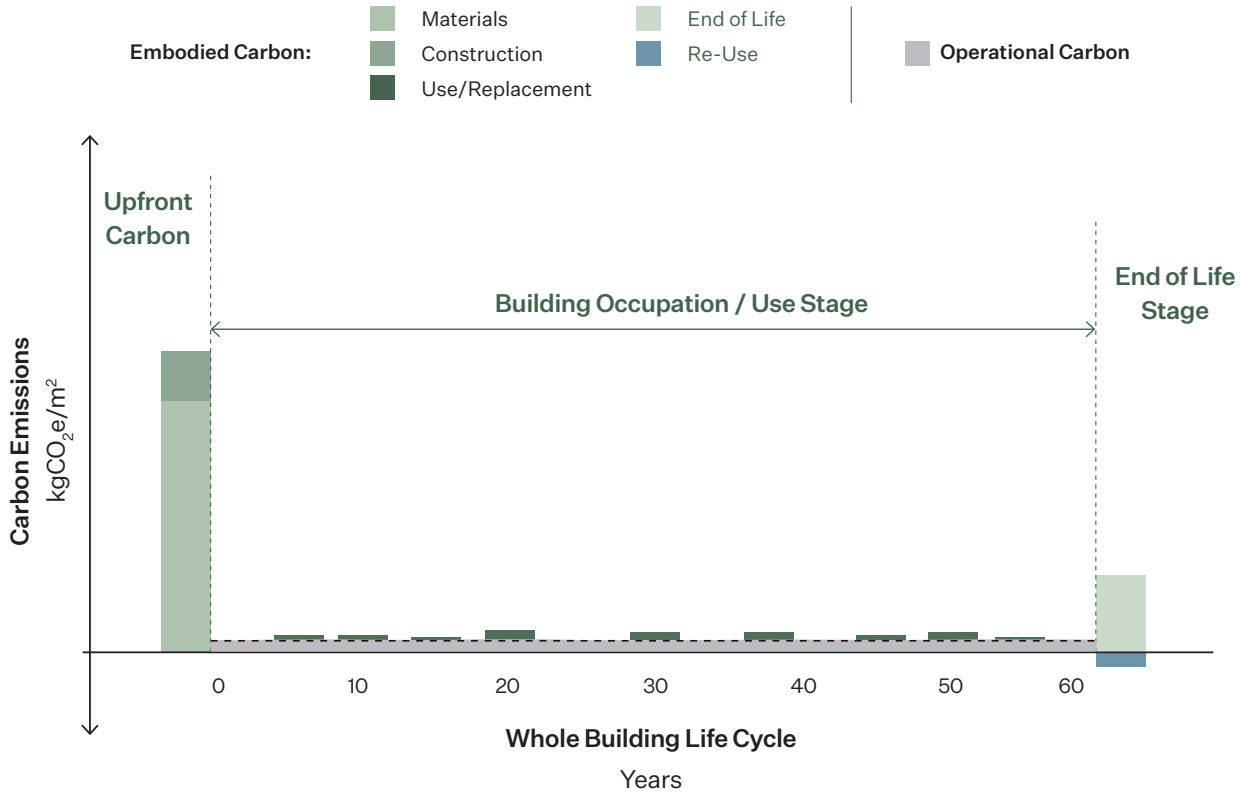


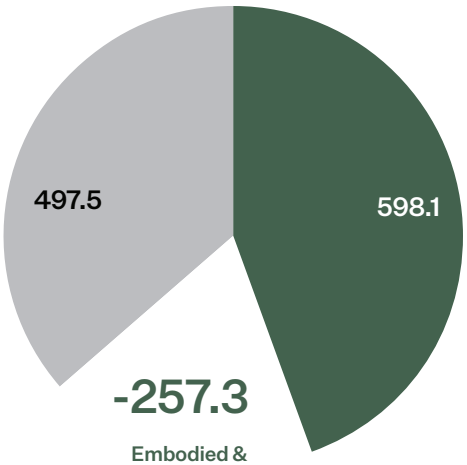


Whole-of-life Carbon Across Building Life Cycle

Option B - Green Rebuild

While Option B Green Rebuild has greater emissions at end of life stage it most importantly has the lowest upfront emissions and total life cycle emissions, thus having lower climate impact than Option A Repair.





1. **Structure**
   - Timber Superstructure
2. **Product Substitution**
   - Low Carbon Concrete
3. **Product Substitution**
   - Low Carbon Carpet

Operational Carbon ($kgCO_2e/m^2$)

Embodied Carbon ($kgCO_2e/m^2$)

Christchurch South Library

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Christchurch South Library
LCA Carbon Results

Jasmax has completed a whole-of-life carbon analysis for the repair of Christchurch South Library. Two options were analysed.

Option A Repair proposes a typical steel and concrete repair resulting in large emissions during the A1-A3 Product Stage 427kgCO2e/m2 . The "make good" repair approach also results in relatively high operational carbon 670.9kgCO2e/m2 as a result of still having to air-condition the library, albeit with a better performing fan coil unit system. Total life cycle carbon is approx. 1352.3kgCO2e/m2

The Option B Green Rebuild utilises a LVL timber superstructure, greatly reducing embodied carbon emissions through reduced production impacts and sequestered carbon. Embodied carbon is lowered further by 28.6kgCO2e/m2 and 37.2kgCO2e/m2 respectively via lower carbon concrete and carpet products. Total embodied carbon is lowered by (681.4kgCO2e/m2) to (598.1kgCO2e/m2). There is also a significant reduction in operational carbon from (670.9kgCO2e/m2) to (497.5kgCO2e/m2) as the redesign provides an opportunity to incorporate passive solar design principles and a mixed mode ventilation strategy with perimeter radiant heating. Total life cycle carbon emissions are around (1,095.6kgCO2e/m2), approximately 257.3kgCO2e/m2 less than Option A, resulting in lower impacts on climate.

This study has focused primarily on life cycle carbon emissions, and it shows how a green rebuild can result in lower life cycle emissions than a conventional repair. Other factors such as capex, opex, time to build etc must also be considered. From a sustainability perspective, both options have also been assessed against the Ōtautahi Climate Resilience Strategy (pages to follow). The Option A repair "business as usual" approach tends to also perform poorly against this framework.

Christchurch City Council
Climate Resilience Strategy

Christchurch City Council (CCC) recognises climate change as the biggest challenge of our time. In 2019, it declared a Climate and Ecological Emergency and adopted ambitious greenhouse gas emissions (GHG) targets to achieve net zero greenhouse emissions by 2045, and to halve emissions by 2030, from 2016-17 levels.

The resulting Ōtautahi Climate Resilience Strategy provides a framework for addressing climate change challenges and opportunities. The strategy aligns to the United Nations Sustainable Development Goals (UN SDGs), which can also improve the wider wellbeing of our communities. Building rating tools such as Green Star are also now increasingly responding directly to the UN SDGs so they provide a useful frame of reference.

The Climate Resilience Strategy set's four Climate Goals for Christchurch, supported by ten Climate Action Programmes on specific areas, to help achieve the climate goals. The primary opportunities for both library options are summarised below.

Goals	Background	Option A - Repair	Option B – Green Rebuild
1. Net zero emissions Christchurch	Target net zero GHG emissions by 2045, and a 50% reduction from the baseline financial year 2016/2017 levels, by 2030. Target net carbon neutral for Council's operations by 2030. This will require Council to track and monitor progress, and demonstrate leadership and commitment as an organisation towards climate action.	The repair option largely replicates the original building construction. Lower carbon options of steel, concrete etc can be substituted but there is little opportunity for substantial improvements to life cycle emissions and few opportunities to illustrate the Strategy "signs of success".	The rebuild can be used as an example of sustainable low carbon design and provide valuable cost, energy, water and carbon benchmarking data for future projects in Ōtautahi and Aotearoa. It responds more directly to the expressed need to address embodied carbon, especially in the production of the materials such as concrete and steel, and transitions towards more sustainable materials and construction techniques. There is also greater opportunity to display the following Strategy "signs of success": Climate Leadership, demonstrating how to build more sustainably with lower emissions in a more climate adaptive way. Action pathways - educating the community (users) about the need to reduce emissions and develop pathways to achieving a net zero Christchurch. Low emission transport can also be supported through better integration of end of trip amenity and support for low carbon modes of transport.

Christchurch City Council Climate Change Goals

Goals	Background	Option A - Repair	Option B – Green Rebuild
2. We understand and are preparing for the ongoing impacts of climate change	Climate change will affect everyone and communities need to adapt. Resilient communities need to be aware of how and where they will be impacted by climate change and then to plan infrastructure accordingly.	The repair option represents a business-as-usual approach that is limited by the existing structural setout. For example, there are risks to comfort and sustainability as building services solutions are impacted by height and weight limitations and there is no opportunity for underfloor heating.	The rebuild illustrates Strategy "signs of success" including Resilient Communities, where the project demonstrates understanding of, and preparation for, current and future impacts of climate change. For example, higher floor to ceiling, passive solar design features and mixed mode ventilation can be used to mitigate higher ambient temperatures in future.
3. We have a just transition to an innovative low-emission economy	The move to a low-emission and more environmentally sustainable economy creates new opportunities, businesses, and jobs. Innovative solutions to climate change contribute to workforce transition away from resource intensive industries. Education, training and an openness towards innovation will be vital to ensure all of the community benefits and Christchurch continues to be a city of opportunity for all.	Strong communities can be supported where the library forms a community hub. The library also has inherent opportunities for signs of success including planning together, lifetime learning and upskilling. However, the repair option represents a business-as-usual approach with little innovation from a climate change perspective.	The rebuild also supports strong communities through its hub function. Other innovative solutions to climate change can be shaped around Strategy signs of success. Lifelong learning and reskilling – for example, the rebuild can be an education tool where occupants experience innovative design both passively and actively (eg. energy use displays, passive solar controls), while enabling potential through equitable access to education, training, and lifelong learning.
4. We are guardians of our natural environment and taonga 	By restoring the natural environment, we will reduce the impacts of climate change, as trees, soils, and wetlands absorb large amounts of carbon dioxide that would otherwise further heat the atmosphere.	Both projects offer similar potential to incorporate the Strategy signs of success. In particular, site design can enhance valuing nature, restoring ecosystems, contributing to the garden city and natural carbon absorption.	The rebuild also offers opportunities, and tells a story of, natural carbon absorption through its timber structure and material selection.

Christchurch City Council Climate Action Programmes

Programmes	Background	Option A - Repair	Option B – Green Rebuild
3: Proactive climate planning with communities	Supporting communities to plan for and adapt to future climate change challenges empowers them to use their own knowledge and social networks to take action. Change is an opportunity for innovation, and for our communities to have a say in shaping their future. Council will help communities thrive by identifying shared values, and the local changes we need to make together. Key focus areas include: Provide climate education in schools and promote youth voices and leadership. Develop holistic, long-term responses to natural hazards and climate change with community and all Council activity areas.	The repair will provide an opportunity for the community to incorporate innovative learning spaces. The repair option is an example of how a building needs to be adapted for natural hazards. There will be very little existing building fabric remaining and therefore it will not exemplify adaptive reuse of building stock as a means of reducing carbon emissions.	The green rebuild will provide an opportunity for the community to incorporate innovative learning spaces. The rebuild can be used as an education tool to illustrate broader climate change issues and how we can respond through built form. The project is in itself a holistic, long term response to natural hazards and climate change with community.
4: Adapting and greening infrastructure	Buildings and infrastructure are increasingly under threat to the impacts of climate change, impacting quality of life and risking one of the biggest investments for Christchurch. Any new infrastructure will utilise low-energy solutions, and be designed to minimise the amount of embodied carbon in the materials used so it is as efficient and sustainable as possible. Green infrastructure (such as swales, rain gardens, sand dunes, street trees, natural waterways, plants, stormwater retention basins, and permeable paved paths) helps manage flooding, storm surges, and erosion along our coasts and hillsides, and cleans rivers and air. Council will continue to incorporate greener infrastructure to respond to our changing climate, lower our infrastructure's carbon footprint, and allow nature to thrive while supporting our wellbeing.	The repair option represents a business-as-usual approach that is limited by the existing structural setout. For example, there are risks to comfort and sustainability as building services solutions are impacted by height and weight limitations.	The rebuild illustrates Strategy "signs of success" including Resilient Communities, where the project demonstrates understanding of, and preparation for, current and future impacts of climate change. For example, higher floor to ceiling, passive solar design features and mixed mode ventilation can be used to mitigate higher ambient temperatures in future.

Christchurch City Council Climate Action Programmes

Programmes	Background	Option A - Repair	Option B – Green Rebuild
5: Carbon removal and natural restoration	Our biodiversity and ecosystems will be increasingly threatened by climate change. By protecting and expanding natural areas in our district, we will help capture carbon dioxide, while benefiting natural ecosystems and biodiversity. While native forests provide many biodiversity benefits, some exotic plantations will still be required to help quickly capture carbon and provide timber for low carbon building materials.	The repair option represents a business-as-usual approach that relies on carbon offsetting.	The rebuild uses sustainably harvested timber that directly contributes economically to this action programme, while also promoting use of timber in buildings over more carbon intensive materials.
6: Economic transformation and innovation	To reach our goal of zero net greenhouse gas emissions, we need innovative climate solutions and an economic transformation to move away from resource intensive, high emission industries. A move towards low-emission, high value local businesses will create significant new opportunities for entrepreneurs, social enterprises and agile businesses.	The repair option represents a business-as-usual approach.	The rebuild is based around low carbon materials (eg. mass timber, recycled steel, low carbon concrete), technologies and construction techniques, directly supporting development of these industries.
7: Low-emission transport system	Road transport is the biggest single contributor to Christchurch's emission footprint. The transport sector contributes 54% of Christchurch GHG emissions with 36% coming from road transport. Reducing transport emissions is essential to achieve emissions targets. Christchurch has high levels of private car use and low levels of public transport use compared to Auckland or Wellington.	Both library options have opportunities to promote lower carbon, alternative modes of active and public transport. The site can encourage more walkable neighbourhoods, where short trips to services can be taken on foot or by bike/e-scooter to further reduce transport-related emissions. EV infrastructure and electric car sharing could also be considered.	The rebuild has greater design scope so can more effectively incorporate a wider range of solutions such as end of trip facilities.

Christchurch City Council Climate Action Programmes

Programmes	Background	Option A - Repair	Option B – Green Rebuild
8: Energy efficient homes and buildings.	Homes, buildings, businesses and infrastructure consume large amounts of resources such as energy, water and materials to build, operate, maintain, repair and replace. We will design our homes, businesses, buildings, and infrastructure to be more energy and resource efficient, and powered by affordable, renewable energy. This will lower emissions, reduce costs, deliver healthier buildings, create businesses that are more efficient and conserve our precious resources.	The repair option represents a business-as-usual approach.	The rebuild directly responds to this action programme, including the following Strategy focus areas. Increase business resource efficiency (low energy and water usage) and reduce greenhouse gas emissions. Maximise resource efficiency in our existing infrastructure and facilities, and minimise embodied carbon when designing and building new facilities and infrastructure. Investigate the use of wind and solar energy for individual houses, small communities, kāinga nohoanga, marae and businesses.
9: Towards zero waste	About 9% of Christchurch's greenhouse gas emissions come from our waste. However, approximately 40% of waste currently going to landfill in Christchurch has the potential to be recycled or composted, using the services currently available. We will move towards a zero waste, circular economy, enabling resources to be reused or recycled, supporting new jobs and innovation, and creating a low-emission, resilient and more sustainable economy.	Libraries inherently promote a "sharing economy" and both library options will be designed to minimise waste where possible, moving towards a zero waste, circular economy.	The rebuild has greater design scope to include additional waste minimisation strategies (eg. modularity) and circular economy principles including design for disassembly and reuse.
10: Sustainable food system	The changing climate will threaten the resilience of our food supply. In addition, the production, distribution, consumption and disposal of food generates significant greenhouse gas emissions. Changing the way we grow and consume food can create a more resource efficient, low-emission and resilient local food economy.	Both library options have opportunity to encourage urban farming and community gardening through inclusion on site.	

References: Christchurch City Council (2021), Kia tūroa te Ao - Ōtautahi Christchurch Climate Resilience Strategy. Pp1-2

Thank you.

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Prepared for
Christchurch City Council
Co No.: N/A

AECOM

South Christchurch Library Repair and Rescoping

Cost Report

27-Apr-2022

aecom.com

Delivering a better world

South Christchurch Library Repair and Rescoping

Cost Report

Client: Christchurch City Council

Co No.: N/A

Prepared by

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AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 and ISO45001.

Quality Information

Document South Christchurch Library Repair and Rescoping

Ref 60672875

Date 27-Apr-2022

Prepared by Ross Davidson

Revision History

Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
2	27-Apr-2022	Final Cost Report	Ross Davidson Technical Director	[redacted]

Table of Contents

1.0 Basis of Cost Report

This Cost Report has been derived from:

- Jasmax Architects EQ Refurbishment Report dated 21 January 2022
- Lewis Bradford Consulting Engineers Concept Design Report - Seismic Strengthening dated December 2021
- Enlightened Fire Solutions Means of Escape Preliminary Fire Report dated 20 January 2022
- Mainzeal Construction Tender Trade Summary for original South Christchurch Library project dated August 2002
- AECOM benchmarking data analysed from current and recently completed Library projects including original South Christchurch Library

2.0 Benchmarking

AECOM (including its legacy companies Davis Langdon and Shipston Davies) has cost managed numerous Library facilities over the past 20 years including the original South Christchurch Library project.

