

Canterbury Museum Redevelopment

Site Address: 9 & 11 Rolleston Avenue, Christchurch

Resource Consent Application for Redevelopment of the Canterbury Museum and Robert McDougall Gallery

Date: 4 December 2020



Application for Resource Consent Under Section 88 of the Resource Management Act 1991

TO: Christchurch City Council

1. Canterbury Museum Trust Board apply for land use consent for the following activities:

To undertake redevelopment works to the Canterbury Museum and Robert McDougall Gallery, including:

- Base isolation across the whole site to protect the buildings and the collections.
- The demolition of unprotected buildings, being:
 - Museum site: 1995 Garden Court infill building, 1958 Centennial building (except façade), 1977 Roger Duff Wing (excluding façade) and the 1995 whale store and staff room.
 - Robert McDougall Gallery: 1982 Canaday wing, 1962 workshop and the 1961 night entry.
- Replacement of the above with new buildings to provide increased exhibition space, storage facilities, staff areas, visitor experience areas (lecture theatre, classrooms, café, Hosting, lavatories) and plant rooms.
- Alteration to the Centennial Wing façade to provide separation from the Mountfort buildings and a second Rolleston Avenue entrance which re-purposes two existing openings and create a third opening to form a new entry porch, drawing on the typical tripartite form commonly found in Gothic architecture.
- Reinstatement of exterior elements, including the original Benjamin Mountfort-designed flèche (slender spire) and the 1877 chimney on the Rolleston Avenue façade, and original Benjamin Mountfort-designed 1870 and 1877 chimneys.
- Revealing and displaying heritage fabric that has been hidden for many years, including exposing the hidden north facades of the 1872 and 1877 Mountfort Buildings, west façade of the 1870 Mountfort Building, and the wall on the northern side of the original 1882 Benjamin Mountfort-designed buildings.
- Removing the blackouts and tints on the 1877 Mountfort Building windows, letting more natural light into the Museum.
- Alterations to the Roger Duff Wing façade to provide glazed separation from the Mountfort buildings and a split-level family cafe with views across the Botanic Gardens. Precast cladding panels will be removed from the west and south facades and reused as the cladding of the new alteration and extension.
- A glazed link to the Robert McDougall Gallery.
- Improved visitor facilities, including exhibition spaces, cafes, retail areas, circulation and amenities.
- Other structural, fire, safety and security upgrades.

The proposal is more fully described in the attached AEE, technical reports and plans which form part of this application.

2. The owner, address and legal description of land to which the application relates are:

Owner: Canterbury Museum Trust Board (Canterbury Museum) and Christchurch City Council (Robert McDougall Gallery)

Address: 9 & 11 Rolleston Avenue, Christchurch

Legal description: Pt Res 25 Canterbury District & Lot 1 DP 45580

The Records of Title form **Appendix One**.

3. Other RMA consents required in relation to the activity.

Resource consent may be required from the Canterbury Regional Council for the discharge of construction phase stormwater and dewatering. The exact consenting requirements will not be known until detailed design and associated construction methodologies are worked through.

4. In accordance with the Fourth Schedule of the Resource Management Act 1991, please find attached an assessment of environmental effects in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment.

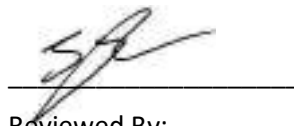
5. Pursuant to section 95A(3)(a) of the Resource Management Act 1991, the applicant requests that the application be publicly notified.

6. The required deposit for processing the application will be paid directly by the applicant upon receipt of an invoice.



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For and on behalf of
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CSF-124207-2-503-V4

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**COUNCIL CHARGES: Resource Management Group accepts no liability for any Council costs or charges.
All such invoices are to be sent to the Applicant's address for billing**

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Annexure: Assessment of Effects on the Environment

(containing the following appendices)

Appendix One	Records of Title
Appendix Two	District Plan Heritage Listings
Appendix Three	Concept Design Report, Athfield Architects
Appendix Four	Engagement Consultation Report
Appendix Five	Heritage Impact Statement
Appendix Six	Cultural engagement correspondence
Appendix Seven	District Plan Compliance Assessment
Appendix Eight	Restricted matters of discretion (Rule 9.3.6.1)
Appendix Nine	Heritage Landscape Report
Appendix Ten	Basement and Base Isolation Structural Feasibility Report

Introduction

General

1. This assessment is provided in accordance with the requirements of Section 88 and the fourth schedule of the Resource Management Act 1991 (“the RMA”). It is in support of a resource consent application by the Canterbury Museum Trust Board (Museum Board) for the redevelopment of the Canterbury Museum (‘Museum’) and adjacent Robert McDougall Gallery (‘RMG’).
2. The redevelopment works are a response to a number of challenges with the current buildings, including:
 - Deterioration of the museum building enclosure;
 - Unclear visitor circulation and poor visitor facilities;
 - Insufficient space and interior environment for storing and displaying the collection; and
 - A need for seismic strengthening and significant structural, fire, safety and security upgrades.
3. When completed, the works will protect the heritage buildings and the Museum’s collections, and upgrade visitor facilities to create a fit-for-purpose Museum that provides an improved visitor experience.
4. With visitor numbers projected to increase from the current 750,000 per annum up to 1,000,000, the Museum Board is embarking on redevelopment in response to the need to actively position and shape the Museum for its next 50 years – 100 years.