Specifically, we have analysed the cost data from the following list of Library projects to derive a likely construction cost and overall project cost for the replacement or repair of the South Christchurch Library:

- Ashburton Community Library and Civic Offices (current)
- Te Ara Atea Rolleston Library (completed 2021)
- Sumner Library and Community Centre
- Kaiapoi Library
- Halswell Library
- Lincoln Library
- Upper Riccarton Library
- South Christchurch Library

Our benchmarked data from these projects shows that it would likely cost circa $6,000 - $6,500 per square metre of gross floor area to construct the Building Works component of a new single storey suburban Library building of same size and quality today.

3.0 Option A – Comprehensive Repair and Refurbishment of the Existing Building (minimal retention of existing)

AECOM's preliminary assessment of likely cost for Option A, given very little of the existing building can be retained, is **$26,634,000** calculated as follows:

Trade / Cost Centre	**Option A Cost**	%	$/m² rate
Preliminary & General	1,980,000	13.0%	804
Excavation	0	0.0%	0
Concrete Work	1,165,000	7.7%	473
Precast Concrete Work	21,000	0.1%	8
Reinforcing Steel	186,000	1.2%	76
Structural Steelwork	2,216,000	14.6%	900
Stone Masonry	33,000	0.2%	14
Metalwork	54,000	0.4%	22
Windows & Exterior Doors	1,986,000	13.1%	807
Carpentry	1,212,000	8.0%	492
Joinery Doors & Fittings	358,000	2.4%	145
Roof Coverings	259,000	1.7%	105
Plumbing	222,000	1.5%	90
Drainage	93,000	0.6%	38
Mechanical Services	1,857,000	12.2%	754
Fire Protection Services	246,000	1.6%	100
Electrical Services	1,309,000	8.6%	532
Plasterboard Linings	699,000	4.6%	284
Grid Suspended Ceilings	360,000	2.4%	146
Tiling	395,000	2.6%	161
Floor Coverings	308,000	2.0%	125
Painting	235,000	1.5%	95
Glazing	7,000	0.0%	3
Total Building Works Cost:	**15,201,000**	**100.0%**	**6,174**
Demolish Existing Building	440,000		
External Works	300,000		
	15,941,000		
Construction Contingency (10%)	1,594,000		
Total Construction Cost:	**17,535,000**		
Professional Fees, Internal Costs & Consents	3,750,000		
Library Fitout	1,000,000		
Service Centre Fitout	250,000		
Miscellaneous Expenses	125,000		
Relocation & Temporary Accommodation Costs	500,000		
	23,160,000		
Escalation (based on Early 2024 Construction Start & Late 2025 Completion) (15%)	3,474,000		
Total Project Cost:	**$26,634,000**		
Gross Floor Area (GFA):	2462		

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4.0 Option B – A New Building Slab and Superstructure of the Same Footprint on Top of the Existing Concrete Slab and Foundations (completely rebuilt)

AECOM's preliminary assessment of likely cost for Option B is **$24,861,000** calculated as follows:

Trade / Cost Centre	**Option B Cost**	%	$/m^2 rate
Preliminary & General	1,800,000	12.0%	731
Excavation	0	0.0%	0
Concrete Work	971,000	6.5%	394
Precast Concrete Work	209,000	1.4%	85
Reinforcing Steel	186,000	1.2%	76
Structural Steelwork	1,847,000	12.4%	750
Stone Masonry	333,000	2.2%	135
Metalwork	54,000	0.4%	22
Windows & Exterior Doors	1,986,000	13.3%	807
Carpentry	1,212,000	8.1%	492
Joinery Doors & Fittings	358,000	2.4%	145
Roof Coverings	259,000	1.7%	105
Plumbing	222,000	1.5%	90
Drainage	93,000	0.6%	38
Mechanical Services	1,857,000	12.4%	754
Fire Protection Services	246,000	1.6%	100
Electrical Services	1,309,000	8.8%	532
Plasterboard Linings	699,000	4.7%	284
Grid Suspended Ceilings	360,000	2.4%	146
Tiling	395,000	2.6%	161
Floor Coverings	308,000	2.1%	125
Painting	235,000	1.6%	95
Glazing	7,000	0.0%	3
Total Building Works Cost:	**14,946,000**	**100.0%**	**6,070**
Demolish Existing Building	400,000		
External Works	600,000		
	15,946,000		
Construction Contingency (5%)	797,000		
Total Construction Cost:	**16,743,000**		
Professional Fees, Internal Costs & Consents	3,000,000		
Library Fitout	1,000,000		
Service Centre Fitout	250,000		
Miscellaneous Expenses	125,000		
Relocation & Temporary Accommodation Costs	500,000		
	21,618,000		
Escalation (based on Early 2024 Construction Start & Late 2025 Completion) (15%)	3,243,000		
Total Project Cost:	**$24,861,000**		
Gross Floor Area (GFA):	2,462		

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5.0 Commentary

1. Cost estimates have been developed for both a repair and new build on the same footprint
2. These costs are similar because the extent of fabric replacement required in the repair is like a full replacement
3. The cost of repair exceeds the cost of a new build because of the complexity and inefficiency of construction within an existing building
4. The new build cost estimate has utilised the original South Christchurch Library tendered trade breakdown, escalated to today's dollars
5. The repair cost estimate has been calculated by adjusting specific new build line items for likely repair differences

6.0 Exclusions

1. Separate Project Contingency (if desired)
2. GST

Item 11

11. Sustainability Fund: Grant Allocation

Reference / Te Tohutoro: 22/426051

Report of / Te Pou Matua: Tony Moore, Climate Resilience Lead, Tony.Moore@ccc.govt.nz

General Manager / Pouwhakarae: Jane Davis, General Manager Infrastructure, Planning & Regulatory Services, jane.davis@ccc.govt.nz

1. Purpose of the Report Te Pūtake Pūrongo

1.1 The purpose of this report is to enable the Committee to consider an application to the 2021/22 Sustainability Fund. The application is for a time critical project that aligns strongly with the Fund's objectives, received outside of a funding round.

1.2 The decisions in this report are of low significance in relation to the Christchurch City Council's Significance and Engagement Policy because they are consistent with approved delegations, the Fund's Terms of Reference, and support Council's established climate change objectives.

2. Officer Recommendations Ngā Tūtohu

That the Sustainability and Community Resilience Committee:

1. Approve a grant of $49,763 from the 2021/22 Sustainability Fund to Eco-Bulb Limited for the delivery of the Christchurch Home Energy Saver project.
2. Relying on clause 32 of Schedule 7 of the Local Government Act 2002 and for the purposes of efficiency and effectiveness in the conduct of the Committee's business, and any other applicable statutory authority,
    a. Revoke the delegation to the Head of Sustainable City Growth and Development in relation to the Sustainability Fund which is in Part B, Subpart 2 of the Delegations Register the authority to determine and carry out the administration requirements for this Fund, and to enter into Funding Agreements with Grant recipients, and
    b. Delegate to both the Head of Strategic Policy and Resilience and Head of Planning and Consents in relation to the Sustainability Fund which is in Part B, Subpart 2 of the Delegations Register the authority to determine and carry out the administration requirements for this Fund, and to enter into Funding Agreements with Grant recipients.

3. Reason for Report Recommendations Ngā Take mō te Whakatau

3.1 The Council has received an application to the Sustainability Fund, which was established to support community action on climate change. Applications are assessed against the Fund's Terms of Reference, evaluation criteria and a rationale for the recommendations contained in this report is provided in **Attachment 1**.

3.2 This report brings to the Committee a proposal that is well aligned to the purpose of the Fund and time sensitive to allow commencement of the project prior to a central government fund closing in July 2022. Should this Funding recommendation be accepted, a greater level of support could become available from the Ministry of Business and Employment's Energy's $17 million Hardship Programme to help Christchurch residents in this currently challenging economic climate.

3.3 Relying on clause 32 of Schedule 7 of the Local Government Act 2022 and for the purposes of efficiency and effectiveness, a change to the delegation for fund administration is recommended. Part B, Subpart 2 of the Delegations Register sets out the authority to determine and carry out administration of the Fund, and to enter into Funding Agreements. Delegation to the Head of Strategic Policy and Resilience will align administration with the group responsible for leading resilience work following a recent organisational restructure.

4. Alternative Options Considered Ētahi atu Kōwhiringa

4.1 The Sustainability and Community Resilience Committee have delegated authority for the Sustainability Fund and can determine if an applicant should receive funding and the amount allocated. The Committee could decide not to fund this project, or to delay a funding decision until the next scheduled decision date for this Fund (February 2023). This would not meet the time constraints of the pilot project for which funding is sought or support application in July 2022 for central government funding to assist Christchurch households.

5. Detail Te Whakamahuki

5.1 In June 2021 the Council approved the *Kia tūroa te ao, Ōtautahi Climate Resilience Strategy 2021* containing targets, goals, principles and programmes related to climate change. The purpose of the Sustainability Fund is to encourage community, school, social enterprise or business projects that help meet these climate objectives.

5.2 The Terms Of Reference for the Sustainability Fund including: the purpose, climate change objectives and targets, evaluation criteria and a list of what is not generally funded are provided on the Council website's Sustainability Fund page. Details of previously funded projects are also listed on this webpage.

5.3 Applications to the Sustainability Fund are generally considered within funding rounds to support efficiencies in administration and decision making. The Fund terms of reference and process do not preclude consideration of applications outside of funding rounds.

5.4 The balance of the 2021/22 Sustainability Fund is below.

Total budget available 2021/22	Total requested	Staff recommendation	Balance if staff recommendation is adopted
$101,454	$49,763	$49,763	$51,691

5.5 To support Council decision making, staff have evaluated the proposal against the Terms of Reference and evaluation criteria for the Fund. The evaluation criteria are: Relevance, Benefit, Legacy, Deliverability and Measurability. The project was prioritised using the following criteria:

5.5.1 **Priority 1** – Outstanding project, highly recommended for funding. Project meets all eligibility criteria and contributes significantly to the purpose and outcomes of the Fund.

5.5.2 **Priority 2** – Worthwhile project, recommended for funding. Meets all eligibility criteria and contributes well to the purpose and outcomes of the Fund, but to a lesser extent than Priority 1 projects.

5.5.3 **Priority 3** – Satisfactory project, not recommended for funding. Meets eligibility criteria, meets most evaluation criteria, and contributes to the fund purpose and outcomes, but to a lesser extent than Priority 2 projects.

5.5.4 **Priority 4** – Unsatisfactory project, not recommended for funding. For example, it may not meet eligibility criteria, insufficient information was provided, other funding sources are more appropriate or the project offers a limited or uncertain benefit.

5.6 A table providing a brief summary of the proposal, the determined priority level, a funding recommendation and a rationale for the recommendation is provided in **Attachment 1**.

Understanding the Home Energy Saver proposal

5.7 Eco-Bulb Limited are a Christchurch business with strong focus on sustainability and climate action and a long relationship with the Council. Energy Mad / Eco-Bulb were one of the key sponsors of the 2008 and 2009 Earth Hour events where energy efficient lightbulbs were given to Christchurch residents to prompt involvement in the event. Earth Hour encouraged residents to switch off lights as a public demonstration of concern about climate change.

5.8 The Home Energy Saver pilot project will:

a) Help 200 low and fixed income households facing energy hardship in Christchurch to save on average $586 in energy bills per year. Resulting in a total saving of $117,000 per year across the 200 homes.

b) Save approximately 690 tonnes of greenhouse gas emissions over ten years through energy savings. The energy used in buildings generates 20% of Christchurch's greenhouse gas emissions.

c) Install approximately 3,320 light emitting diodes (LED bulbs) and approximately 100 water efficient shower heads into homes. The LED bulbs have a life of approximately 10 years resulting in sustained energy savings for households. Experience has shown that many low income households are still using energy inefficient incandescent lightbulbs and many homes have inefficient downlights and would benefit from the conversation to LED bulbs.

d) Provide household energy saving tips and help people select the best energy provider for their household energy use, resulting in substantial energy savings for the household.

e) Collaborate with local community / health agencies and providers to align services and efficiently reach the target households, such as the Mayor's Welfare Fund (approximately 1/3 of this fund is used to pay household electricity bills), Community and Public Health and other providers to low income households. Eco-bulb can work with Māori health and community support agencies (as they have done in the King Country) to further strengthen the benefits for these communities.

f) Aim to complete within three months to gather information that will form the basis of a larger project and subsequent funding applications.

g) Prepare an application to the The Ministry of Business, Innovation and Employment (MBIE) Energy Hardship Programme to expand the service to help more households in Christchurch. MBIE have established a $17 million Energy Hardship Programme with funds going to support people experiencing energy hardship achieve warmer, more energy-efficient homes with lower energy bills. An expanded service could potentially reach approximately 20-30,000 Christchurch households. Applying to the MBIE fund will require Eco-bulb Limited to collaborate with local partners to deliver an expanded service.

5.9 This service is aligned and complementary to the existing services provided in Christchurch. For example none of the services currently provided install subsidised LED lights and water efficient showerheads. The existing services are mostly focused on insulating homes and

energy efficient heating. Government subsidies do not currently apply to light bulbs or shower heads.

5.10 This new service can provide leads to the existing Healthy Homes service established by the Council and Environment Canterbury. The Healthy Home service would benefit from a greater number of households taking-up the advice and financial support services available.

5.11 A short video of the service currently being provided in the King Country can be found at the link below. This 5 minute video shows the provider in action and the positive response from the community. Introducing the King Country Home Energy Saver Project.

6. Policy Framework Implications Ngā Hīraunga ā- Kaupapa here

Strategic Alignment Te Rautaki Tīaroaro

6.1 The decisions in this report support the *Kia tūroa te ao, Ōtautahi Climate Resilience Strategy 2021.*

6.2 This report supports the Council's Long Term Plan (2018 - 2028):

6.2.1 Activity: Community Development and Facilities

- Level of Service: 2.3.1.1 Provide funding for projects and initiatives that build partnerships; resilient, engaged and stronger communities, empowered at a local or community of interest level. - 95% or more of reports presented demonstrate benefits that align to CCC community outcomes, Council's strategic priorities and, where appropriate Community Board plans

Policy Consistency Te Whai Kaupapa here

6.3 The decisions in this report are consistent with the Council's Plans and Policies. Specifically the Climate Resilience Strategy 2021.

Impact on Mana Whenua Ngā Whai Take Mana Whenua

6.4 The Home Energy Saver service resulting from the recommended fund allocation will benefit low and fixed income households. In Christchurch the Māori and Pacific communities are over represented in this type of household. Consequently, this investment can directly benefit Māori and Pacific communities. Eco-bulb can work with Māori health and community support agencies (as they have done in the King Country) to further strengthen the benefits to these communities.

Climate Change Impact Considerations Ngā Whai Whakaaro mā te Āhuarangi

6.5 The decisions in this report are well aligned to the Climate Resilience Strategy. The energy used in homes and buildings generates approximately 20% of Christchurch greenhouse gas emissions. The Home Energy Saver pilot project will help to reduce emissions from 200 Christchurch households saving approximately 690 tonnes of emissions over ten years. Much greater savings will be possible should central government support be received based on this pilot project.

Accessibility Considerations Ngā Whai Whakaaro mā te Hunga Hauā

6.6 The Sustainability Fund is open to everyone through a website and online application form. Council libraries can support individuals with limited access to computers or the internet.

7. Resource Implications Ngā Hīraunga Rauemi

Capex/Opex / Ngā Utu Whakahaere

7.1 The available balance at April 2022 for the 2021/22 Sustainability Fund is $101,454.

7.2 This report is recommending granting $49,763 to the applicant.

7.3 Should these recommendations be approved, $51,691 will remain in the Fund.

8. Legal Implications Ngā Hīraunga ā-Ture

Statutory power to undertake proposals in the report / Te Manatū Whakahaere Kaupapa

8.1 The Sustainability and Community Resilience Committee have delegated authority to allocate grant funding from the Sustainability Fund.

Other Legal Implications / Ētahi atu Hīraunga-ā-Ture

8.2 Relying on clause 32 of Schedule 7 of the Local Government Act 2022 and for the purposes of efficiency and effectiveness, a change to the delegation for fund administration is recommended. Part B, Subpart 2 of the Delegations Register sets out the authority to determine and carry out administration of the Fund, and to enter into Funding Agreements. Delegation to the Head of Strategic Policy and Resilience, and revoking delegation to the Head of Sustainable City Growth and Development, will align administration with the group responsible for leading the Council's resilience work following a recent organisational restructure.

9. Risk Management Implications Ngā Hīraunga Tūraru

9.1 The Grant Funding Agreement that each successful applicant must sign before funds are allocated aims to minimise the risks to the Council. Despite this, some level of risk remains that projects may not proceed, they may fail to deliver outcomes proposed or timeframes may change. Having a good relationship with the applicants and adopting a no-surprises approach helps respond to these risks. A detailed accountability report is required from applicants which also helps manage risk.