Proposal Summary

5. The specific components of the proposal are set out in the following sections of this report, however in summary the proposal includes:
 - Base isolation across the whole site to protect the buildings and the collections.
 - The demolition of unprotected buildings, being:
 - Museum site: 1995 Garden Court infill building, 1958 Centennial building (except façade), 1977 Roger Duff Wing (excluding façade) and the 1995 whale store and staff room.
 - Robert McDougall Gallery: 1982 Canaday wing, 1962 workshop and the 1961 night entry.
 - Replacement of the above with new buildings to provide increased exhibition space, storage facilities, staff areas, visitor experience areas (lecture theatre, classrooms, café, Hosting, lavatories) and plant rooms.
 - Alteration to the Centennial Wing façade to provide separation from the Mountfort buildings and a second Rolleston Avenue entrance which re-purposes two existing openings and creates a third opening to form a new entry porch, drawing on the typical tripartite form commonly found in Gothic architecture.
 - Reinstatement of exterior elements, including the original Benjamin Mountfort-designed flèche (slender spire) and the 1877 chimney on the Rolleston Avenue façade.
 - Revealing and displaying heritage fabric that has been hidden for many years, including exposing the hidden north facades of the 1872 and 1877 Mountfort buildings, west façade of

the 1870 Mountfort Building, the wall on the northern side of the original 1882 Benjamin Mountfort-designed buildings and remnants of original Benjamin Mountfort-designed 1870 and 1877 chimneys.

- Removing the blackouts and tints on the 1877 Mountfort Building windows, letting more natural light into the Museum.
- Alterations to the Roger Duff Wing façade to provide glazed separation from the Mountfort buildings and a split-level family cafe with views across the Botanic Gardens. Precast cladding panels will be removed from the west and south facades and reused as the cladding of the new alteration and extension.
- A glazed link to the Robert McDougall Gallery.
- Improved visitor facilities, including exhibition spaces, cafes, retail areas, circulation and amenities.
- Other structural, fire, safety and security upgrades.

District Plan Consenting Summary

6. The proposal requires resource consent under the Christchurch District Plan (District Plan) in relation to the following:
 - Alterations to heritage items¹ are restricted discretionary activities under Rule 9.3.4.1.3 RD1.
 - New buildings in a heritage setting are a restricted discretionary activity pursuant to Rule 9.3.4.1.3 RD2.
 - A breach of internal boundary setback and maximum height rules requires resource consent as a restricted discretionary activity under Rule 18.4.1.3 RD1.
 - Exceeding maximum GFA of food and beverage activities is a restricted discretionary activity under Rule 18.4.1.3 RD5.
 - New buildings on the application site or external alterations and/or additions to existing buildings rules requires resource consent as a restricted discretionary activity under Rule 18.4.1.3 RD9.
 - A cycle parking shortfall for visitors is a restricted discretionary activity under Rule 7.4.2.3 RD1.
7. All of the above non-compliances require resource consent as a **restricted discretionary activity**. Under the Resource Management Act 1991 (“RMA”), the Council’s discretion whether to grant or refuse resource consent, or to impose conditions is limited to specific matters over which the District Plan restricts Council’s control.
8. This application and Assessment of Environmental Effects are provided to address the statutory requirements under the RMA and for the land use consent required under the District Plan.

¹ Being the Canterbury Museum (1870-1882 buildings), the south and west facades of the Roger Duff Wing, the east façade of the Centennial Wing, and the Robert McDougall Gallery.

Museum Trust Board

9. The Canterbury Museum is a registered Charitable Trust, the governance of which is vested in the Canterbury Museum Trust Board, and as set out in the Canterbury Museum Trust Board Act 1993.
10. Canterbury Museum relies upon the vision and business expertise of its board, which consists of:
 - four members appointed by the Christchurch City Council;
 - one member appointed jointly by Hurunui and Waimakariri District Councils;
 - one member appointed by Selwyn District Council;
 - one member appointed by the University of Canterbury;
 - one member appointed by the Canterbury Branch of the Royal Society of New Zealand;
 - one member appointed by Te Runanga o Ngai Tahu;
 - one member appointed by the Association of Friends of Canterbury Museum; and
 - one member appointed by the Canterbury Pilgrims' and Early Settlers' Association.
11. The Board's role is to ensure that the Museum building, collections and documentation are maintained in good order and condition, and to ensure that the Museum is run effectively and efficiently through a close working relationship with the Director, who is charged with the day-to-day leadership and management of the Museum.

Supporting Documents

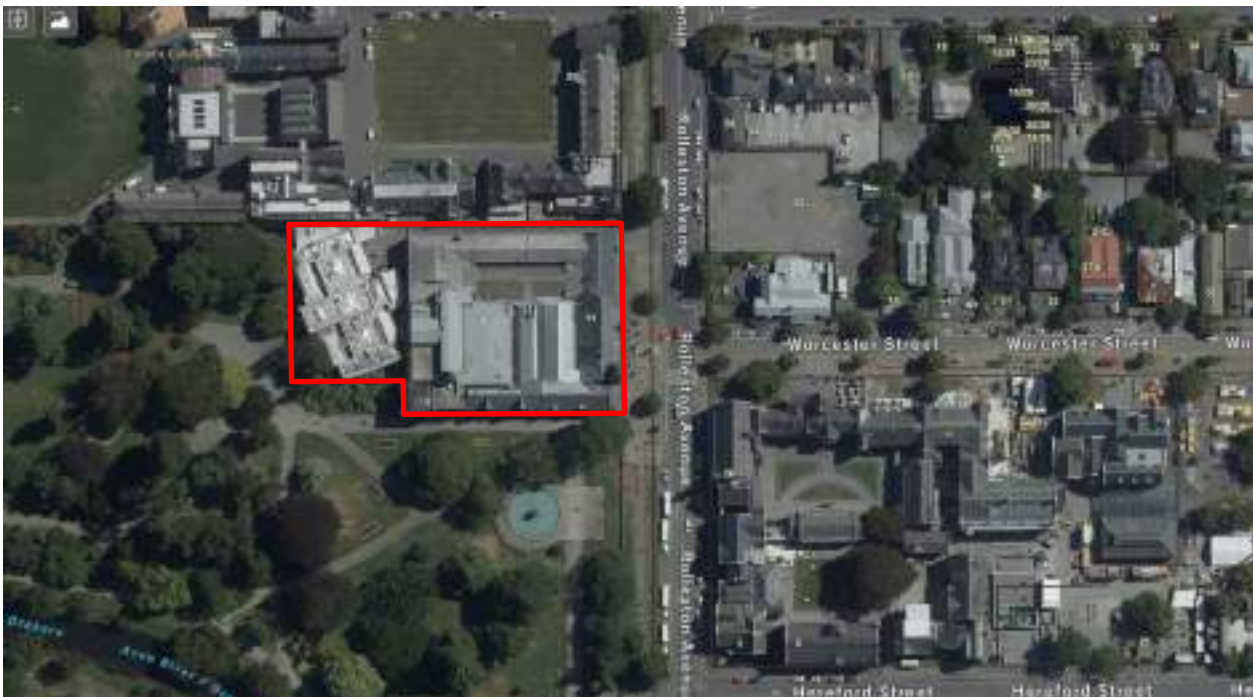
12. This application for resource consent includes a number of technical design reports. A full list of these reports is set out below:
 - Concept Design Report, Athfield Architects, **Appendix Three**
 - Stakeholder Engagement and Consultation Report, **Appendix Four**
 - Heritage Impact Statement, GJM Heritage, **Appendix Five**
 - Heritage Landscape Impact Assessment, Mandy McMullin, **Appendix Nine**
 - Basement and Base Isolation Structural Feasibility Report, Holmes Consulting, **Appendix Ten**
13. The information contained in this application relies on the reports listed above with respect to the details of the proposal and qualified assessments.

The Site and Surrounding Area

General

14. The application site is located at 9 & 11 Rolleston Avenue in central Christchurch. The site is on the eastern end of Hagley Park. The site is made of two separate legal parcels, being Pt Res 25 Canterbury District (5,000m²); and Lot 1 DP 45580 (2,200m²).
15. The site borders Hagley Park on its southern and western sides and Christ's College to the north. The eastern boundary adjoins a strip of land contained in the same parcel as the Botanic Gardens, however for all practical purposes it adjoins Rolleston Avenue along this frontage. An aerial photo of the site and surrounding environment is contained in Figure 1 below.

Figure 1: Aerial Photo of Site



Site History

16. A detailed history of the Museum and RMG are contained in the District Plan Heritage Listing Reports and the Architectural Concept Report attached as **Appendix Two** and **Appendix Three** respectively.
17. A summary of the various components that make up the Museum and RMG is outlined below.

Canterbury Museum

18. The order of the construction of the various Museum buildings is:

- Mountfort Building (1870)
- Mountfort Building (1872)
- Mountfort Building South (1877)

- Mountfort Building East (1877)
- Mountfort Porch Addition (1878)
- Mountfort Additions (1882)
- Centennial Building Rolleston Ave façade (1958)
- Centennial Building (1958)
- Roger Duff Wing (1977)
- Garden Court Infill, Whale House , Staff Room (1995)

Robert McDougall Gallery

19. The Robert McDougall Gallery was constructed in 1932. Subsequent additions were made to the building as follows:

- Night entry (1961)
- Workshop (1962)
- Canaday Wing (1982).

20. The above components and the date each was established is illustrated in Figure 2 below.

Figure 2: Development History (Source: Concept Design Report, Athfield Architects)



21. Full details of the design and historical background of the buildings are contained in the Concept Design Report prepared by Athfield Architects attached as **Appendix Three**.

Planning Context

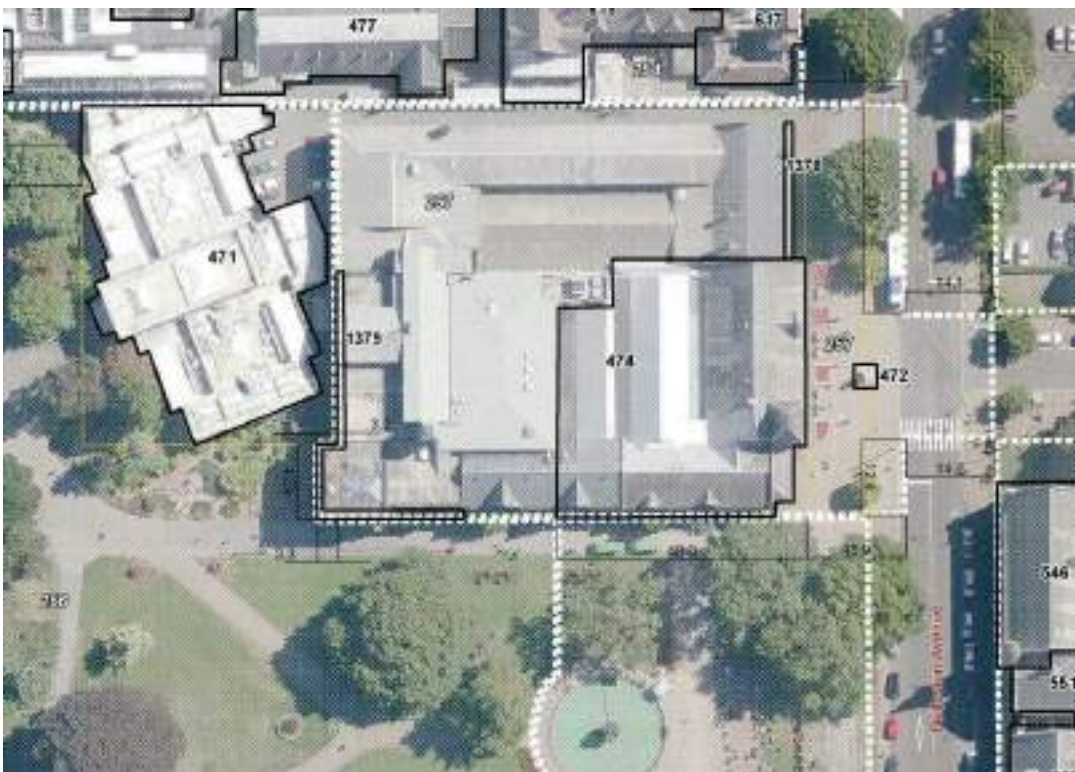
22. The site is zoned Open Space Community Park in the Christchurch District Plan ('District Plan'). The zone makes specific provision for cultural activities² on the Museum and RMG sites, as well as provision for additional food and beverage sales.