Attachments / Ngā Tāpirihanga

No.	Title	Page
A	Home Energy Saver Sustainability Fund Application Summary	195

In addition to the attached documents, the following background information is available:

Document Name	Location / File Link

Confirmation of Statutory Compliance / Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).
(a) This report contains:
  (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
  (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.
(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories / Ngā Kaiwaitohu

Author	Tony Moore - Climate Resilience Lead
Approved By	Ceciel DelaRue - Team Leader Urban Design John Higgins - Head of Planning & Consents Jane Davis - General Manager Infrastructure, Planning & Regulatory Services

SUSTAINABILITY FUND DECISION MATRIX

Organisation Name Ecobulb Limited **Project:** Christchurch Home Energy Saver **Focus area:** Homes and buildings	**Overview** – Project purpose, issue or opportunity. Our project aims to deliver an initial energy saving project to 200 Christchurch homes in energy hardship by the end of June 2022, with: 1. Three locally recruited energy assessors providing Christchurch homes with free personalised 'energy assessments' on how to make their homes more energy efficient and helping them find the lowest cost electricity retail plan for their home. 2. These homes would then receive free Ecobulb LED bulbs and screw in downlights and free energy efficient showerheads (3,320 energy saving devices in total) and other free energy saving actions.	**Council Funding History** NIL **Other Sources of Funding** Because this is a proposed new project, it has not received any funding from the Christchurch City Council. We are requesting $49,763 funding from the Christchurch City Council Sustainability Fund for this project. **How Council funds will be used:** This Council funding will be used to recruit and train three energy assessors, fund 200 energy assessments to homes in energy hardship, provide 3,320 free energy saving devices and project manage, monitor and provide a detailed project report. **Will the project proceed without Council funding:** No	**Budget** **Total Cost:** $83,963 **Requested Amount:** $ 49,763 **Percentage requested:** 59.26% **Budget Summary:** **Income** Ecobulb Management (in-kind) $34,200 **Total Income $34,200** **Expenditure** Staff training and service delivery $25,200 Ecobulb LEDs $15,363 Project management $9,200 **Total Expenditure $49,763**	**Staff Recommendation** **$49,763** That the Sustainability and Community Resilience Committee makes a grant of $49,763 from the 2021/22 Sustainability Fund to Ecobulb Limited towards the Christchurch Home Energy Saver Project. **Rationale for Staff Recommendation** Staff recommend granting Ecobulb Limited $49,763 based on the following rationale: • Strong alignment with the Council's climate change, water conservation and wellbeing objectives. • Cost of living is a significant concern for many households and this project saves energy (greenhouse gases) and costs for households. It has a focus on helping low and fixed income households. • This local pilot aims to gain further support from Central Government for a larger initiative delivering even greater benefits to Christchurch residents. • It is complementary to existing healthy home services and can build on existing partnerships. • An excellent application was provided to the Council and the applicant has proven delivery in the King Country.	**Priority** **1**

Organisation Details: Service Base: 87 Major Aitken Drive, Christchurch Christchurch Legal Status: Limited Liability Company Staff – Paid: Volunteers: Annual Volunteer Hours: Participants: **Measurable** – Proposed ways to measure and report Key measurables for this project include: • The number of homes supported (target 200 homes). • The number of energy efficient LEDs and water efficient shower heads installed (target 3,320 LEDs and 100 shower heads). • Customer satisfaction with the service provided (target 95% customer satisfaction). • The energy savings achieved by the households estimated via EcoBulbs software that captures the potential and actual savings supported by EECA home energy data. • The total value of the energy savings (target $117,000 per year). • The estimated total amount of greenhouse gas emissions saved from the energy efficency improvements (target 690 tonnes CO2-e). • Postive media stories about the project and experiences of the participants. • Additional central government funding secured.	**Relevance** – How the project plans to advance on the Council's climate change objectives. Our project is directly aligned to the Council's climate change objectives. It will deliver approximately 690 tonnes of greenhouse gas emissions from energy savings achieved over the next 10 years. **Benefit** – The nature and scale of the benefits to be delivered. Two hundred low and fixed income households (those facing energy hardship) will directly benefit from this project – receiving FREE home energy advice and the installation of efficient LED lightbulbs and water efficient shower heads (approximately 3,320 LED bulbs and 100 shower heads will be installed). A greater number of households will benefit should central government funding be secured based on this local pilot project. Our Christchurch Home Energy Saver project will deliver $117,000 estimated annual electricity bill savings for 200 Christchurch homes in energy hardship. The average home would save an estimated $586 per year. This project would also deliver 690 tonnes of estimated carbon dioxide emission reductions over the next 10 years and a 68kW estimated electricity network peak load reduction. Peak load is when New Zealand is using the most costly and often fossil fuel generated electicity. It would also create three temporary energy assessor jobs that pays them well.	**Legacy** – How the project will deliver ongoing or lasting benefits. Our project will continue to deliver the annual energy savings and ongoing carbon dioxide emission reductions outlined above. It also has the potential for New Zealand leadership by rolling this out to up to 20-30,000 Christchurch homes through the quick success of the initial 200 home project that would allow Ecobulb to apply for Ministry of Business, Innovation and Employment's MBIE's June 2022 'energy hardship' funding round and / or for Christchurch City Council 2022 / 2023 funding for this larger project. **Deliverable** – Experience, skills, support and resources secured to deliver the project. This project is shovel ready, where we will have recruited and trained three energy assessors within two weeks of funding approval for this project. We aim to complete this project within three months of funding approval for this project. Reaching the target households will be achieved in partnership with local agencies such as Communtiy Public Health and providers of support to low income households. We have the required experience, skills, support and resources to successfully deliver our project, most recently demonstrated by us recruiting and training 20 locally employed King Country energy assessors who completed free home energy assessments to 2,269 King Country homes in energy hardship over the last 10 months. This provided these homes with 43,269 free Ecobulb LEDs and energy saving shower heads and completed 1,756 free electricity retail plan assessments. One fifth of King Country homes now saving $1.293 million per year on their power bills.

Item 12

12. Suburban Regeneration Biannual Report - October 2021 - March 2022

Reference Te Tohutoro:	22/258125
Report of Te Pou Matua:	Janine Sowerby, Senior Planner – Urban Regeneration, Janine.Sowerby@ccc.govt.nz Dave Little, Manager Residential Red Zone, David.Little@ccc.govt.nz
General Manager Pouwhakarae:	Jane Davis, General Manager Infrastructure, Planning and Regulatory Services, Jane.Davis@ccc.govt.nz

1. Brief Summary

1.1 The purpose of this report is to inform the Committee of implementation progress on suburban regeneration projects over the six month period from 1 October 2021 to 31 March 2022. The report focuses on projects for which there is funding or activity in the current financial year. Staff have been reporting on suburban regeneration implementation progress on a biannual basis since 2015. Urban regeneration projects are supported by a range of Council staff (including Urban Design, Heritage, Community Governance, Transport, Parks and Capital Delivery) and other organisations (including ChristchurchNZ).

1.2 Progress updates of particular note are provided in Section 4 below and greater detail is provided in the attached dashboard (**Attachment A**). This attachment was circulated to all community boards; no feedback was received.

1.3 Following a query by the Committee regarding the implementation status of suburban centre master plan actions during presentation of the last Suburban Regeneration Biannual Report (24 November 2021), staff have amended the format and content of the master plan webpages. The status of each master plan action is now clearly identified. The information includes what has been (or is being) delivered/commenced, by whom and when. Refer master plan webpages link.

2. Officer Recommendations Ngā Tūtohu

That the Sustainability and Community Resilience Committee:

1. Receive the information in the Suburban Regeneration Biannual Report for October 2021 – March 2022.

3. Progress updates

3.1 A selection of progress updates this reporting period is provided below. The attached dashboard has a comprehensive range of other updates and supporting information.

3.2 **Higher priority suburban regeneration locations:**

3.2.1 New Brighton:

- Momentum has continued in the residential development phase of the regeneration project, with phases one and two of the Seaview Development selling out and the sale of three vacant development sites on Beresford Street going unconditional.

3.2.2 Linwood Village/Inner City East:

- Consultation on the Linwood Village Streetscape Plan in February/March 2022 drew 62 submissions, which are informing changes to the design where appropriate.

3.3 **Other master plan locations:**

3.3.1 Main Road:

- Work began on the Moncks Bay parking and bus stop enhancements.

3.3.2 Ferry Road:

- Gateway enhancements (three pou) were installed at each end of Woolston village.
- Physical works are about to start on the combined Ferry Road and Humphreys Drive crossings enhancements and Estuary edge/Coastal Pathway connection.

3.3.3 Sydenham:

- A contract for construction of the Buchan Park remodel has been awarded to Citycare.

3.3.4 Lyttelton:

- Public toilet upgrades are in progress at both the Lyttelton Information Centre and Albion Square.
- Stage 1 implementation of the Naval Point – Te Nukutai o Tapoa Development Plan was completed in late 2021. Stage 2 works are programmed to start early April 2022.

3.4 **Other suburban locations:**

3.4.1 Residential Red Zone (RRZ) Ōtākaro Avon River Corridor (OARC):

- Avondale Bridge and Dallington Landing were completed and opened to the public.
- Much of Dallington Loop and part of Porritt Park were planted in locally sourced native species.
- A total of $38,925 community funding was allocated for projects in the RRZ/OARC.
- The establishment of an OARC co-governance entity with Ngāi Tūāhuriri and the community is reaching its final stages.
- Request for Proposal responses for a design services panel were received from the market. Establishment of the panel will streamline implementation delivery. Projects that will enhance suburban regeneration are the City to Sea Pathway and recreational destination developments, such as landings and park upgrades.
- The RRZ Team has been working with local community groups and residents associations to put together foraging walks in their area in the Red Zone.

3.4.2 Diamond Harbour:

- The Request for Proposal to lease vacant land at 2E Waipapa Ave (the former Godley House site) opened on 7 March 2022 and closes on 7 June 2022.

3.4.3 Little River:

- Construction of the new Little River Playground has been completed.
- Following consultation and design processes for the upgrade of Little River Coronation Library, physical works are anticipated to start early next financial year.

3.5 City-making partners Life in Vacant Spaces and The Green Lab continued supporting projects in the RRZ/OARC, with the former also working in New Brighton, Linwood Village, Lyttelton and Waltham, while the latter worked in St Albans and Phillipstown.

3.6 South Brighton and Linwood Village continued to benefit from Enliven Places Rates Incentive funding. Community projects in Lyttelton, Redwood and Halswell have received Shape your Place Toolkit (SYPT) funding.

3.7 When assets delivered through the Enliven Places Capital Programme are no longer required, they are offered and gifted to other areas of the Council, sister organisations and communities. New Brighton, the Residential Red Zone and Sydenham were gifted assets in this reporting period.

Attachments Ngā Tāpirihanga

No.	Title	Page
A	Sustainability and Community Resilience Committee Suburban Regeneration Biannual Report - October 2021 - March 2022 1 June 2022 Attachment A	200

Additional background information may be noted in the below table:

Document Name	Location / File Link
Not applicable	Not applicable

Confirmation of Statutory Compliance Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).
(a) This report contains:
  (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
  (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.
(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories Ngā Kaiwaitohu

Authors	Janine Sowerby - Senior Planner David Little - Manager Residential Red Zone
Approved By	Carolyn Bonis - Team Leader Urban Regeneration Andrew Rutledge - Head of Parks Jane Davis - General Manager Infrastructure, Planning & Regulatory Services

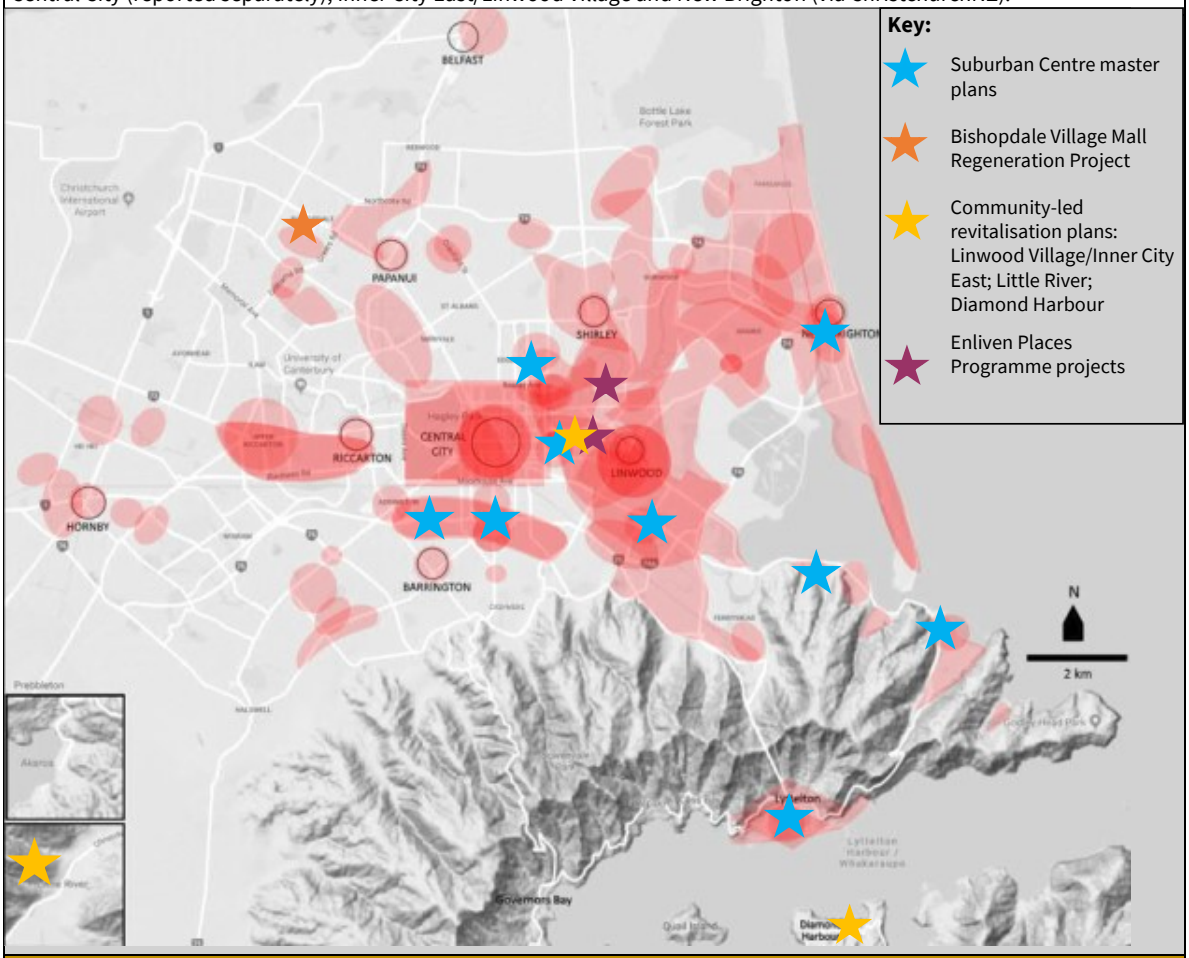
ATTACHMENT A—Suburban Regeneration Biannual Report

Key Updates for the Period 1 October 2021—31 March 2022.

This information highlights the funding and delivery progress of suburban regeneration initiatives over the past six months. ***Information is grouped*** into 'higher priority', 'other master plan' and 'other suburban regeneration' categories, with a focus on place (refer link to Council resolution below). It includes project delivery via the Enliven Places Programme (capital budget for small place-making installations), city-making partner grants, other grants and Shape Your Place Toolkit-related funding. In addition to the information below, ***Council webpages are a source of past Master Plan implementation progress*** (see https://ccc.govt.nz/the-council/plans-strategies-policies-and-bylaws/plans/suburban-centres-master-plans/).
NOTE the final page of this dashboard provides overall ***budget*** allocations for capital projects, grants and incentives.

Background: The Suburban Regeneration Programme has evolved over several years following the 2010/2011 Canterbury Earthquakes. From 2011, the programme predominantly consisted of nine 'Suburban Centre Master Plans' and projects supported through the Enliven Places Programme. Other projects have been added in recent years. In 2016, an 'Urban Regeneration Priorities Heat Map' (below) was prepared to provide the Council with an overview of regeneration issues and drivers. The Heat Map was updated with more recent data at the end of 2019 and, on 10 September 2020, it was endorsed as a key evidential input to determining priority urban regeneration locations and initiatives for the Council (see Council Resolution CNCL/2020/00119 at this link: https://christchurch.infocouncil.biz/Open/2020/09/CNCL_20200910_AGN_4049_AT_WEB.htm). Relative priorities will change over time.
This report is not a complete view of the Council's regeneration progress. Many other projects that contribute to suburban regeneration outcomes will be reported through other channels.

Urban Regeneration Heat Map: The Urban Regeneration Heat Map overlays data on social, economic and environmental factors to provide an overview of regeneration issues and drivers and identify priority urban generation locations. The darker colour-hue, the more complex the regeneration issues. Recent priority work has focused on the Central City (reported separately), Inner City East/Linwood Village and New Brighton (via ChristchurchNZ).



Strategic direction: Suburban regeneration projects contribute to the achievement of the 'Liveable City' Community Outcome: *Sustainable suburban and rural centres*. Suburban and rural centres play an important role in providing accessible services for communities and are a focal point for social and economic activity. Well-designed centres are people focused, providing social hubs which meet the needs of the community.

WORK UNDERWAY IN HIGHER PRIORITY SUBURBAN REGENERATION LOCATIONS

There is no update for Bishopdale.

New Brighton (Master plan adopted 2015)

ChristchurchNZ and the Council continue with a joint approach for the implementation of this master plan.