23. Appendix 9.3.7.2 of District Plan provides a list of heritage items within Christchurch and their level of heritage significance. Relevant to the Museum and RMG this includes:

- **Heritage Item 474 and setting 257:** Canterbury Museum (1870-1882 buildings) and setting – **highly significant**;
- **Heritage Item 1379 and setting 257:** Roger Duff Wing south and west facades and setting – **significant**;
- **Heritage Item 1378 and Setting 257:** Centennial Wing east façade and setting – **significant**; and
- **Heritage Item 471 and Setting 256:** RMG and setting (including scheduled interior heritage fabric) - **highly significant**.

24. The heritage items are illustrated in Figure 3 below.

Figure 3: Heritage Items (Christchurch District Plan)



² means the use of land and/or buildings for public performances, demonstrations or displays/exhibitions of cultural, historic, scientific or artistic significance, whether a charge is made for admission or not.

It includes:

1. museums;
2. cultural centres;
3. galleries;
4. the open-air operation of heritage vehicles, trains and machinery; and
5. ancillary workshops, offices, storage, retail activity and staff accommodation.

25. The district plan includes hyperlinks to Heritage Statements of Significance (HSOS) for each heritage item and setting listed in Appendix 9.3.7.2 which provide additional information regarding each heritage listing.
26. Three separate HSOS relate to the Museum listings above (the Museum HSOS) and one for the RMG. In addition, scheduled interior heritage fabric for the RMG are identified in the Register of Interior Heritage Fabric. A copy of these documents and the heritage planning maps are attached as **Appendix Two**.
27. Canterbury Museum (19th century portion) is listed by Heritage New Zealand Pouhere Taonga as a Historic Place Category 1 under list number 290. Robert McDougall Art Gallery is listed by Heritage New Zealand Pouhere Taonga as a Historic Place Category 1 under list number 303

Surrounding Environment

28. Located on the western edge of the CBD, the surrounding environment contains a variety of activities. In close proximity to the site are the historic Arts Centre, Christ's College and the Botanic Gardens. The wider area contains various retail shops, offices, galleries, food and beverage outlets, residential activities and the Christchurch Public Hospital.

Need for change

Existing Deficiencies

29. The Design Concept Report attached as **Appendix Three** details the current deficiencies of the existing building that this redevelopment seeks to resolve. These deficiencies are summarised below.

- **Entrance foyer** - The main door acts as both entry and exit. This is not big enough to accommodate the number of visitors the museum receives, and results in significant accessibility, congestion and safety concerns. The problem is compounded by school and other large groups entering or exiting the museum.
- **Foyer congestion** - The small foyer space acts as both reception and welcoming space for regular visitors and a gathering space for school groups. This can include more than one group at a time causing congestion and access issues.
- **Circulation** - Both the public and non-public circulation is often illogical and difficult to navigate. Especially toward key destinations such as toilets or the lift. Staircases are small, far between and no staircase runs the full height of the building. There is no lift access to the exhibition mezzanine of the Mountfort Gallery; thus, not complying with the NZ Building Code. There is currently only one lift in the entire museum complex. The dual lift door access between public and staff areas is a security risk. Transportation of large exhibits is incompatible with heavy public use. The current lift regularly breaks down, often out of use for several hours.
- **Building Code** – There is a need to achieve higher seismic performance rating under the Building Code. The Museum is also non-compliant with the NZ Building code for fire safety and the number of toilets provided for visitors; additional toilets need to be installed.
- **Exhibition Space** - At present only 1% of the Museum’s collection is on display at any one time because of the lack of gallery space. Large, significant items in the collection such as the whale whakairo and blue whale skeleton cannot be displayed at all. Limited exhibition spaces also means that only a small number of items of Ngāi Tahu taonga and objects from the Antarctic collection can be displayed.
- **Collection storage and plant space** – The collection stores are dispersed throughout the building and none have HVAC environmental controls as per internationally recognised Museum standards. There is visual evidence that collection items have suffered damage as a result of these environmental fluctuations.
- **Exhibit Space** is very limited with major exhibitions unable to be displayed.
- **Environmental control** - The existing museum conditions do not meet the needs of collection storage or visitor comfort. There is a general lack of fresh air in spaces, the control system is not operating correctly in some areas.
- **Deteriorating building enclosure** – Various components of the existing buildings need repairs to ensure weather tightness and structural integrity.

Consultation and Engagement

General

30. The Museum Board has undertaken a comprehensive engagement programme to build and maintain public and key stakeholder understanding and support for the Museum's need to redevelop its present site.
31. The stakeholder engagement ensured that all relevant stakeholders were identified. Engagement channels were carefully selected to ensure there was opportunity for genuine consultation and feedback. Particular emphasis was placed on devising communication and feedback channels that people could use during the Covid pandemic.
32. The Museum's stakeholder engagement programme is estimated to have reached more than 400,000 people through its digital engagement platform, face to face meetings, advertising, national and local media, social media and other channels.
33. In addition to the above stakeholder engagement, the Museum engaged with heritage professionals and interest groups during the design process, with several comments and suggestions being incorporated into the final concept design plans.
34. Full details of the engagement programme and specific outcomes are set out in the Stakeholder Engagement and Consultation Report attached as **Appendix Four**.

Proposal Description

Overview

35. The proposed works are fully detailed in the Concept Design Report prepared by Athfield Architects Limited attached as **Appendix Three**. The report sets out the site's history, the need for change, the project brief and contains detailed concept design plans.
36. Section 4 of the Heritage Impact Statement prepared by GJM Heritage (**Appendix Five**) details the proposed alterations and additions to heritage items and proposed conservation works.
37. The Basement and Base Isolation Structural Feasibility Report prepared by Holmes Consulting (**Appendix Ten**) provides preliminary advice on the engineering feasibility of the basement and base isolation proposals. It is proposed that full engineering design be undertaken at the detailed design stage prior to building consents, and that this be subject to certification by a recognised heritage professional at the time of design, by way of conditions of resource consent.
38. A high-level summary of the various components of the proposal is provided in the following section of this report, however the above three reports should be referred to for full details of the proposal.

Summary of Proposed Changes

39. The works include the following:

- **Base isolation** across the whole site to protect the buildings and the collections.
- **Demolition of non-heritage additions** and replacement with **new buildings**.
- A **second Rolleston Avenue entrance** which will have three openings, drawing on the typical tripartite form commonly found in Gothic architecture.
- **Reinstatement of exterior elements**, including the original Benjamin Mountfort-designed flèche (slender spire) and the 1877 chimney on the Rolleston Avenue façade.
- **Revealing and displaying heritage fabric** that has been hidden for many years, including exposing the hidden north facades of the 1872 and 1877 Mountfort buildings, west façade of the 1870 Mountfort Building, the wall on the northern side of the original 1882 Benjamin Mountfort-designed buildings and remnants of original Benjamin Mountfort-designed 1870 and 1877 chimneys.
- **Removing the blackouts and tints** on the 1877 Mountfort Building windows, letting more natural light into the Museum.
- **Alterations to the Roger Duff Wing and façade** to include a split-level family cafe with views across the Botanic Gardens.
- A **glazed link** to the Robert McDougall Gallery.
- **Improved visitor facilities**, including exhibition spaces, cafes, circulation and amenities.
- **Improved storage facilities**, including a basement underneath the Museum and Robert McDougall Gallery

40. Key elements of the proposed redevelopment works are summarised further below. However, full details of the proposed works are outlined in the reports referenced above.

Key Elements

Eastern Elevation (Rolleston Avenue)

41. A key element of the design is a second Rolleston Avenue entrance. The current entry to the Museum is too small to be the only entrance, and with more than 750,000 visitors a year and rising, an additional entrance will reduce congestion and improve the flow of visitors into the building. This entry will also house a cafe with sidewalk seating.
42. The additional entrance on Rolleston Avenue will have three openings into a covered portico. This draws on the typical tripartite form commonly found in Gothic Revival architecture, including the 1878 porch of the existing entrance to the Museum, key entrances within the Arts Centre, and the porch of Christ Church Cathedral.
43. The southern end of the Centennial wing will be removed to expose the hidden facades of the 1877 Mountfort building and the wall on the northern side of the original 1882 Benjamin Mountfort-designed building.
44. The proposal includes reinstatement of the original Benjamin Mountfort-designed fleche and the 1877 chimney on the Rolleston Avenue façade, and will reveal remnants of original Benjamin Mountfort-designed 1870 and 1872 chimneys.
45. Removing the blackouts and tints on the 1877 Mountfort building windows is also proposed to let more natural light into the Museum.

South Elevation (Botanic Gardens)

46. The stairwell link between the Roger Duff Wing and the 1872 building will be altered to create a substantially glazed connection. The existing exposed aggregate cladding panels are proposed to be reused to alter the existing elevation and new glazing will be installed on the projecting element to replace previously altered glazing and pre-cast panels. Changes are also proposed to be made to retained internal fabric of Little/No Significance.
47. Changes to the Duff Wing draw on the Late Modern architectural form of architect John Hendry's 1977 design, creating a new focal point for the Museum, with dramatic views across the Botanic Gardens and towards the Peacock Fountain and Arts Centre.

Internal Additions

48. New structures are proposed over the footprint of the Centennial Wing, the Garden Court and the demolished components of the Roger Duff Wing.
49. Revealed heritage fabric that will become visible from within the building and atrium includes the north facades of the 1872 and 1877 Mountfort buildings, west façade of the 1870 Mountfort Building, the wall on the northern side of the original 1882 Benjamin Mountfort-designed buildings and remnants of original Benjamin Mountfort-designed 1870 and 1877 chimneys.
50. The new structures comprise atria, exhibition spaces, vertical circulation, visitor facilities, staff offices, collections handling, conservation and management spaces and building services and plant. The new structures generally sit lower than the height of the nineteenth century fabric. A cantilevered element projects over part of the service lane to the north to provide additional floor space. The exterior walls (to the north and west) are clad in precast concrete with variation in modulation, texture and colour.
51. The folded low-pitched roof form is glazed above the atria and with solid roof cladding to office and other exhibition areas. Clerestory glazing beneath the folded roof form provides lighting to the upper level offices and back of house facilities. The new roof above the retained parts of the Roger Duff Wing

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at the southwest corner of the complex is flat.

Conservation Works

52. The redevelopment includes the preservation, restoration and reconstruction of the buildings various features. While many of these works have been referenced above, for completeness they are summarised below:

- Reconstruction of the fleche to the roof of the 1877 (Rolleston Avenue) building;
- Reconstruction of the paired stone chimney to the small gable at the centre of the 1877 (Rolleston Avenue) building;
- Reconstruction of the two paired stone chimneys to the small gables on the 1877 (south) building;
- Revealing fabric of Principal Significance including: the northern gable end, the west façade and roof of the 1870 building; part of the north elevation and roof of the 1872 building; the northern gable end of the 1877 building; and the end (north) elevation and gable roof form of the 1882 building.
- Revealing the interior volume and roof trusses of the 1882 building;
- Removal of the reproduction buttress added to the western end of the 1872 wing at the time of construction of the Roger Duff Wing;
- Removal of non-contributory and intrusive additions to the east of the RMG building;
- Reconstruction of the Canaday Wing of RMG;
- The removal of roof-top building services and plant revealing the roof form (fifth elevation) of the building;
- Making good and repair of heritage fabric where later additions and fabric have been removed across the site; and
- Preservation of retained heritage fabric (RMG and Museum).

53. Recording of changes to the heritage items and their settings will be undertaken in accordance with Article 12 (Recording) of the ICOMOS New Zealand Charter.

Activities (Floor Plans)

54. The Concept Design report (**Appendix Three**) includes floor plans and an accompanying schedule illustrating the proposed internal layout of the buildings. The floor plans show the improvements to the public access and connections to the Robert McDougall Gallery.