Master plan capital projects (completed, underway or commencing in FY21/22):

- Actions (A3) New north-south corridor and (B4) New pedestrian links: High level scheme options for the road layout (including new pedestrian links and a bus superstop) have been completed, however further design refinements are paused until the property can be secured**.**
- Action (A4) Brighton Mall upgrade: It is intended that the short-term temporary improvements of seats and cycle stands be installed this year. These assets can be relocated and reused once the Oram Avenue extension is implemented.

Other Council-funded projects:

- ***City-making partners:*** Outside of their Grant Funding Agreement, Life in Vacant Spaces continued to manage Roy Stokes Hall, at the request of ChristchurchNZ. The site is being established as a creative community hub (see Action C3 below).
- ***Enliven Places Rates Incentive****:* The Rates Incentive continued for the Common Ground site, an exterior space for South Brighton residents to come together to enjoy food, music, art and gardening, totalling $885.

Other projects:

- Action (B1) New residential development: Momentum has continued in the residential development phase of the regeneration project. The Seaview Development at the former school site has seen phases one and two sell out and further stages brought forward. The sale of three vacant development sites on Beresford Street has gone unconditional. Once completed, these combined developments will add at least 200 new residents to the area.
- Action (C1) A stronger, active business association: After meetings of ChristchurchNZ with a number of local businesses and an emerging collective, a number of options are being considered in support of the commercial core. Initiatives could include mentoring and workshops for business leaders and/or marketing support and activations to add vibrancy to the area.
- Action (C3) Transitional projects and events: During the summer months support has also been provided to placemaking activities in the area, including working with Watch This Space, New Brighton Outdoor Arts Foundation and Ngāi Tahu to develop unique experiences that encourage locals and visitors to explore New Brighton and the completed regeneration projects. Work has continued with Life in Vacant Spaces to pilot a creative community hub in the Roy Stokes Hall, which saw a second anchor tenant move in early this year. A first report is due which will help determine the next steps and future of the hall.

Roy Stokes Hall.

WORK UNDERWAY IN HIGHER PRIORITY SUBURBAN REGENERATION LOCATIONS (CONT'D)

Linwood Village/Inner City East (Master plan adopted 2012)

Master plan capital projects (completed, underway or commencing in FY21/22):

- Action (C1c) Design and install children's interactive play art in the Doris Lusk Park: Minor design changes are required to meet engineering and play standards. Installation of the artwork is anticipated in early FY23. However, delays may arise due to Covid-19 (manufacturing uncertainty, material supply, and contractor availability).
- Action (S1) Finalise and implement streetscape plan: Consultation was undertaken on the Linwood Village Streetscape Plan between 2 February and 2 March 2022, including a drop-in session at Linwood Arts and Eastside Gallery and through approaching people via a daytime street walk. 62 submissions were received. Review of the consultation feedback is underway and changes to the design are being made where appropriate, ahead of seeking Community Board approval to proceed to detailed design and construction. Construction is anticipated to commence in early 2023.

Draft design concept for Linwood Village Streetscape Plan.

Other Council-funded projects:

- ***City-making partners:*** Life in Vacant Spaces continued their lease agreement at Tiny Shops - a temporary activation that incudes a café and cycle repair. The land that hosts these small buildings is for sale and options for scaling back Tiny Shops is under consideration in anticipation of an eventual sale.
- ***Enliven Places Rates Incentive****:* The Rates Incentive continued for the Tiny Shops site ($1,635).

WORK UNDERWAY IN OTHER MASTER PLAN LOCATIONS

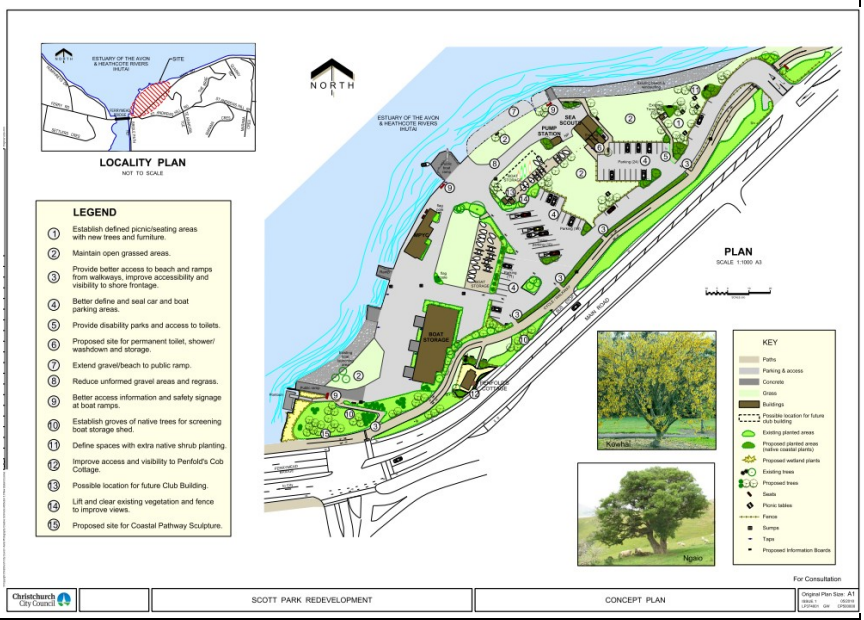
There is no update for the following master plans: Edgeware Village, Selwyn Street Shops and Sumner Village Centre. LTP budgets for all master plans are provided on the final page.

Main Road (Master plan adopted 2014)

Master plan capital projects (completed, underway or commencing in FY21/22):

- Action (M1) Coastal Pathway: Minor work, comprising the laying of a ready lawn in the surf club area and installation of a sprinkler system in the landscaped areas, was completed.
- Action (M7) Moncks Bay parking and bus stop enhancements: This work has been included in the Coastal Pathway (Moncks Bay) project, under construction by Fulton Hogan. It's forecast for completion in late 2023.
- Action (NE2) Scott Park enhancements: A detailed design of the carpark areas has been drafted with consideration to resource consent requirements, the approved concept plan and some consultation with the Mount Pleasant Yacht Club.

  A high level cost estimate for this design has identified that additional funding is required to support the carpark construction works. The resource consent application will be progressed and the detailed design will be finalised while the additional funding is sought.

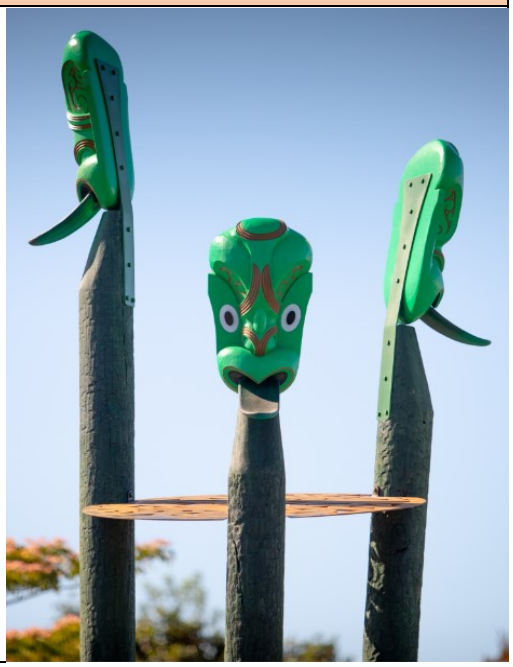


Concept plan for Scott Park redevelopment.

Ferry Road/Woolston Village (Master plan adopted 2014)

Master plan capital projects (completed, underway or commencing in FY21/22):

- Actions (WL3) Ferry Road crossing enhancements, (FM3) Estuary edge/Coastal Pathway connection and (FM4) Humphreys Drive crossings: The design, procurement and construction for these projects were combined into a single contract to create cost efficiencies and maximise asset delivery. Design was completed, the tender awarded and physical works are about to start. Completion is expected in early August 2022.
- Action (WL5) Woolston gateway enhancements: Following the installation of three pou at each end of Woolston village in February, this project is now completed.



The completed pou.

WORK UNDERWAY IN OTHER MASTER PLAN LOCATIONS (CONT'D)

Sydenham (Master Plan adopted 2012)

Master plan capital projects (completed, underway or commencing in FY21/22):

- Action (N3) Buchan park remodel: A contract for the construction works at Buchan Park has gone to tender and been awarded to Citycare. Works will commence early April 2022 and are due for completion before June 2022.

Other Council funded projects:

- ***Enliven Places Capital Programme:*** The property at 441 Colombo St was transferred from this Programme to the Parks Unit. The land was purchased by the programme in 2015 to support the Sydenham Master Plan and has hosted a temporary park and a Llew Summers sculpture. The Parks Unit will deliver a permanent park when LTP funding is available.

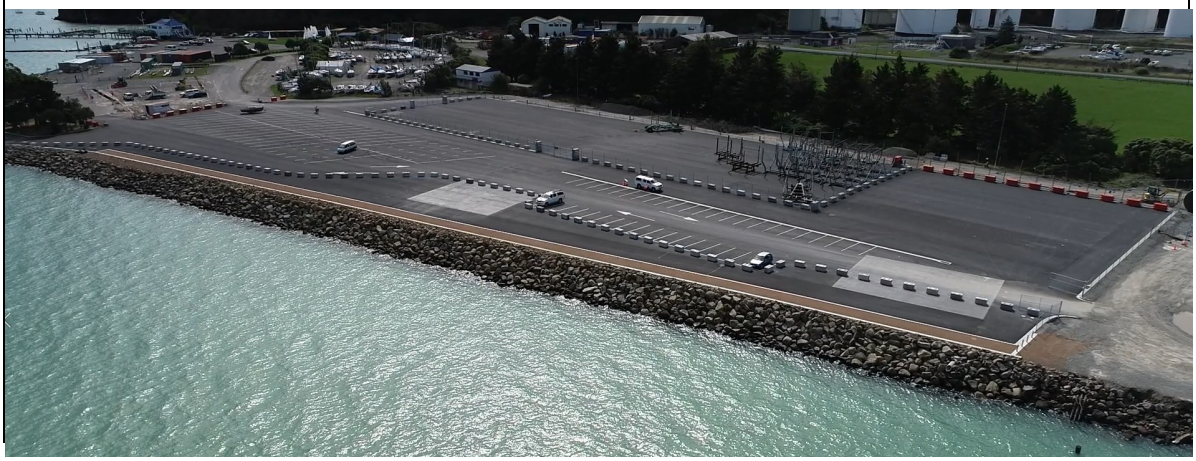
441 Colombo St.

Lyttelton (Master plan adopted 2012)

Master plan capital projects (completed, underway or commencing in FY21/22):

- Action (C4) New public amenities in the town centre: The Council is upgrading public toilets within the town centre. Temporary toilets have been placed next door to the Lyttelton Information Centre and are open to the public. This enabled the information centre public toilets to be partially stripped out. Resource consent has been approved and the Building Consent application is underway. Construction is expected to start in April. Design of the Albion Square public toilet is underway, after which consent applications will be lodged. The aim is to have this project completed before Christmas 2022.
- Action (C6) Naval Point amenity improvements and redevelopment: Stage 1 implementation was completed in late 2021. The aim is to commence Stage 2 works in early April 2022. These include the extension of the water main and the car park area to better align with the redevelopment of the eastern car park for Naval Point. Staff have also been working in partnership with Te Hapū o Ngāti Wheke on the redevelopment of the coastal edge, with features to include seating, planters and a pump track. All elements are being designed to be removable for the 2023 and 2025 Sail GP sailing event to be based on the site. Planning for upgrades to Godley Quay from Te Ana Marina to the south and the Lyttelton Harbour has likewise begun and will include a fibre internet connection, stormwater, kerb and channel and a pedestrian footpath to the new Naval Point works.

Car park improvements at Naval Point.



WORK UNDERWAY IN OTHER MASTER PLAN LOCATIONS (CONT'D)

Lyttelton (cont'd)

Other Council-funded projects:

Lyttelton Master Plan-related:

- Action (B4) Identify and assist retention of remaining built heritage: Work on Kilwinning Lodge at 26 Canterbury St, a Heritage Incentive Grant recipient, has proceeded well and is currently focussed on the external metal cladding and roof.

City-making partners:

- Life in Vacant Spaces continued to support at Collett's Corner - noting the site is for sale.
- The Lyttelton Memorial Orchard, located on Somes Road and Norton Close, has been transferred from LINZ to the Council. The community planted three fruit trees with funding from Te Tira Kāhikuhiku. The site is a space for loved ones to visit two locals who lost their lives in the earthquakes.
- Te Puna Auaha Lyttelton —a community makerspace ('the pool/spring of creativity and innovation') that supports plastics recycling, woodworking and the tool library —has been granted both building and resource consent. tepunaauaha.org
- ***Shape your Place Toolkit funding****:* Project Lyttelton Inc. received $4,300 for traffic management training for two staff, to support the Lyttelton Farmers' Market and other local events.

Other projects:

- Action (M6) Access to and from Lyttelton: A review of Bus Route 28 servicing Lyttelton, to cater for both increased frequency and the inclusion of new or growing destinations, was commenced by Environment Canterbury.
- Action (N6) Local landscape and heritage interpretation: The Lyttelton Historical Museum Society is working with Council staff towards notifying its resource consent application. The rebuild received a $150,000 donation from the Lyttelton Port Company (LPC) in December.
- Action (C2) Investigation for and use of Council property to accommodate community and cultural activities: Possible renovation and use of the Council-owned land and buildings in Donald Street for a commercial venture via an Expressions of Interest process (commenced in early 2021) was determined unfeasible. Staff will present a briefing to the Te Pātaka o Rākaihautū Banks Peninsula Community Board within the next few months to discuss the future of the site.
- Action (C7) Art in public places: A new mural called Te Hau Tāhengihengi - The Calming Wind, designed by Amber Moke in partnership with the students from Te Kura Tuatahi o Ōhinehou, Lyttelton School, was installed along the fence in front of the old Shadbolt House and Royal Hotel sites on the corner of Norwich Quay and Canterbury St just prior to Christmas. It was made possible with support from the Council, Fulton Hogan, LPC, Mitre 10 and Resene.

Te Hau Tāhengihengi - The Calming Wind.

REGENERATION WORK UNDERWAY IN OTHER SUBURBAN LOCATIONS

In the April 2021 Suburban Regeneration Biannual Report to the Sustainability and Community Resilience Committee, staff advised that other potential regeneration projects would be reported on as initiatives arose and resources allowed.

Residential Red Zone (RRZ)/Ōtākaro Avon River Corridor (OARC)

Governance:

Ngāi Tūāhuriri, the community and Christchurch City Council will co-govern the Ōtākaro Avon River Corridor (ŌARC). The establishment of this group is reaching its final stages.

Transformative Land Use Consultative Group:

In February, the Council approved the extension of Te Tira Kāhikuhiku/The Christchurch Red Zones Transformative Land Use Consultative Group (including all membership and independent chair appointments) until the co-governance structure is established.

Implementation planning:

- Request For Proposal responses were received from the market for the establishment of a design services panel that will greatly streamline delivery. The panel is expected to be operational by April.
- The first tranche of briefs was prepared and is ready to go out for design services as soon as the panel is established. These will set up a continuous rolling programme of delivery, starting next summer. The aim of this programme will be to do earthwork components and hardscape each summer, followed by a planting programme each winter. Projects that will enhance suburban regeneration are the City to Sea Pathway and recreational destination developments, such as landings and park upgrades.

Council delivery:

Access:

- 'Avondale' Bridge was completed and opened to the public. 'Medway' Bridge was progressed and opened to the public on 8 April. Construction of 'Snells' Bridge also progressed towards its expected completion and opening in May. Formal naming of all three bridges will be discussed with the co-governance group, once established.

Amenity:

- Dallington Landing was completed and opened to the public. As with the bridges, formal naming will be discussed with the co-governance group, once established.

Dallington Landing

- Much of Dallington Loop, along with part of Porritt Park, was planted in locally sourced native species, in association with community groups (Conservation Volunteers NZ) and corporates.

REGENERATION WORK UNDERWAY IN OTHER SUBURBAN LOCATIONS

Residential Red Zone/Ōtākaro Avon River Corridor (cont'd)

Supporting other initiatives:

The Transformative Land Use Consultative Group (Te Tira Kāhikuhiku) manages a project establishment fund that can be accessed to support ŌARC initiatives. Red Zones Transitional Use Fund In this reporting period:

- Riverlution Community Hub received $18,896 to fund Richmond Community Garden Trust.
- Redzone Drone Racing Incorporated received $1,140 for the 2022 Drone Racing New Zealand Open.
- Avon-Ōtākaro Network received $5,254 for the Children and Young People Engagement and Facilitation at Adventure Ave.
- Avon-Ōtākaro Forest Park received $13,635 for the Development of Brooker Reserve to improve the short and/or long term environmental health of RRZ land.

Staff have also been supporting the following groups with information and advice to progress their initiatives through Te Tira Kāhikuhiku for this time period:

- Avon-Ōtākaro Network.
- Ao Tawhiti — Climate Action Campus.
- Berry Community Garden Richmond Hill.
- CCC Empowerment Project (Salam Garden).
- Eden Project New Zealand — The Eden Project.
- CJMs Events Ltd.

A volunteer group at Brooker Reserve with Avon-Ōtākaro Forest Park.

Approximately 39 leases and licences are/have been operating in the ŌARC, with another 18 operative in the RRZ.

Funding:

LTP funding of $300M+ over ten years has been provided across all Council units.