Cultural Narrative

55. The development is unpinned by the Canterbury Museum Cultural Narrative, developed by Puamiria Parata-Goodall, Te Pākura Ltd. The Cultural Narrative weaves together the cultural values, traditions and history of Ngāi Tūāhuriri and recognises the rights and guarantees provided under the Treaty of Waitangi and respects the mana of the local hapū, iwi and all peoples now resident in this land.

56. A number of threads have been woven into the redevelopment to recognise a shared history and an authentic bi-cultural approach based on the kawa and tikanga of mana whenua. Notable features include the connection to water – Nga Puna Wai and facilitating space and design for Ngāi Tahu to tell their stories.

57. The concept provides a strong foundation and framework to build a bicultural future for Canterbury Museum, working in partnership with mana whenua, Papatipu Rūnanga and Ngā maata Waka.
58. Correspondence from Puamiria Parata-Goodall is attached as **Appendix Six**.

Servicing and Cycle Parking

59. The existing service lane adjacent to the Museum's northern boundary will allow improved loading and staff entry. Cycle parking for staff is provided at the head of the service lane at the western end of the Museum.

Earthworks and Excavations

60. Earthworks and excavations will be required for the demolition works, base isolation and new buildings. It is anticipated that all earthworks will be located within the building footprint, which under the District Plan definition extends 1.8m from the outer edge of any wall. Details of earthworks and excavations will be detailed as part of the building consent documents.

Compliance Assessment

Christchurch District Plan

61. The site is located in the Open Space Community Parks Zone under the Christchurch District Plan and is also subject to the following notations and overlays:

- Heritage Item 474 and setting 257: Canterbury Museum (1870-1882 buildings) and setting – highly significant;
- Heritage Item 1379 and setting 257: Roger Duff Wing south and west facades and setting – significant;
- Heritage Item 1378 and setting 257: Centennial Wing east façade and setting – significant; and
- Heritage Item 471 and setting 256: RMG and setting (including scheduled interior heritage fabric) - highly significant.
- Category 3: Low Noise Level Area;
- Christchurch International Airport Protection Surfaces; and
- Liquefaction Management Area.

62. A compliance assessment under the District Plan is contained in **Appendix Seven** of this application. In summary, land use consent is required under the rules outlined in **Table 1** below.

Table 1: Reasons for Consent

Rule	Reason	Activity Status	Matters of control or discretion
<u>Rule 18.4.1.3</u> <u>RD1</u>	Breach of internal boundary setback (south and north boundaries)	Restricted Discretionary Activity	a. Setback from boundaries – Rule 18.10.15.
<u>Rule 18.4.1.3</u> <u>RD1</u>	Breach of maximum height	Restricted Discretionary Activity	a. Building height – Rule 18.10.17.
<u>Rule 18.4.1.3</u> <u>RD5</u>	Exceeding maximum GFA of food and beverage activities (Max 250m ² , 515m ² proposed)	Restricted Discretionary Activity	a. Scale of activity, displacement, multifunctional, non-recreational, community and cultural facilities – Rule 18.10.2. b. Traffic generation and access – Rule 18.10.3. c. N/A
<u>Rule 18.4.1.3</u> <u>RD9</u>	New buildings on the Canterbury Museum and Robert McDougall Art Gallery site (9-11 Rolleston Avenue, legally described as Pt Res 25 and Lot 1 DP	Restricted Discretionary Activity	a. Scale of activity, displacement, multifunctional, non-recreational, community and cultural facilities – Rule 18.10.2.

Rule	Reason	Activity Status	Matters of control or discretion
	45580) or external alterations and/or additions to existing buildings.		<ul style="list-style-type: none"> b. Building height – Rule 18.10.17. c. 9.3.5 (Matters of Control - Historic heritage) and 9.3.6 (Matters of Discretion - Historic heritage)
Rule 9.3.4.1.3 RD1	Alterations to the four highly significant listed heritage items.	Restricted Discretionary Activity	<ul style="list-style-type: none"> a. Alterations, new buildings, relocations, temporary event structures, signage and replacement of buildings - Rule 9.3.6.1.
Rule 9.3.4.1.3 RD2	New buildings in a heritage setting	Restricted Discretionary Activity	
Rule 7.4.2.3 RD1	Cycle parking shortfall (visitors)	Restricted Discretionary Activity	<ul style="list-style-type: none"> a. Minimum number of cycle parking facilities required – Rule 7.4.4.4

Activity Status

63. All of the above non-compliances require resource consent as a **restricted discretionary activity**. Under the Resource Management Act 1991 (“RMA”), the Council’s discretion whether to grant or refuse resource consent, or to impose conditions is limited to specific matters over which the District Plan rules reserve control.
64. It is important to note that the proposed uses for the museum and gallery, including ancillary retail, office and food and beverage sales purposes do not require resource consent per-se, except for the quantum of food and beverage area.
65. In all other respects, the proposal complies with the standards of the District Plan.

Statutory Considerations

Duties and Restrictions under the RMA

66. Sections 9 to 23 of the RMA set out the duties and restrictions relating to activities in terms of consenting authorities. These sections provide the basis for which consent in this application is sought. Of relevance to this proposal is Section 9 (restrictions on use of land).

67. Section 9 of the RMA sets out that any use of land may not proceed in a manner that contravenes a:

- *national environmental standard;*
- *regional rule; or*
- *district rule.*

unless expressly allowed by a resource consent or by Sections 10, 10A or 20A of the RMA.

68. The proposed activities are not expressly allowed by any national environmental standard or other regulations and, as outlined above, the proposal requires resource consent under the District Plan in relation to built form standards, heritage matters, open space zone rules and cycle parking. As such, the proposal requires resource consent and assessment in accordance with the following provisions of the RMA.

Consideration of Application

69. Section 104(1) of the RMA sets out the matters which must be considered by a consent authority in considering applications for resource consent. It is considered that in this instance, regard shall be had to:

- *any actual and potential effects of allowing the activity (section 104(1)(a));*
- *any relevant objectives, policies, rules, or other provisions of a national environmental standard, other regulations, a national policy statement, a New Zealand coastal policy statement, a regional policy statement or proposed regional policy statement, a plan or proposed plan (section 104(1)(b)); and*
- *any other relevant matters reasonably necessary to determine the application (section 104(1)(c)).*

70. In respect of a restricted discretionary activity, Section 104C of the RMA sets out that a consent authority must consider only those matters over which it has restricted the exercise of its discretion in its plan or proposed plan.

71. The consent authority may grant or refuse the application, and if it grants the application, may impose conditions under section 108, only for those matters which it has restricted the exercise of its discretion. In addition, section 18AA requires any condition be:

- *agreed by the applicant; or*
- *directly relate to an adverse effect on the environment or an applicable district rule; or*
- *relate to administrative matters that are essential for the implementation of the resource consent*

72. The assessment of the actual and potential effects is set out below, and an assessment of relevant Objectives and Policies follows.

Assessment of Environmental Effects

Overview

73. Section 88 of the RMA requires the applicant to undertake an assessment of any actual or potential effects on the environment that may arise from a proposal, and the ways in which the adverse effects may be avoided, remedied or mitigated. For this application, as a restricted discretionary activity, Council's discretion is restricted to matters relating to:

- Heritage matters / Scale of activity in Open Space Zone;
- Building height;
- Internal boundary setbacks;
- Food and beverage activities; and
- Cycle parking.

74. These matters are addressed in the following assessment of environmental effects.

Heritage Matters / Scale of Activity in Open Space Zone

75. Alterations to the four heritage items and new buildings in a heritage setting require an assessment against the matters of discretion listed in Rule 9.3.6.1. In addition, the matters of discretion in terms of rule 18.4.1.3 RD9 apply in terms of the open space zone rules. These also reference back to the heritage matters in 9.3.6. A copy of the restricted matters of discretion is contained in **Appendix Eight**.

76. A Heritage Impact Statement (HIS) has been prepared by GJM Heritage which provides an assessment of the proposal against the matters of discretion listed in Rule 9.3.6.1 under which the Council has restricted its discretion. The HIS also considers the Canterbury Museum Building Conservation Plan (2019) and the Robert McDougall Gallery Conservation Plan, Draft Volumes 1 & 2 (2013). The HIS is attached as **Appendix Five**.

77. A Heritage Landscape Report has been prepared by Mandy McMullin which provides a landscape assessment of the proposal. The landscape assessment is not specific to the relevant matters of discretion in Rule 9.3.6.1, rather, the assessment is wider ranging, assessing potential visual effects of the redevelopment as it would be seen from selected viewpoints. The assessment includes potential impact on values of contextual significance and whether they might be considered beneficial or adverse, depending on whether they enhance or detract from heritage values and the experience of the viewer. Effects are also assessed against the policies of the above Conservation Plans and the Conservation Plan for Hagley Park and Christchurch Botanic Gardens. The Heritage Landscape Report is attached as **Appendix Nine**.

78. The following summarises the conclusions reached in both expert assessments.

79. Following a detailed consideration of the restricted matters of discretion contained in Rule 9.3.6.1 of the District Plan, the HIS draws the following conclusions:

- *The proposed redevelopment of Canterbury Museum and the Robert McDougall Art Gallery will enable the continued use of these highly significant cultural institutions. The works have been carefully refined following extensive consultation and thorough analysis of the heritage values and historic fabric of the subject site.*

- *The full base isolation of the complex will ensure seismic resilience of new and existing structures on the site to meet the New Zealand Building Code and provide the highest possible protection to the collections they house as well as staff and visitors.*
- *Demolition is largely limited to fabric of little or no significance within the Museum and the basement of the Robert McDougall Art Gallery, which is identified as being ‘non-contributory’ or of ‘some significance’ in the 2013 Conservation Plan. The loss of these elements will have only a minor impact on the cultural heritage significance of the heritage places, which will be more than offset by the opportunities provided to reveal historic fabric and enable the continued use of the buildings and their contribution to the cultural life of Christchurch and Canterbury. These works also facilitate base isolation and allow the subtle incorporation of seismic joints between fabric of different construction techniques and eras such as the Centennial and Roger Duff wings.*
- *Alterations to identified historic fabric are generally limited to those elements of secondary significance and will help reveal the significance of previously hidden nineteenth century fabric of Canterbury Museum, such as the north wall and quatrefoil of the 1877 wing. These alterations will provide a new entry to Rolleston Avenue through the Centennial Wing, which reinstates the façade rhythm envisaged, but never fully realised, in the competition winning design. The expressed concrete structure, fine steel piloti and exposed aggregate precast panels of the Roger Duff Wing are reused to a design that reinterprets the Late-Modern architectural form and detailing of the original building while additionally providing new visitor facilities and exhibition spaces which visually connect the museum with the Botanic Gardens.*
- *New structures, located on the footprint of mid-late twentieth century elements identified as being of little or no significance or intrusive, are scaled and massed to avoid adversely affecting the visual appearance or setting of the subject site. The new buildings are low-rise, and averaged across the site comply with the 15m height plane identified in Chapter 8 of the District Plan. Their visual impact is minor, being substantially obscured by the nineteenth century fabric of the Canterbury Museum from key viewpoints. Those discrete elements that more substantially exceed 15m in height, namely the reconstructed paired chimney and fleche to the 1877 building, will restore the original appearance of this element and help recover the architectural and aesthetic significance of Benjamin Mountforts design of Canterbury Museum. The new north elevation, which includes cantilevered gallery spaces, is recessive in materiality, articulation and form to ensure that the contribution that the museum makes to the broader context and setting of the Arts Centre and Christ’s College is retained. Christchurch’s distinctive Gothic Revival and more contemporary architecture is reflected in the subtle folded roof forms of the new museum buildings and atrium.*
- *The proposed redevelopment of the Canterbury Museum and the Robert McDougall Art Gallery represents a once in a generational opportunity to rejuvenate these major cultural institutions and ensure they meet current seismic, universal access and other compliance standards. The works, while visually recessive and respectful of identified heritage values and fabric, respond to contemporary art gallery and museology practice and management requirements. The exhibition spaces will incorporate and celebrate both the nineteenth century heritage fabric and Māori taonga. The visitor experience will be enhanced through the proposed development to provide new educational and interpretative experiences to ensure the cultural and spiritual values of the heritage place are maintained and transmitted to future generations. The proposed development is in accord with the provisions of the Christchurch District Plan, and has been informed by the policies of the relevant conservation plans and the philosophical framework of the New Zealand ICOMOS Charter.*