Other Council-funded projects:

City-making partners:

- The Green Lab continues to support community development at the Riverlution Eco Hub and Richmond Community Garden through installation of their Mobile Workshop, testing the viability of a community workshed/ tool library on site. The Mobile Workshop hosted a Repair Café and several community events. The Green Lab's propeller benches were also gifted to this site.
- Outside their Grant Funding Agreement, Life in Vacant Spaces continued to activate their space East x East, including brokering The Barkery, a café and dog training space to help abandoned dogs find forever homes; and a community garden where a Year 8 pupil grows vegetables for families in need. LiVS won the 'Gracious Navigating of Red Tape' category of Placemaking Aotearoa's The Kumara Awards 2021 for their work satisfying the requirements of central and local government landowners and the aspirations of existing and former residents in the Residential Red Zone.

Enliven Places Capital Programme: The concrete planters from Super Lot Nine in the East Frame's Youth Hub were gifted from the Enliven Places Capital Programme to Richmond Riverlution Community Hub, for the Swanns Road entrance to the Residential Red Zone.

Other projects:

- The Residential Red Zone Team have been working with local community groups and residents associations to put together foraging walks in their area of the Red Zone. This is great for locals who may not have explored this side of their local area, and for wider communities to connect and interact with the space.

REGENERATION WORK UNDERWAY IN OTHER SUBURBAN LOCATIONS

Diamond Harbour community-led plan 'Getting to the Point'

Capital projects (completed, underway or commencing in FY21/22):

- Diamond Harbour Wharf Renewal: Building and Resource Consents were granted. The evaluation of tenders received was completed and negotiation with the preferred tenderer has begun.

Other projects:

- Godley House site redevelopment: The Request For Proposal to lease vacant land at 2E Waipapa Ave (the former Godley House site) opened on 7 March 2022 and closes on 7 June 2022.

Little River community-led plan 'Little River Big Ideas'

Capital projects (completed, underway or commencing in FY21/22):

- Little River Play and Recreation Development: Construction of the new Little River Playground started in mid-February and it opened on 23 March 2022.

The new Little River Playground under construction.

- Little River Coronation Library: Following consultation with community groups, further work on the design of this upgrade is underway, the aim being to elevate the structure to mitigate flooding events. Contractor procurement has progressed as per planned timeframes, with physical works expected to commence in July 2022.

North New Brighton

- ***Enliven Places Capital Programme***: With permanent development beginning in Super Lot 9 in the East Frame's Youth Hub, this programme's climbing boulders Up, Up, Up! were gifted to the Parks Unit for inclusion in the fitness trail at QEII Park.

REGENERATION WORK UNDERWAY IN OTHER SUBURBAN LOCATIONS

Mairehau/St Albans

Other Council-funded projects:

- ***City-making partners:*** The Green Lab finalised plans for a community co-design garden with the neighbourhood trust who run the Whānau Centre in Mairehau. After the initial site fell through in 2021, the neighbourhood trust secured a section of land at the McFaddens Centre in St Albans to develop a community garden. Building will begin in March/ April 2022 (Covid-dependent). The project has sponsorship support from Citycare and the Natural Paint Co.

The Green Lab's Neighbourhood Trust Community Garden located in St Albans.

Phillipstown

Other Council-funded projects:

- ***City-making partners:*** The Green Lab continued its support of the Phillipstown Hub through active participation in Hub governance, including participation in collaborative and strategic modelling for the Hub. That work has been finalised, but associated shared events were cancelled due to Covid.

Waltham

Other Council-funded projects:

- ***City-making partners:*** Life in Vacant Spaces continued to activate the old Seven Oaks school site on Hassals Lane with fifteen participants on site, including artists, writers, other creatives and permaculture. LiVS is exploring a governance structure to support site management. Work is underway to deliver the Enliven Places Project-funded project to enhance the site, however Covid has made completing the works difficult.

LiVS working bee at Seven Oaks site.

REGENERATION WORK UNDERWAY IN OTHER SUBURBAN LOCATIONS
Redwood
Other Council-funded projects: • ***Shape your Place Toolkit funding**:* The Papanui Redwood Association Football Club Inc received $6,700 towards plans by lighting and electrical specialists for the replacement of lights at Owen Mitchell Park on Grimseys Rd.
Halswell
Other Council-funded projects: • ***Shape your Place Toolkit funding**:* The Halswell Community Project received $4,300 towards the engagement of consultants to undertake the technical work needed to apply for a change in use. This was necessary following its takeover of the ownership of the former Halswell Library for use as the new Halswell hub.
Community Board areas - general
Shape your Place Toolkit funding: • Community Boards have allocated SYPT funding in the reporting period as noted above. Waikura Linwood-Central-Heathcote, Waimāero Fendalton-Waimairi-Harewood, Waihoro Spreydon–Cashmere and Waitai Coastal-Burwood Community Boards did not allocate funding.
 *Previous recipient of SYPT funding: The Shirley Road Central's Skip Day on 8 May 2021 engaged with the community concerning future use of the former Shirley Community Centre site at 10 Shirley Rd. The SYPT funding paid for the skip hire.*

FUNDING THE DELIVERY OF SUBURBAN REGENERATION INITIATIVES

Master Plan capital budget allocation:

The master plans comprise a mix of public projects (including Council-led capital projects discussed below) and private projects (for implementation by local communities and business groups). Some master plan capital projects are closely associated with other Council budgets or programmes of work—e.g. major cycleway route development. Future timing, phasing and costings of capital projects are subject to a range of factors, e.g.:

- Annual and Long Term Plan decision-making on the Council's capital programme;
- Detailed design;
- Outcomes from community engagement and consultation;
- Project alignment across the Council's capital programme; and
- Inflation.

The table below shows figures in the 2021-31 Long Term Plan and Council capital budget allocations.

Master plan (adoption)	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
New Brighton (2015)	$2,128k				$1,268k	$4,885k	$7,292k	$987k		
Main Road (2014)	$387k	$104k								$76K
Ferry Road (2014)	$1,361K									$76k
Edgeware Village (2013)	$35K					$565K	$1,589K			
Sumner Village (2013)										$76k
Linwood Village (2012)	$1,470k	$326k								
Selwyn Street (2012)		$708K								
Sydenham (2012)	$109k	$203k								$25K
Lyttelton (2012)	$4,604k	$1,555k	$1,377k	$2,840k	$1,060k	$5,138k	$4,581k	$2,623k	$2,760k	$2,537k

Other regeneration areas capital budget allocation: (ŌARC info is spread across multiple budgets so not shown here)

Bishopdale										$76k
Little River	$225k	$834k								
Diamond Harbour	$1,402k				$36k	$113k	$464k			$1,448k

Other Council funding sources for community-led place-making projects:

Fund	Total available	Total spent
Place Partnership Fund: to support those seeking to strengthen connections between communities and their places and spaces. See https://www.ccc.govt.nz/culture-and-community/community-funding/place-partnership-fund/	FY21/22 $82,000 *(citywide)*	$0 (*suburban*)
Enliven Places grant funding, City-making partners: to support Gap Filler, The Green Lab (previously Greening the Rubble) and Life in Vacant Spaces with a grant of $90,000 (as of FY21/22) for each organisation per year. This supports suburban regeneration outcomes in Christchurch, Community Outcomes and Strategic Priorities (in respect to *Resilient Communities* and *Enabling active and connected communities to own their future* and the Enliven Places Programme aims. (A full update on the city-making partners is outlined in the Central City Biannual Report).	FY21/22 $270,000	N/A Not a contestable fund
Enliven Places Rates Incentive: to support suburban property owners who allow their vacant sites (interior or exterior) to be used for temporary activations. For more information, see https://ccc.govt.nz/rates-incentive	FY21/22 $40,000 (*citywide*)	$5,040 (*suburban*)
Shape Your Place Toolkit funding: to support local community-led place-making projects that require technical or specialist advice and assistance to deliver, as part of Community Boards' Discretionary Response Funds. For more information, see https://ccc.govt.nz/shape-your-place	FY21/22 $30,100	$19,425

Item 13

13. Events and Festivals Fund

Reference Te Tohutoro:	22/204420
Report of Te Pou Matua:	Lucy Blackmore, Manager Events and Arts, lucy.blackmore@ccc.govt.nz Tanya Cokojic, Team Leader Events Partnerships, tanya.cokojic@ccc.govt.nz
General Manager Pouwhakarae:	Mary Richardson, General Manager Citizens & Community, mary.richardson@ccc.govt.nz

1. Purpose of the Report Te Pūtake Pūrongo

1.1 The purpose of this report is for Sustainability and Community Resilience Committee to receive the staff recommendation for the allocation of the Events and Festivals Sponsorship Fund for Financial Year 2022/23 and make a decision to approve or otherwise.

1.2 The report is staff generated.

1.3 The decisions in this report are considered medium significance in relation to the Christchurch City Council's Significance and Engagement Policy. The level of significance was determined by the outcome of the decisions having the potential to generate community interest and the likely impact on, and consequences for, the social and economic wellbeing of the City.

2. Officer Recommendations Ngā Tūtohu

That the Sustainability and Community Resilience Committee:

1. Receive the information in the Events and Festivals Sponsorship Fund Evaluation report as Attachment A.
2. Approve carrying forward the $119,826 remaining in the Events Discretionary Response Fund for inclusion in the 2022/23 Events and Festivals Fund to be allocated.
3. Approve the staff recommendations for the allocation of the Events and Festivals Sponsorship Fund for the 2022/23 financial year as detailed in the Events and Festivals Sponsorship Fund Evaluation attached to this report (Attachment A).
4. Approve the establishment of an Events and Festivals Discretionary Response Fund as per the eligibility criteria attached to this report (Attachment D).
5. Delegate to the Head Recreation Sports and Events authority to approve grants from the Events and Festivals Discretionary Response Fund of up to $15,000 in accordance with the eligibility of the fund.

3. Reason for Report Recommendations Ngā Take mō te Whakatau

3.1 All the events recommended for support meet the Events and Festivals Sponsorship Fund criteria highlighted in the Staff Decision Matrix (Attachment C) and have been prioritised accordingly for support.

3.2 The Events and Festivals Sponsorship Fund for Financial Year 2022/23 was oversubscribed with 43 applications totalling $1,013,923 received. $521,835.00 is on budget to be allocated less $326,000.00 which is already committed on multi-year contracts leaving $195,835 available to allocate this financial year.

3.3 The Special Events Fund, also known as the Discretionary Response Fund currently has $119,826 available to distribute. If the balance is allocated through Events and Festivals 2022/23 it would increase the total available for allocation this financial year through Events and Festivals to $315,661.

4. Alternative Options Considered Ētahi atu Kōwhiringa

4.1 Reject or alter staff recommendations, or refer funding request to another fund for consideration.

4.2 Decline the resolution to carry forward the $119,826 remaining in the Events Discretionary Response Fund for inclusion in the 2022/23 Events and Festivals Fund to be allocated. This would leave a total of $195,835 available to allocate this financial year through Events and Festivals.

5. Detail Te Whakamahuki

Events and Festivals Sponsorship Fund

5.1 The purpose of the Events and Festivals Sponsorship Fund is to provide support for events that enhance regional and local Christchurch as a place to live and visit and to strengthen the distinctive lifestyle, qualities and identity of Christchurch.

5.2 Applications to this fund were received by 3 April 2022. Information provided by the applicants included the event budget and company/organisation details. An event business plan was provided for multi-year applications. Applications have been assessed against the fund criteria (Attachment C), Council strategies and within the total funding available.

5.3 The Financial Year 2022/23 fund has operated under the same process as previous years in collaboration with ChristchurchNZ. Community and regional events were assessed as part of this fund, and major/mega events being assessed under the ChristchurchNZ's funding portfolio.

5.4 There were no applications received to the Events and Festivals Sponsorship Fund that were considered major/mega events.

Timeline for Assessment

5.5 25 February 2022: Industry-wide notification of fund opening dates.

5.6 7 March – 3 April 2022: Fund opened.

5.7 April – May 2022: Applications assessed against the fund criteria and recommendations drafted by Council staff.

5.8 17 May 2022: Applications presented in Sustainability and Community Resilience Committee Briefing.

5.9 1 June 2022: Final allocation decisions made in Sustainability and Community Resilience Committee Meeting.

Events Discretionary Response Fund

5.10 In Financial Year 2020/21 an Event Discretionary Response fund was set up with funds from funded events that cancelled due to Covid-19 related reasons.

5.11 Allocation of this funding was considered under the same process as the Metropolitan Strengthening Communities Discretionary Response Fund (DRF) with requests for amounts under $15,000 being assessed at DRF panel, and amounts over $15,000 taken to Council for consideration.

5.12 In the 2021/22 financial year any returned or unused funds from Events and Festivals Fund due to Covid-19 alert level changed impacting on the ability for events to proceed were pooled into an Events Discretionary Response fund.

5.13 The Discretionary Response Fund currently has $119, 826 available to distribute. Staff recommend the balance of this fund be allocated through Events and Festivals 2022/23 financial year.

5.14 If the balance is allocated through Events and Festivals 2022/23 it would increase the total available for allocation this financial year through Events and Festivals to $315,661.

5.15 In the event of Covid-19 alert level changes impacting on the ability for events to proceed in 2022/23 financial year it is requested that any returned or unused funds from the Events and Festivals Sponsorship Fund be pooled into an Event Discretionary Response Fund to be used in the same way and follow the same process as the previous Events Discretionary Response fund.

6. Policy Framework Implications Ngā Hīraunga ā- Kaupapa here

Strategic Alignment /Te Rautaki Tīaroaro

6.1 This report supports the:

6.1.1 Activity: Recreation, Sport, Community Arts & Events

Level of Service: 2.8.6.1 Support community based organisations to develop, promote and deliver community events and arts in Christchurch - 15,000 hours of staff support provided to 600 community organisations.

Policy Consistency / Te Whai Kaupapa here

6.2 The decisions are consistent with these Council's Plans and Policies:

6.2.1 Events Policy Framework

6.2.2 Community Events Implementation Plan

6.2.3 Toi Ōtautahi – Art and Creativity Strategy

6.2.4 Central City Activation Plan

Impact on Mana Whenua Ngā Whai Take Mana Whenua

6.3 The decision does not involve a significant decision in relation to ancestral land or a body of water or other elements of intrinsic value, therefore this decision does specifically impact Mana Whenua, their culture and traditions.

Climate Change Impact Considerations / Ngā Whai Whakaaro mā te Āhuarangi

6.4 Events that are granted sponsorship support from the Events and Festivals Sponsorship Fund are required to work with Council to implement sustainable waste management initiatives to reduce the impact of the event on the environment where possible and report back on this as part of their post-event report.

Accessibility Considerations / Ngā Whai Whakaaro mā te Hunga Hauā

6.5 Events that receive sponsorship support from the Events and Festivals Sponsorship fund are required to consider accessibility options for their event.

7. Resource Implications Ngā Hīraunga Rauemi

Capex/Opex / Ngā Utu Whakahaere

7.1 Cost to Implement – No additional cost to Council, allocation of the fund is included in existing budgets.

7.2 Maintenance/Ongoing costs – No additional cost to Council.

7.3 Funding Source – Events and Festivals Sponsorship fund.

Other / He mea anō

7.4 Not applicable.

8. Legal Implications Ngā Hīraunga ā-Ture

Statutory power to undertake proposals in the report / Te Manatū Whakahaere Kaupapa

8.1 The Sustainability and Resilience Committee has delegation for the allocation of the Events and Festivals Fund.

Other Legal Implications / Ētahi atu Hīraunga-ā-Ture

8.2 There is no legal context, issue or implication relevant to this decision.

8.3 This report has not been reviewed and approved by the Legal Services Unit.

9. Risk Management Implications Ngā Hīraunga Tūraru

9.1 Insufficient funds to meet the requests may result in negative response from some applicants.

Attachments Ngā Tāpirihanga

No.	Title	Page
A ⇩	Events and Festivals Sponsorship Fund - Evaluation 2022	218
B ⇩	Budget Spreadsheet	221
C ⇩	Staff Decision Matrix Spreadsheet	223
D ⇩	Events & Festivals Discretionary Response Fund - Eligibility	224

Additional background information may be noted in the below table:

Document Name	Location / File Link
Events and Festivals Sponsorship Fund information available on CCC website	Events and Festivals Sponsorship Fund: Christchurch City Council (ccc.govt.nz)

Confirmation of Statutory Compliance Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002). (a) This report contains:

(i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
(ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories Ngā Kaiwaitohu

Authors	Lucy Blackmore - Manager Events and Arts Tanya Cokojic - Team Leader Events Partnerships & Development
Approved By	Nigel Cox - Head of Recreation, Sports & Events Mary Richardson - General Manager Citizens & Community

Key to priority		
	One	Priority for funding. Event meets all eligibility requirements and contributes significantly to the purpose and outcomes of the Fund.
	Two	Recommended for funding. Event meets all eligibility requirements and contributes significantly to the purpose and outcomes of the Fund, but to a lesser extent than Priority 1.
	Three	May be recommended for funding depending on limitiations of fund. Meets all eligibility requirements, and contributes to fund purpose and outcomes, but to a lesser extent than Priority 2.
	Four	Not recommended for funding. The application may not meet eligibility requirements, supply insufficient information, other funding sources are more appropriate or due to limitations of the fund.

Category	Event	Priority	Funding Request	Staff Recommendation with DRF	Staff Recommendation without DRF	Council Decision	Evaluation panel rationale, comments and context	CCC Events Funding received 20/21
Community	**The Christchurch Christmas Show Parade** - *NEW* held at the Christchurch Arena, a reimagined Santa Parade, presented by the Christchurch Children's Christmas Parade Trust. Expertly choreographed in partnership with studnets of NASDA and ARA together with the traditional Santa Parade floats.	One	90,000 (FY22/23) 70,000 (FY23/24) 50,000 (FY24/25)	45,000 (FY22/23) decline (FY23/24) decline (FY24/25)	40,000 (FY22/23) decline (FY23/24) decline (FY24/25)		**Partial funding for one year is recommended** for the new look Santa Parade. The new director has an exciting and bold direction for the Santa Parade, one that has a plan for financial self-sufficiency. Given the potential for income generation, support is recommended for one year to determine how the event runs in its first year and level of future funding support required.	Metropolitan DRF Fund $15,000- CANCELLED
	Open Christchurch - celebrating local architecture by highlighting and inviting people to view buildings that may not typically be accessible to the public	One	45,000	35,000	31,000		**Partial funding is recommended** for this popular annual event that showcases our local architecture and provides behind the scenes looks at locations typically inaccessible to the public. This event incoporates a strong mana whenua programme. The organisers have a reputation for delivering compelling events related to the built environment. The inaugural 2020 Open Christchurch event was a success and met set sponsorship targets. There are a small number of ticketed tours as part of the programme. The event has limited opportunity for generating revenue and will not be held without Council funding support.	Events and Festivals Fund $35,000
	Christmas in the City - a santa parade along the Avon river with entertainment on three main stages - the Bridge of Remembrance, The Crossing and New Regent Street, expanding on the scope and footprint from previous years.	One	9,000	9,000	9,000		**Full funding is recommended** for this annual event that brings thousands of famillies into the Central City. This year they are looking to expand their reach through the city including stages in New Regent Street, The Crossing and Bridge of Remembrance. This event creates a festive feel through the city during Christmas.	NA
	Christchurch Brick Show - held at Christchurch Arena, a popular winter event featuring imaginitive scultpures and structres created from lego	Two	17,500	10,000	7,000		**Partial funding is recommended** for this popular family-focussed event. This event is extremely well attended, has very accessible ticket prices and compliments the winter event programme well.	Special Events Fund $7500
	Illuminate Light and Sound - *NEW* held at Ferrymead Heritage Park,	Three	40,000 (FY 22/23) 20,000 (FY23/24) 10,000 (FY24/25)	10,000 (FY 22/23) decline (FY23/24) decline (FY24/25)	decline (FY 22/23) decline (FY23/24) decline (FY24/25)		**Partial funding for one year is recommended** for this event due to availability of funds. This event was showcased in 2021 - during Covid. It is a ticketed event that proved extremely popular with event attendees and will be a wonderful compliment to the City's winter event programme. This event will not be held without Council funding support, however has demonstrated good income-generating ability.	NA
	Orton Bradley Spring Fair - annual community fair with live music, community stalls and entertainment	Three	8,000	5,000	0		**Partial funding is recommended for this event** which is popular amongst attendees due to availability of funds. The event is well attended and showcases the beautiful surrounds of Orton Bradley Park and Banks Peninsula.	Events and Festivals Fund $5,000, Urban Regen $2,000
	Community Christmas Extravanza -*NEW* held on Nga Puna Wai grounds, performances from cultural groups, a Christmas Grotto, amusement devices, Santa photos and movie night	Four	60,000	0	0		**Funding is not recommended for this event.** The event is proposed to be held at Nga Puna Wai for the duration of December. No other funding or financial support has been sought, and less than 50% of he budget has been secured. The applicant is not known to staff as having experience running a community event. Entry fee may need to be charged if no Council funding support granted.	NA
	Lazy Day Markets - *NEW* held in various vacant spaces in the Central City, a local farmers market showvcasing local produce and other goods	Four	5,000	0	0		**Funding is not recommended for this event** due to low anticipated numbers and that the event is not unique with many farmers markets around the city.	NA
	Festival of Community Sustainability - *NEW* proposed festival showcasing sustainability held in Lyttleton at the time of SailGP	Four	28,800	0	0		**Funding is not recommended for this event** due to ineligibility and insufficient information provided in the application. The organisers do not have an event concept and requested funding for salaries and wages for someone to create an event for them. They will be passed to ChristchurchNZ further discussion as the event is proposed to be held in conjunction with SailGP.	
	A Ferry Merry Christmas - *NEW* held at Ferrymead Heritage Park, Christmas movies and activites, 15m illuminated Christmas tree	Four	50,000	0	0		**Funding is not recommended.** This event is considered a low priority for funding. It has the opportunity to be self-sustaining through reconsideration of entry fee. There are multiple Christmas events taking place in Christchurch that have stronger alignment to the fund criteria. No additional sponsors or supporters have been sought, and less than 50% of the budget has been secured. This event will not be held without Council funding support.	NA
Arts and Culture	**SCAPE Public Art Season** - held through the Central City, an annual contemporary public art festival	One	n/a (FY22/23) 75,000 (FY23/24) 75,000 (FY24/25) 75,000 (FY25/26)	n/a (FY22/23) 35,000 (FY23/24) 35,000 (FY24/25) decline(FY25/26)	n/a (FY22/23) 35,000 (FY23/24) 35,000 (FY24/25) decline(FY25/26)		**Partial funding for two years is recommended** to provide security with the future planning of this event. SCAPE deliver a quality event which will profile local and national artists and contribute to the delivery of Toi Ōtautahi including supporting community programmes for children and for emerging artists. The event will be held later in the year, moving to Nov-Jan which will hopefully provide more stable weather for walking tours, and outdoor activities. Event organisers are looking to focus art works to the 'cultural precinct' rather than spreading them out across the city. The programme is well supported and a popular annual event for the city.	Events and Festivals Fund $35,000
	MidSummer Night's Dream - held at Isaac Theatre Royal an annual Shakespeare production (previously held at Mona Vale)	Two	10,000	10,000	0		**Full funding is recommended** as the event organiser has a proven track record producing Shakespeare, having done so for 16 years at Mona Vale. This event has a focus on youth engagement, subsidised tickets are made available for students unable to access the performance due to financial constraints and two matinees with face value costs for the tickets. In 2021 around 1,000 school children attended the event. The youth-accessible focus of A Midsummer's Night Dream supports key points of Toi Ōtautahi. It is a wholly unique event in the city, addressing the gap of Shakespearean performance.	Events and Festivals Fund $5000
	Ōtautahi Tiny Performance Festival 2022 (Tiny Fest) - annual performance-based arts festival with a unique, marathon-like series of 20 back-to-back performances, panels, and speaking events.	Two	35,531	19,000	9,835		**Partial funding is recommended** for this event as it is a unique festival supporting local and national contemporary dance and development. The Festival is inclusive and supporting of diversity-both in nature of performances and dancers engaged. The Festival contributes to a stronger local creative sector – noting the impact of Covid-19 on live performance in particular. Organisers will create opportunities for audiences to view performances via live stream also. The event organisers work with mana whenua, Māori and Pasifika performers, encourage experimentation and creative exchange, and in doing so, strongly contribute to delivery of the arts strategy, Toi Ōtautahi.	NA
	Asian Arts Festival - *NEW* held at the Arts Centre in Autumn 2023 with a pan-Asian focus	Two	30,000	10,000	5,000		**Partial funding is recommended** to support the implementation of this new event in the city. As a pan-Asian arts festival, it will focus on the artistic perspectives of a number of Asian communities including China, Vietnam, and Japan, Korea, India and Afghanistan; a unique offering in Christchurch. The festival is free to attend and will address more specialised art forms, as opposed to a cultural festival which showcases more mainstream and recognisable art forms. There is confirmed financial support from philanthropic and commercial organisations. This event is unique to Christchurch, evidences joined-up thinking and a good range of commercial and logistical partnerships, and delivers to key points in the CCC's Multicultural Strategy and Toi Ōtautahi.	NA

Category	Event	Priority	Funding Request	Staff Recommendation with DRF	Staff Recommendation without DRF	Council Decision	Evaluation panel rationale, comments and context	CCC Events Funding received 20/21
Arts and Culture	**NZSO 'Immerse' Festival -** held at Isaac Theatre Royal includes an 'open doors' family day to encourage participation and engagment with family groups. Includes NZSO 'storytime', instrument petting zoo, workshps, masterclasses, immersive musical play areas.	Two	20,000	10,000	5,000		**Partial funding is recommended** as the event presents an opportunity for families and communities to experience orchestral music alongside a diverse concert series. This adds to the offering presented by our very active and engaged regional orchestra. The event will provide a free opportunity to experience music, learn about the instruments and hear from musicians. In addition to this there will be evening concerts with high calibre collaborations with notable musicians-Shane Carter and Whirimako Black. The NZSO is funded by the Ministry for Culture and Heritage, with a portion of that funding supporting this concert series.	Special Events Fund $10,000
	Made in Canterbury 2023 - held at Isaac Theatre Royal showcasing local performing arts including live music, comedy, dance, poetry and visual arts	Two	5,000	5,000	5,000		**Full funding is recommended** as this event fills an identified gap in the events market, has potential to create economic benefit for a range of city centre businesses, and supports Toi Ōtautahi strategic priorities to provide opportunities for local practitioners to reach new audiences. The purpose of this festival is to celebrate and support local talent in the Canterbury region. It also aims to create a safe and supportive environment for artists to develop their work. A key aim of this festival is to promote the ITR as a key regional venue for local artists to perform and collaborate. With no mainstream arts festival in Christchurch, Made in Canterbury provides an opportunity for a range of artists to perform and reach new audiences. This festival supports the Isaac Theatre Royal to develop their own programme in lieu of touring shows	Events and Festivals Fund $5000 - CANCELLED
	Matilda The Musical - *NEW* held at the Isaac Theatre Royal and presented by Showbiz, a large theatrical musical production of Matilda	Two	50,000	10,000	5,000		**Partial funding is recommended** for this event as it is unique in Christchurch, has massive potential commercial benefits for city centre businesses, and delivers to Toi Ōtautahi and Events and Festivals Fund priorities providing opportunities for youth participation. The event is the only Broadway-level musical in the city. Whilst the age group of the cast is varied, most of the 'adult' chorus are youth 16-22 years of age. There are also 19 children in the cast aged between 8-13 years and there are opportunities for youth participation in the volunteer crew. At the 50% breakeven capacity the event will bring 9000 people into the central city over three weeks, a large influx of potential customers for surrounding hospitality businesses. In the context of a COVID-affected theatre schedule, this support would signal that large-scale productions are welcome and supported by Council	NA
	Whānau Mārama: New Zealand International Film Festival 2022 - held in Lumier Theatre at the Arts Centre, an annual New Zealand film festival showcasing the most striking films from film festivals around the world	Two	20,000	10,000	5,000		**Partial funding is recommended** as NZIFF is a fantastic celebration of local and New Zealand screen production, which can support interest and growth in local production, something which Council is invested in through ChristchurchNZ and Screen Canterbury. NZIFF presents a rare opportunity to hear from film makers. It supports local venues such as Lumiere and creates winter entertainment opportunities with some screening options for children. This is a well supported and popular annual event for the city.	Events and Festivals Fund $10,000
	17th Annual Show Me Shorts Film Festival - national short film festival connecting NZ audiences with short films from around the world	Three	5,072	5,072	0		**Full funding is recommended** to assist with operational costs of the event. This event is New Zealand's leading international short film festival. It is Acadamy Award qualifying and is internationally recognised. This years festival incorporates dozens of Otautahi film craftspeople showcasing the unique identity of Otautahi to locals and tourists. The event supports the film industry with educational events and an awards programme. Whilst a slight overlap with the NZ International Film Festival, Show Me Shorts caters towards a local market and provides a platform for local artists to shine.	NA
	Vegas - A High Rolling Revue - *NEW* held at the Majestic Church a cabaret show with singing and dancing	Three	7,500	0	0		**Funding is not recommended** due to limited alignment to the fund criteria. Council currently supports a Jazz and Cabaret Festival which has a wide reach and established connections with the performing arts sector in several venues across the central city. The venue proposed for this event is not an established arts venue so does not directly support the city's arts and performance venues. Aside from cast biographies there is little information regarding the content of this event, or evidence as to why this might be an identified gap in the market.	NA
	NZ Youth Symphonic Winds Winter Intensive Workshop - *NEW* a workshop held for secondary school students who excel at wind, brass and percussion instruments from around the country	Four	5,996	0	0		**Funding is not recommended** due to the limited alignment to the fund criteria. With an anticipated audience size of 100 and 37 participants the impact is not significant for the wider community. The event organiser has indicated that the workshop will not be held without Council support however no other funding or sponsorship has been applied for, the event is solely reliant on Council support. While of benefit for participating musicians,there is no clear evidence that this event will have a particularly strong impact for Christchurch youth musicians generally.	NA
	Christchurch Jazz Festival - *NEW* held at Ferrymead Heritage Park with a focus on an older audience. Food vendors, jazz and supporting acts	Four	60,000	0	0		**Funding is not recommended** as the Council already supports a Jazz and Cabaret Festival currently which has a wide reach and great connections with the performing arts sector and several venues across the central city. The applicant has no demonstrated experience in delivering this type of event. The event organisers have indicated the event will not go ahead without Councill support however no other funding has been applied for and at this stage funding support is solely reliant on Council.	NA
Multi-cultural	**Akaroa French Festival** - biennial event held in Akaroa showcasing the unique Maori and French culture and heritage of the area	Two	32,082	30,000	20,000		**Partial funding is recommended** to total the same amount as the previous funding contract which was not fulfiled due to COVID regulations cancelling the event. The amount of $10,000 is retained by the event organisers from the partrial payment of the previous contract. This biennial event provides opportunites for cultural expression and engagement with a diverse community. It is a free event with a resonable attendance (8,000+). The event showcases the unique identity of Akaroa and is very well received by locals and attendees.	Events and Festivals Fund $40,000
	Celebrating Philippine Festival with Global Friends - annual event held in Victoria Square celebrating Philipppine culture with food and performances. This year other cultures will be invited to have stalls including Thai, Indian, Japanese and Chinese	Two	10,000	5,000	5,000		**Partial funding is recommended** this event has a long history in the city and aligns closely to the multicultural strategy. It is a free event and takes place in the central city and incorporates other nationalities as well as that of the Philippines, making it a multicultural event. The event also encourages community participation. The event will still take place if funding is not granted, but with a reduced offering.	Community Activation Fund $2500
	Christchurch Latin Street Festival - held in the Arts Centre, an annual celebration of Latin culture. Includes music, art, dance, crafts and more	Two	9,558 (FY22/23) 7,500 (FY23/24) 5,000 (FY24/25)	8,000 (FY22/23) 7,000 (FY23/24) 5,000 (FY24/25)	5,000 (FY22/23) 5,000 (FY23/24) 5,000 (FY24/25)		**Partial funding for three years is recommended** as it is a popular and lively celebration of Hispanic culture. It is a free event that takes place in the Central City. It has close alignment with the multicultural strategy. The event is multifaceted and incorporates dance, music, art and craft, dance showcase, cooking and dance workshops.The event will still take place if funding is not granted and there is opportunity to generate income through gold coin entry.	Events and Festivals Fund $5000
	Korea Day - *NEW* held in Victoria Square, a celebration of Korean culture through food, performance and traditional games	Two	10,000	9,000	5,000		**Partial funding is recommended** as the event takes place in the Central City, is free to attend and showcases the Korean culture which is growing in popularity. There is a high level of community involvement and it aligns closely to the multicultural strategy. The event will still take place if funding is not granted, but with a reduced offering.	NA
	Thai Festival - held in Victoria Square, an annual event celebrating Thai culture, identity and language.	Two	18,000	10,000	5,000		**Partial funding is recommended** as this event takes place in the central city, is free to attend and has a proven track record. There is a high level of community involvement and celebrates arts, culture, and cuisine showcasing the Thai traditions, customs and hospitality. It closely aligns with the multicultural strategy and attracts reasonably large attendance (approx. 6000). The event will still take place if funding is not granted, but with a reduced offering.	Events and Festivals Fund $6600
Cultural	**Waitangi Day Commemorations** - *NEW* annual event held at Okains Bay, a free to enter event held on 6 February, co-hosted by Okains May Museum and Te Runanga o Koukourarata. Offering paid VIP experiences, entry to the museum to view the nationally significant Maori taonga, workshops, heritage displays and childrens entertainment	Two	20,360	7,589	5,000		**Partial funding is recommended** as this event is an important part of Waitangi Day commemorations for the City and is a long-standing event. The event takes place in a unique location and is free to attend. People attending the event also have the opportunity to view the museum's nationally significant collection of taonga Maori, enjoy workshops and working heritage displays, as well as children's entertainment. The event will still take place if funding is not granted, but with a reduced offering.	NA
	Matariki in the Zone - annual event held in the Residential Red Zone celebrating Matariki with lighting displays, traditional kai, workshops and bespoke signage telling the story of Matariki	Three	20,024	6,000	0		**Partial funding is recommended for this event** due to availability of funds**.** This event has declined in attendance over the past two years and has struggled to meet objectives set in the sponsorship contract. Funding for one more year recommended to allow the event an opportunity to show a marked increase in attendance and KPI adherance.	Special Events Fund $5000

Category	Event	Priority	Funding Request	Staff Recommendation with DRF	Staff Recommendation without DRF	Council Decision	Evaluation panel rationale, comments and context	CCC Events Funding received 20/21
Sport	**International Track Meet and the Fast Five -** annual event held at Ngā Puna Wai showcasing the best of New Zealand's track and field talent.	One	40,000 (FY22/23) 40,000 (FY23/24) 40,000 (FY24/25)	20,000 (FY22/23) 15,000 (FY23/24) 15,000 (FY24/25)	17,000 (FY22/23) 15,000 (FY23/24) 15,000 (FY24/25)		**Partial funding for three years is recommended** to ensure ongoing support and growth for the event. The Track Meet successfully returned to Christchurch in 2021 but unfortunately had to host a participant only event in 2022 due to COVID. The event has been endorsed by Athletics NZ and World Athletics. The organisers are hoping to secure World Athletics Continential Tour Bronze Status, meaning world athletics points are on offer. This will see a higher calibre of athletes in attendance allowing attendees to see high profile athletes in action. The event is free to attend. The event will showcase a Christchurch City Council facility, Ngā Puna Wai at an international level. A new event the FAST Five will be introduced in 2023, this is an elite road race and community fun run that will provide opportunities for the public to compete as well as add to the overall offering of the event	Events and Festivals Fund $10,000
	Canterbury Open - NZ Beach Tour - annual event held in Cathedral Square, one of multiple events as part of the NZ Beach Volleyball Tour. NZ's top beach volleyball athletes compete for points and prize money, and the title of the NZ Beach Tour Champions	Two	20,000 (FY22/23) 20,000 (FY23/24) 20,000 (FY24/25)	20,000 (FY22/23) 15,000 (FY23/24) 15,000 (FY24/25)	12,000 (FY22/23) 12,000 (FY23/24) 12,000 (FY24/25)		**Funding for three years is recommended** to contribute to the venue build and to ensure ongoing support for the event in Christchurch. The event brings the sport of beach volleyball to the city centre through the activation of Cathedral Square. The event is free for public to attend and has been well supported by the community. This is a unique event for Christchurch, it attracts the best men's and women's beach volleyball players from around the country. The event has received considerable media coverage in the past giving Otautahi nationwide exposure. The event continues to gorwn and develop with the event organisers looking to expand the competition to an additional court in Cathedral Square and are discussing options for additional courts at Sumner Beach. Volleyball NZ and SMC Events have strong relationships with the local association and have provided significant legacy benefits to Canterbury Volleyball through the hosting of this national event. The full amount requested has been recommended due to the realistic request made against the total event budget.	Events and Festivals Fund $20,000
	Aramex Kiwi Walk/Run series - *NEW* held nationwide on local trails participants will experience kiwi-themed pitstops and marshalls dressed in Kiwiana themed costumes. Free BBQ and fizzy drink on completion	Three	10,000 (FY22/23) 10,000 (FY23/24) 10,000 (FY24/25)	0	0		**Funding is not recommended** due to limited alignment to the fund criteria. The event is not unique to the city with a number of mass participation walk/run events in Christchurch. The Council currently invest in their own walking event 'The Walking Festival' in April each year.The Council programme is free to attend whereas this event is ticketed. The Council programme also offers a wide range of walking events and experiences with approximately 58 walks on offer. The Council has also provided support to the Little River Wairewa Community Trust for the Banks Peninsula Walking Festival. The event organisers have indicated the event will not come to Christchurch if Council does not invest however no other funders or sponsors have been approached in the city to provide support to the event, this is solely reliant on Council funding	NA
	Equifest - held at Canterbury Park, a three day festival for the equestrian community to share their passion for all things equine	Three	20,000	0	0		**Funding is not recommended** due to limited alignment to the fund criteria**.** This is an event that will appeal to the equine community but may have a limited wider audience. This event will run in Taupo in October 2022 prior to coming to Christchurch in December 2022. The event will proceed without Council support but with a smaller marketing campaign. Council staff are happy to work with the event organiser to see what opportunities there are for marketing and promotional support through Council's free channels instead	NA
	Lexus Urban Polo - a fusion of music and polo, a short format form of the traditional sport in an Urban location (North Hagley Park). Urban Polo creates a fun social event that showcases the best horses and players as well as top local DJ's playing throughout the day.	Three	50,000	0	0		**Funding is not recommended** due to limited alignment to the fund criteria. The event organiser has indicated the event will not proceed without Council support however the event has been hosted successfully in Christchurch in the past with no Council funding. Ticket prices are reasonably high, starting at $90 for a GA through to $450 per person for a corporate package. The application states that the event targets a high net worth customer base. The budget provided indicates an initial significant profit however once the head office operating expenses are factored in this is reduced. The event has good commercial sponsorship with Lexus as the naming rights sponsor.	NA
	Volleyball NZ National Volleyball League (NVL) - the pinnacle indoor volleyball event for Volleyball NZ held at Pioneer Stadium. The NVL has been established to provide an elevated environment for talented and ambitious players, coaches and referees to compete and develop towards an international level	Three	25,000	0	0		**Funding is not recommended** due to limited alignment to the fund criteria**.** The event is held over two weekends and split between Christchurch and Auckland. The entire event is not held in Christchurch with Auckland hosting the finals. Volleyball events are already well supported in Christchurch with staff recommending funding support to Volleyball NZ for the Canterbury Open Beach Tour event that they have applied for as well as supporting three other Volleyball events in the city in the 21/22 financial year. The event will proceed without Council support but with a reduced offering for participants	NA
Other	**Overload x Japan Fiesta (OXJ)** - *NEW* held at Christchurch Arena over winter, this anime festival, popular in Auckland targets a youth demogrphic through the popular medium of Japanese anime.	Two	15,000	7,000	0		**Partial funding is recommended** as this is a new event to Christchurch, anticipating a large number of attendees (6500) and is a unique offering. The event attracts a large youth audience and has a proven track record in Auckland. The event will still take place if funding is not granted, but with a reduced offering.	NA
	2022 TMC Trucking Industry Show - a tradeshow held at Canterbury Park, this event showcases the transport industry to the public.	Four	60,000	0	0		**Funding is not recommended.** Funding sought is for a city-wide marketing campaign geared towards local businesses who would be invited to participate to be included in promotions so tourists who come to Christchurch for the event can plan their visit, as opposed to funding the event itself.	NA
	Chocolate and Coffee Festival - *NEW* held at Te Pae, held in Auckland for the past 10 years, a ticketed event bringing together NZ's finest chocolate makers, chocolatiers and coffee roasters	Four	40,000	0	0		**Funding is not recommended.** Whilst this a new event to Christchurch and a unique concept, no other funding or income has been sourced. Less than 50% of income has been sourced and the applicant states that the event will not take place if funding is not granted, however their budget projects a profit of $27,781 without taking income from Council funding into account.	NA
Total funding requested and recommended FY22/23			$ 1,002,423.00	$ 315,611.00	$ 195,835.00			
Total funding requested and recommended FY23/24			$ 242,500.00	$ 72,000.00	$ 67,000.00			
Total funding requested and recommended FY24/25			$ 210,000.00	$ 70,000.00	$ 32,000.00			
Funds available to allocate FY22/23								
Funds Remaining			0					

EVENTS & FESTIVALS SPONSORSHIP FUND - 2022/2023

EVENTS CURRENTLY CONTRACTED			
Event name	2022/23		2023/24
	Requested	Contracted	Contracted
Big Band Festival	$ 20,000	$ 10,000	
Canterbury Japan Day	$ 20,000	$ 17,000	$ 17,000
Canterbury Polyfest	$ 60,000	$ 15,000	$ 15,000
Christchurch Holi Festival	$ 15,000	$ 8,000	
Coca Cola Christmas in the Park	$ 70,000	$ 50,000	$ 50,000
GROW Otautahi	$ 120,000	$ 30,000	$ 30,000
ISCC Diwali	$ 30,000	$ 15,000	$ 15,000
Le Grande Swim	$ 25,000	$ 25,000	$ 25,000
Le Race	$ 10,000	$ 10,000	
Live Broadcast of Chinese Lunar New Year Celebrations in Christchurch	$ 15,000	$ 5,000	$ 5,000
Matariki Festival	$ 10,000	$ 8,000	$ 8,000
SCAPE Public Art Season	$ 85,000	$ 35,000	
Sea2Sky Challenge	$ 12,500	$ 12,000	
Takahe 2 Akaroa	$ 10,000	$ 5,000	
The Single Fin Mingle	$ 80,000	$ 20,000	$ 20,000
Waitangi Day 2022	$ 25,000	$ 15,000	
Winter Fun "Chillin the City"	$ 12,000	$ 8,000	$ 5,000
WORD Christchurch Festival	$ 40,000	$ 30,000	$ 35,000
YMCA Carols by Candlelight	$ 10,000	$ 8,000	
Total	**$ 669,500**	**$ 326,000**	**$ 225,000**

FUNDING SUMMARY				
Financial Year	Allocated Budget	Currently Contracted *(as per above)*	Proposed Committee Allocation *(as per below)*	Remaining budget
Year 1 - 2022/2023	$ 641,611	$ 326,000	$ 315,611	$ -
Year 2 - 2023/2024	$ 521,835	$ 225,000	$ 72,000	$ 224,835
Year 3 - 2024/2025	$ 521,835	$ -	$ 70,000	$ 451,835

2022/23 EVENTS & FESTIVALS FUNDING APPLICATIONS												
Event	2021/22 Funding	2022/23			2023/24			2024/25			Page # Reference for	Comments
		Requested	Staff Rec.	Council Rec.	Requested	Staff Rec.	Council Rec.	Requested	Staff Rec.	Council Rec.		
17th Annual Show Me Shorts Film Festival in Ōtautahi Christchurch		$ 5,072	$ 5,072								1	
2022 TMC Trucking Industry Show		$ 60,000	Decline								3	
A Ferry Merry Xmas (To be finalised)		$ 50,000	Decline								7	
Akaroa French Festival	$ 40,000	$ 32,082	$ 30,000								10	
Aramex Kiwi Walk & Run Series		$ 10,000	Decline		$ 10,000	Decline		$ 10,000	Decline		13	
Asian Arts Festival		$ 30,000	$ 10,000								15	
Autumn Glory of Canterbury Rhythmic Gymnastics Competition		$ 1,500	Withdrawn (applying to SSEF)								18	
Canterbury Open - NZ Beach Tour	$ 20,000	$ 20,000	$ 20,000		$ 20,000	$ 15,000		$ 20,000	$ 15,000		19	
Celebrating Philippine Festival with Global Friends		$ 10,000	$ 5,000								21	
Chocolate and Coffee Festival		$ 40,000	Decline								23	
Christchurch Brick Show 2022	$ 7,500	$ 17,500	$ 10,000								25	
Christchurch International Cup		$ 3,000	Withdraw and transfer to DRF								27	
Christchurch Jazz Festival		$ 60,000	Decline								28	
Christchurch Latin Street Festival	$ 5,000	$ 9,558	$ 8,000		$ 7,500	$ 7,000		$ 5,000	$ 5,000		30	
Christmas in the City		$ 9,000	$ 9,000								32	
Chuseok (Korean Thanksgiving) 2022		$ 4,000	Withdrawn - refer to DRF								33	
Community Christmas Extravaganza		$ 60,000	Decline								34	
Community Sausage Sizzle		$ 500	Ineligible - refer to Lightbulb Moment fund								36	
EquiFest		$ 20,000	Decline								37	
Festival of Community Sustainability		$ 28,800	Decline								39	
Illuminate - Light and Sound		$ 40,000	$ 10,000		$ 20,000	Decline		$ 10,000	Decline		40	
International Track Meet and The FAST Five	$ 10,000	$ 40,000	$ 20,000		$ 40,000	$ 15,000		$ 40,000	$ 15,000		42	
Jim Kaat Invitational Baseball Tournament		$ 2,500	Withdrawn (applying to SSEF)								45	
Korea Day 2022		$ 10,000	$ 9,000								46	
Lazy Day Markets		$ 5,000	Decline								48	
Lexus Urban Polo		$ 50,000	Decline								50	
Made in Canterbury 2023	$ 5,000	$ 5,000	$ 5,000								52	
Matariki in the Zone	$ 5,000	$ 20,024	$ 6,000								54	
Matilda - The Musical		$ 50,000	$ 10,000								56	
Midsummer Night's Dream at the Isaac Theatre Royal	$ 5,000	$ 10,000	$ 10,000								59	
NZ Youth Symphonic Winds Winter Intensive Workshop		$ 5,996	Decline								63	
NZSO's 'Immerse' Festival Concerts & free Open Doors Family Day		$ 20,000	$ 10,000								65	
Open Christchurch	$ 30,835	$ 45,000	$ 35,000								68	
Orton Bradley Park Spring Fair	$ 5,000	$ 8,000	$ 5,000								71	
Ōtautahi Tiny Performance Festival 2022 (Tiny Fest)		$ 35,531	$ 19,000								72	
Overload x Japan Fiesta 2022 in Christchurch (OXJ)		$ 15,000	$ 7,000								80	
SCAPE	$ 35,000	N/A	N/A		$ 75,000	$ 35,000		$ 75,000	$ 35,000		82	
Thai Festival 2023	$ 6,600	$ 18,000	$ 10,000								87	
The Christchurch Christmas Show Parade	$ 15,000	$ 90,000	$ 45,000		$ 70,000	Decline		$ 50,000	Decline		89	
Vegas - A High Rolling Review		$ 7,500	Decline								91	
Volleyball New Zealand National Volleyball League (NVL)		$ 25,000	Decline								95	
Waitangi Day Commemorations at Okains Bay		$ 20,360	$ 7,539								97	
Whānau Mārama: New Zealand International Film Festival 2022 (NZIFF 2022)	$ 10,000	$ 20,000	$ 10,000								99	
TOTAL	$ 189,935	$ 1,013,923	$ 315,611	$ -	$ 242,500	$ 72,000	$ -	$ 210,000	$ 70,000	$ -		

					Events and Festivals Decision Matrix								
					A balanced calendar of events	**Alignment to city strategies that support the Events Policy Framework**	**Positive community benefits**	**Community support, involvement / active partnerships in the event**	**Economic impact**	**Active engagement**	**Inclusion and diversity**	**Event partnership sustainability**	
				Eligibility Criteria	Event is during the seasonal low points Is unique to other events in the City Fills an identified gap or priority such as: Event held in Central City location Profiles Christchurch and its diverse venues and open spaces Is not directly duplicating a similar event or parts thereof in the city Youth focussed events	Event Policy Framework, Toi Otatutahi, CCC community outcomes, Multicultural Strategy, Heritage Strategy, Climate Change, Recreation and Sports Strategy, Central City Strategy etc	Brings people together to share memorable experiences Provides an opportunity for participation in recreation and sports activities Encouraging local talent to emerge and thrive Cultural expression and engaging with the current and new diverse communities How events can work together to share resources Capability building of	Commercial sponsors Associated community, city or national organisations Volunteers Non-government organisations Charitable trusts	Stimulates economic activity Leverages opportunities for Central City businesses/hospitality industry Attracts visitors to the Central City and boosts the economy Supports outcomes from Central City Action Plan relating to events Profiles the city to a national audience For an existing event, how effectively the event has been run in the past	Provides an opportunity to actively engage as participants or observers in activations	Cultural expression and engaging with the current and new diverse communities	Event has a dedicated plan to move away from or reduce CCC Event funding support	
					Event scored 1 to 5 (1= not meeting the criteria, 5 = meeting the criteria)								**Event Priority Score (1 = high 4 = low)** *Result is reweighted and inverted to match the Priority Scoring System- Tab 1
Importance Weight					**20%**	**20%**	**20%**	**20%**	**5%**	**5%**	**5%**	**5%**	**1.00**
Season	**EVENT**	**Event Type**	**Funding Request**	**Attendance Number**									
Spring	17th Annual Show Me Shorts Film Festival in Ōtautahi Christchurch	Creative and Cultural	Under $10,000	under 1000	**2**	**2**	**3**	**2**	**1**	**2**	**3**	**2**	**3.00**
Spring	2022 TMC Trucking Industry Show	Commercial	$50,001 - $100,000	over 20001	**2**	**1**	**2**	**1**	**3**	**4**	**1**	1	**4.00**
Summer	A Ferry Merry Xmas	Commercial	$40,001 - $50,000	over 20001	**2**	**2**	**1**	**1**	**1**	**3**	**1**	**4**	**4.00**
Spring	Akaroa French Festival	Multi-cultural	$30,001 - $40,000	5001 - 10000	**4**	**3**	**4**	**3**	**2**	**4**	**3**	**1**	**2.00**
Autumn	Aramex Kiwi Walk and Run Series	Sports	$10,001 - $20,000	under 1000	**1**	**3**	**3**	**2**	**3**	**4**	**1**	1	**3.00**
Autumn	Asian Arts Festival	Creative and Cultural	$20,001 - $30,000	1001 - 2500	**3**	**4**	**4**	**2**	**4**	**4**	**5**	**1**	**2.00**
Summer	Canterbury Open - NZ Beach Tour	Sports	$10,001 - $20,000	1001 - 2500	**4**	**3**	**4**	**3**	**4**	**4**	**1**	1	**2.00**
Spring	Celebrating Philippine Festival with Global Friends	Multi-cultural	Under $10,000	1001 - 2500	**4**	**2**	**3**	**3**	**1**	**4**	**4**	**1**	**2.00**
Autumn	Chocolate and Coffee Festival	Commercial	$30,001 - $40,000	2501 - 5000	**3**	**1**	**1**	**1**	**3**	**3**	**1**	**1**	**4.00**
Winter	Christchurch Brick Show 2022	Commercial	$10,001 - $20,000	10001 - 20000	**4**	**2**	**4**	**4**	**1**	**5**	**4**	**1**	**2.00**
Autumn	Christchurch Jazz Festival	Creative and Cultural	$50,001 - $100,000	1001 - 2500	**1**	**1**	**2**	**2**	**2**	**3**	**1**	1	**4.00**
Spring	Christchurch Latin Street Festival	Multi-cultural	Under $10,000	1001 - 2500	**4**	**3**	**3**	**4**	**3**	**4**	**4**	**1**	**2.00**
Summer	Christmas in the City	Community	Under $10,000	5001 - 10000	**4**	**4**	**4**	**4**	**4**	**4**	**3**	1	**1.00**
Summer	Community Christmas Extravaganza	Community	$50,001 - $100,000	over 20001	**2**	**1**	**2**	**1**	**1**	**4**	**2**	1	**4.00**
Summer	Equifest	Sports	$10,001 - $20,000	5001 - 10000	**3**	**2**	**3**	**2**	**2**	**4**	**1**	**2**	**3.00**
Autumn	Festival of Community Sustainability	Community	$20,001 - $30,000	2501 - 5000	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**4.00**
Winter	Illuminate - Light and Sound	Commercial	$30,001 - $40,000	over 20001	**2**	**2**	**2**	**2**	**1**	**4**	**1**	**4**	**3.00**
Summer	International Track Meet and The FAST Five	Sports	$30,001 - $40,000	5001 - 10000	**4**	**3**	**4**	**5**	**3**	**5**	**1**	1	**1.00**
Spring	Korea Day 2022	Multi-cultural	Under $10,000	2501 - 5000	**4**	**3**	**4**	**3**	**3**	**4**	**4**	**1**	**2.00**
Spring	Lazy Day Markets	Community	Under $10,000	under 1000	**2**	**2**	**2**	**1**	**1**	**2**	**1**	**1**	**4.00**
Summer	Lexus Urban Polo	Sports	$40,001 - $50,000	2501 - 5000	**3**	**2**	**2**	**2**	**4**	**4**	**1**	**1**	**3.00**
Autumn	Made in Canterbury 2023	Creative and Cultural	Under $10,000	1001 - 2500	**4**	**3**	**4**	**3**	**3**	**2**	**3**	**1**	**2.00**
Winter	Matariki in the Zone	Multi-cultural	$20,001 - $30,000	2501 - 5000	**2**	**2**	**3**	**3**	**1**	**2**	**4**	**1**	**3.00**
Spring	Matilda - The Musical	Creative and Cultural	$40,001 - $50,000	10001 - 20000	**3**	**2**	**3**	**3**	**4**	**4**	**2**	**3**	**2.00**
Winter	Midsummer Night's Dream at the Isaac Theatre Royal	Creative and Cultural	$10,001 - $20,000	2501 - 5000	**4**	**2**	**3**	**3**	**3**	**2**	**2**	**1**	**1.00**
Winter	NZ Youth Symphonic Winds winter intensive workshop	Creative and Cultural	Under $10,000	under 1000	**2**	**2**	**2**	**1**	**1**	**1**	**2**	**1**	**4.00**
Spring	NZSO's 'Immerse' Festival Concerts & free Open Doors Family Day	Creative and Cultural	$10,001 - $20,000	2501 - 5000	**3**	**3**	**4**	**3**	**3**	**3**	**2**	**1**	**2.00**
Autumn	Open Christchurch	Community	$40,001 - $50,000	5001 - 10000	**5**	**4**	**3**	**5**	**2**	**5**	**3**	**1**	**1.00**
Spring	Orton Bradley Park Spring Fair	Commmunity	Under $10,000	5001 - 10000	**3**	**2**	**3**	**2**	**1**	**4**	**1**	**1**	**3.00**
Spring	Ōtautahi Tiny Performance Festival 2022 (Tiny Fest)	Creative and Cultural	$30,001 - $40,000	1001 - 2500	**4**	**3**	**4**	**4**	**1**	**3**	**4**	**1**	**2.00**
Spring	Overload x Japan Fiesta 2022 in Christchurch (OXJ)	Commercial	$10,001 - $20,000	5001 - 10000	**3**	**3**	**4**	**3**	**3**	**4**	**4**	**1**	**2.00**
Summer	SCAPE Public Art Season 2024 and 2025	Creative and Cultural	$50,001 - $100,000	over 20001	**4**	**4**	**4**	**4**	**2**	**3**	**3**	**1**	**1.00**
Summer	Thai Festival 2023	Multi-cultural	$10,001 - $20,000	5001 - 10000	**4**	**3**	**4**	**3**	**4**	**4**	**4**	**1**	**2.00**
Summer	The Christchurch Christmas Show Parade	Commercial	$50,001 - $100,000	10001 - 20000	**3**	**3**	**4**	**4**	**2**	**4**	**4**	**5**	**1.00**
Spring	Vegas - A High Rolling Review	Creative and Cultural	Under $10,000	1001 - 2500	**2**	**2**	**3**	**3**	**2**	**2**	**1**	**3**	**3.00**
Winter	Volleyball NZ National Volleyball League (NVL)	Sports	$20,001 - $30,000	under 1000	**3**	**3**	**2**	**2**	**2**	**3**	**2**	2	**3.00**
Summer	Waitangi Day Commemorations	Multi-cultural	$20,001 - $30,000	2501 - 5000	**1**	**3**	**3**	**3**	**1**	**4**	**5**	**1**	**2.00**
Winter	Whānau Mārama: New Zealand International Film Festival 2022	Creative and Cultural	$10,000 - $20,000	2501 - 5000	**4**	**4**	**3**	**3**	**3**	**1**	**3**	**1**	**2.00**

Events & Festivals Discretionary Response Fund Eligibility

The purpose of this fund is to support city and community activations to aid recovery due to the uncertainty created through Covid-19.

The fund would only exist if events were cancelled or postponed ie COVID-19.

The Events and Festivals Discretionary Response Fund is a fund that aligns to the Events Policy Framework, Community Events Implementation Plan, Toi Ōtautahi Arts Strategy, and the Central City Action Plan.

The Events and Festivals Discretionary Response Fund will have similar delegations as the Metropolitan Strengthening Communities Discretionary Response Fund.

Delegated authority to the Head of Recreation Sport and Events to approved grants from the Events and Festivals Discretionary Response Fund of up to $15,000 in accordance with the eligibility criteria of the fund.

Eligibility
To be eligible to apply for support from the Events and Festivals Discretionary Response Fund, the event and/or event organisers must meet the following criteria:

- The event must be within the Christchurch City Council boundaries.
- The organisation responsible for the event must be a legal entity and must be able to provide evidence, such as
    - a trust
    - a company
    - an Incorporated Society
- The organisation must have no outstanding debt owing to Christchurch City Council or any Council-controlled organisations
- The event must have clear start and finish dates and must not be a programme of multiple events
- The event/organiser must fully declare any additional Council, local board or Council-controlled organisation funding, grant or koha/ donation for the event
- If the application is for a sporting event, the event must be officially recognised by the national body of that sport
- The applicants must comply with all Christchurch City Council's regulatory and statutory requirements relating to the preparation and delivery of the event, including obtaining all necessary permits and consents within the allowable timeframes
- The event must be held within the planned timeframe
- If the application is successful, the applicant must sign the Council's Terms & Conditions [PDF, 146 KB] in the form of a contract
- Please note: All events securing funding through the Events and Festivals Discretionary Response Fund will be required to hold up-to-date public liability insurance, which covers the proposed activity in the proposed location.

Events not eligible through the Events and Festivals Discretionary Fund

- Private functions, lunches or dinners
- Events where the primary purpose is to promote religious, ministry or political objectives
- Events that denigrate, exclude or offend parts of the community
- Any conventions, conferences, trade shows, business events or exhibitions
- Events that present a hazard to the community or pose a significant risk to the public or council
- Events that have already been held
- Events that have previously been declined through the current financial year's Events and Festivals Sponsorship Funding round.
- Events not held in the current financial year
- Biennial events will only receive funding on the year the event is being held

Event-related costs not eligible for funding through the Events and Festivals Discretionary Fund

- For the purchase of alcohol

- For staff salaries and/or wages
- Stock or capital market investment
- Payment of fines, court costs, IRD penalties or retrospective tax payment
- Purchase of insurance cover
- Purchase of vehicles and any related ongoing maintenance repair, overhead costs or road user charges
- Rent or accommodation costs
- Service or maintenance costs including utilities such as power or phone
- Any retrospective costs
- Overseas travel
- Debt servicing or refinancing costs
- Medical expenses
- Prize money or entrance fees
- Payment of any legal expenditure including costs or expenses related to mediation disputes, ACC, Employment Tribunal, Small Claims Tribunal, professional or disciplinary body hearings
- Legal challenges against Council, Community Boards, Council-controlled organisations or Environment Court decisions
- Projects or initiatives that change the scope of a Council project
- Projects or initiatives that will lead to ongoing operational costs to the Council.
- Money to be redistributed as grant funding, sponsorship, bequests, donations, to aid funding or aid to other recipients
- Events that have breached previous funding agreements with the Council, including post-event reporting criteria, and where no commitment has been made to rectify this

Item 14

14. Sub-delegation of Time Extensions for Heritage Grants

Reference / Te Tohutoro: 22/412620

Report of / Te Pou Matua: Vivienne Wilson, Senior Legal Counsel, vivienne.wilson@ccc.govt.nz; Brendan Smyth, Team Leader Heritage, brendan.smyth@ccc.govt.nz

General Manager / Pouwhakarae: Jane Davis, General Manager Infrastructure, Planning & Regulatory Services, jane.davis@ccc.govt.nz

1. Purpose of the Report Te Pūtake Pūrongo

1.1 The purpose of this report is to provide for a sub-delegation from the Sustainability and Community Resilience Committee to the General Manager of Infrastructure, Planning and Regulatory Services and the Head of Planning and Consents in respect of extensions for heritage grants.

1.2 This report has been written following requests from members of the Committee.

1.3 The decision in this report is of low significance in relation to the Christchurch City Council's Significance and Engagement Policy. The level of significance was determined by the criteria in the Significance and Engagement Policy.

2. Officer Recommendations Ngā Tūtohu

That the Committee:

1. Relying on clause 32 of Schedule 7 of the Local Government Act 2002 and for the purposes of efficiency and effectiveness in the conduct of the Committee's business, and any other applicable statutory authority

    a. Sub-delegates to the General Manager of Infrastructure, Planning and Regulatory Services and the Head of Planning and Consents, severally, the power to grant the following extensions of time in relation to Heritage Grants:

        - Up to an 18 month extension of time for a Heritage Incentive Grant:
        - Up to an 18 month extension of time for a Central City Landmark Heritage Grant.

    b. Limits the sub-delegation to exercising it once (one extension) for a specified Heritage Grant, noting that any further extensions would need to be determined by the Council.

2. Notes that sub-delegations take effect on the date on this resolution, and that Legal Services will update the Delegations Register accordingly.

3. Reason for Report Recommendations Ngā Take mō te Whakatau

3.1 Members of the Sustainability and Community Resilience Committee have requested that this sub-delegation be made.

4. Alternative Options Considered Ētahi atu Kōwhiringa

4.1 The other alternative option that was considered but not selected as the preferred option is not making these sub-delegations.

4.2 By not making these sub-delegations, the Committee will retain the status quo and continue to consider reports on whether heritage grants should be extended. The advantage of this option is that the Committee maintains a watching brief on the execution of projects for which grants have been approved, and will allow for further extensions of time for the uptake of grants. The disadvantage is this approach is time consuming for staff and elected members.

5. Detail Te Whakamahuki

5.1 The Council delegated to the Sustainability and the Community Resilience Committee the authority to make decisions on the following funds (where the decision is not already delegated to staff)-

- Heritage Grant Applications.
- Extensions of up to two years for the uptake of Heritage Incentive Grants.

5.2 The reference to Heritage Grant applications includes applications for the Heritage Incentive Grant Fund and the Intangible Heritage Grants Fund. The Council also operated the Central City Landmarks Heritage Grants Fund. However the Landmarks Heritage Grants Scheme was discontinued in 2020/2021 (although there are still some grants to be disbursed).

5.3 Heritage Incentive Grants and the Central City Landmark Heritage Grants are time limited. For example, the Heritage Incentive Grant Guidelines provide that "*The award of the Grant will expire 18 months from the date of written approval of the Grant. This period will only be extended with the written consent of the Committee*."[1] The same time limit applied for grants from the Central City Landmark Heritage Grants scheme.

5.4 From time to time, the Sustainability and Community Resilience Committee have considered requests for extensions for up to two years for the uptake of heritage grants. For example, the Committee has considered and granted extensions in relation to the following:

- 20 August 2020 approval of an extension of time for Heritage Incentive Grants for the 158 High Street and 26 Canterbury Street.
- 24 February 2021 approval of an extension of time for a Heritage Incentive Grant for 141 High Street.
- 28 July 2021 approval of extensions of time for the Central City Landmark Heritage Grants for 116 Worcester Street and 387 Manchester Street.
- 24 November 2021 approval of an extension of time for a Central City Landmark Heritage Grant for 92 Lichfield Street.

5.5 Staff have identified that there are likely to be further extensions required for Landmark Heritage Grants for works to 116 Worcester Street and to 92 Lichfield Street. These Grants are likely to be claimed soon but may need further extensions of time as they relate to large scale projects and delays have occurred because of Covid-19.

5.6 From time to time, committee members have asked this matter be sub-delegated to staff. The granting of time is largely an administrative matter, and it could be more efficiently managed through a staff delegation.

5.7 There is no need to allow for the granting of extensions of time for Intangible Heritage Grants as these grants are made are made at the beginning of a project rather than at the completion of a project/work.

[1] See the Heritage Incentive Grant Fund – Guidelines 2020

5.8 The decision affects all wards/Community Board areas as grants can relate to various parts of the City.

6. Policy Framework Implications Ngā Hīraunga ā- Kaupapa here

Strategic Alignment Te Rautaki Tīaroaro

6.1 This report supports the Council's Long Term Plan (2018 - 2028):

6.1.1 Activity: Governance and decision-making

- Level of Service: 4.1.28.3 Establish and maintain documented governance processes that ensure compliance with the local government legislation - Governance processes are maintained and published on council's website.

Policy Consistency Te Whai Kaupapa here

6.2 The decision is consistent with Council's Plans and Policies. The Guidelines for both the Heritage Incentive Grants Scheme and the Central City Landmark Heritage Grants recognise that extensions of time may be granted.

Impact on Mana Whenua Ngā Whai Take Mana Whenua

6.3 The decision does not involve a significant decision in relation to ancestral land or a body of water or other elements of intrinsic value, therefore this decision does specifically impact Mana Whenua, their culture and traditions.

6.4 The decision to create a sub-delegation does not impact on mana whenua.

Climate Change Impact Considerations Ngā Whai Whakaaro mā te Āhuarangi

6.5 Not applicable.

Accessibility Considerations Ngā Whai Whakaaro mā te Hunga Hauā

6.6 Not applicable.

7. Resource Implications Ngā Hīraunga Rauemi

Capex/Opex / Ngā Utu Whakahaere

7.1 Cost to Implement - The changes to the Delegations will be entered in the Delegations Register by Legal Services

7.2 Maintenance/Ongoing costs – There are no ongoing costs from making this change to delegations. There are anticipated savings in elected member time in having delegations sit with staff.

7.3 Funding Source – Staff time in implementing the changes to the Delegations Register is met out of the Legal Services' budget.

Other / He mea anō

7.2 Not applicable.

8. Legal Implications Ngā Hīraunga ā-Ture

Statutory power to undertake proposals in the report / Te Manatū Whakahaere Kaupapa

8.1 Clause 32(1) of Schedule 7 of the Local Government Act 2002 provides that unless expressly provided otherwise in the Act, or in any other Act, for the purposes of efficiency and effectiveness in the conduct of a local authority's business, a local authority may delegate to a

committee or other subordinate decision-making body, community board, or member or officer of the local authority any of its responsibilities, duties, or powers except those expressly excluded.

8.2 Clause 32(3) of Schedule 7 also provides that a committee may delegate any of its responsibilities, duties, or powers to a an officer of the local authority, but, to avoid doubt, if doing so is itself a sub-delegation, the power to so delegate is subject to any conditions, limitations, or prohibitions imposed in connection with the primary delegation.

8.3 There is an express delegation to the Sustainability and Community Resilience Committee in respect of granting extensions of time for Heritage Incentive Grants but both Guidelines for the Grant schemes provide that the Committee authorises extensions, and so Legal Services consider that this can be sub-delegated to staff.

8.4 Extensions of time for Heritage Incentive grants are normally limited to eighteen months (albeit the delegation to the Committee refers to two years), and therefore the same limit should apply to any sub-delegation for Heritage Incentive grants. It also applies in practice to Central City Landmark Heritage grants. These limits ensure that momentum is maintained with each project, although in some cases multiple extensions may need to be granted.

8.5 The proposed sub-delegations do not infringe the restrictions in the Local Government Act 2002.

9. Risk Management Implications Ngā Hīraunga Tūraru

9.1 There are no identified risks caused by the proposed sub-delegation.

Attachments / Ngā Tāpirihanga

There are no attachments to this report.

In addition to the attached documents, the following background information is available:

Document Name	Location / File Link
Not applicable	Not applicable

Confirmation of Statutory Compliance / Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).

(a) This report contains:
  (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
  (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories / Ngā Kaiwaitohu

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