80. The above conclusions and wider assessments set out in the HIS are adopted, noting the many positive outcomes when considered against the matters of discretion in Rule 9.3.6.1.
81. As noted above, the landscape assessment has not been undertaken against the specific matters of discretion in Rule 9.3.6.1. It is a wide-ranging assessment of visual effects of the redevelopment from selected viewpoints, with a focus on whether the works enhance or detract from heritage values and the experience of the viewer. Landscape effects are also assessed against the policies of the above-mentioned Conservation Plans.
82. The relevant assessment matter relevant to heritage and open space landscape values is considered to be limited to matter d. of Rule 9.3.6.1 which is set out below:
- d. *Whether the proposal, including the form, materials and methodologies are consistent with maintaining the heritage values of heritage items and heritage settings, and whether the proposal will enhance heritage values, particularly in the case of Highly Significant (Group 1) heritage items and heritage settings and in particular have regard to:*
- i. *the form, scale, mass materials, colour, design (including the ratio of solid to void), detailing (including the appearance and profile of materials used), and location of the heritage item;*
 - ii. *the use of existing heritage fabric;*
 - iii. *the extent of earthworks necessary as part of the proposal;*
 - iv. *the necessity of the removal or transplanting of mature trees;*
 - v. *the impact on public places; and*
 - vi. *within a heritage setting, the relationship between elements, such as layout and orientation, form and materials.*
83. Of the above matters, those relevant to the landscape assessment are considered to be:
- v. *the impact on public places; and*
 - vi. *within a heritage setting, the relationship between elements, such as layout and orientation, form and materials.*
84. In addition to the above, the matters of discretion under open space zone rule 18.4.1.3 RD9 relating to new buildings on the Museum and Art Gallery sites include reference to scale of activity, building height, and the above heritage matters of discretion which are relevant to the landscape assessment.
85. The conclusions reached in the Heritage Landscape Report are set out below:
- *The focus of the Redevelopment is away from heritage fabric of primary significance. Views of the Mountfort buildings and the Centennial Wing façade from Rolleston Avenue and Worcester Boulevard are not adversely affected. The Museum's relationship with the cultural precinct is enhanced and strengthened through the restoration of original heritage fabric.*
 - *The visual impact of the Redevelopment is greatest when seen from the Botanic Gardens. The visual effect of the new building is considered more than minor around the SW corner, largely due to the scale and proximity of the work and the sensitivity of the setting.*
 - *Due to the fact the Museum building abuts directly onto the Gallery and the Gardens, in this location, any change will be clearly visible. Accepting that redevelopment is necessary for the Museum to continue to function, visual effects in this corner are inevitable.*
 - *Beneficial visual effects arise from the enhanced presence of the Museum in the SW corner,*

and the strengthened connection with the setting. The new exterior presents a confident façade, and has a clear and positive relationship with the Gardens, as do the adjacent Mountfort buildings.

- *Adverse visual effects, arising from the potential of new work to detract from primary heritage fabric and the setting, are limited by the design and materials. Potentially adverse effects are mitigated by the Concept Plan which appears well-considered. The design is respectful of sensitive heritage fabric. New work is readily distinguishable. The Museum's original form and fabric is not compromised, diminished or obscured. The visible footprint is unchanged. New work does not impede or detract from internal views within the Gardens.*
- *Redevelopment is limited to secondary fabric, in keeping with the policies of the Conservation Plans for both Buildings and the Botanic Gardens.*
- *The Redevelopment Plan is in keeping with the ICOMOS charter.*
- *The Plan meets the District Plan objectives requiring change to focus on those parts of heritage items or settings that have most potential to accommodate change.*
- *Contextual values identified in the District Plan are not adversely affected. In some cases they are strengthened. The relationships between the Museum and the Gallery buildings, and their historical settings, remain clearly visible. The Redevelopment is evidence that the Museum continues to perform its original function in its original location.*
- *The Redevelopment builds on the historical relationship between the Museum, the Gallery and the colonial precinct. The important relationship between buildings and their settings is strengthened by the new entrance and unblocked windows on Rolleston Avenue, and the café window opening views between the Museum and the Gardens.*
- *The Redevelopment, clearly evident from the Gardens, is a visible reminder of the Museum's presence and ongoing function in its historical location. New work on the SW corner presents a more confident facade to the Gardens than the existing building, in keeping with the Mountfort buildings and the original concept for the Roger Duff Wing. The Redevelopment establishes a visible connection between separate buildings of very different design, and demonstrates their common purpose. Function, meaning, and relationships are undiminished. Overall, the Redevelopment improves the relationship of the Museum with its setting.*
- *The shared associational, social and cultural relationship between the Museum, Arts Centre, Christ's College, the Gallery and the Botanic Gardens is unchanged. The identity and contribution of the Museum to the cultural precinct and the city is undiminished.*

86. While the overall conclusions reached in the landscape assessment are positive when considered against the relevant matters of discretion, the assessment states that visual effects are considered more than minor around the south west corner of the redevelopment when viewed from the Botanic Gardens. This relates to the changes to the café area of the Roger Duff Wing. The report describes the visual effect being a result of the scale and proximity of the new work and the sensitivity of the setting.

87. While noting that the changes to the Roger Duff building are clearly visible from the Botanic Gardens, the overall assessment is that potentially adverse effects are mitigated by the well-considered design which is in keeping with the policies of the Conservation Plans for both Buildings and the Botanic Gardens. The assessment further noting that the new work does not impede or detract from internal views within the Gardens and the visible footprint is unchanged. Concluding that the relationships

between the Museum and the Gallery, and their historical setting, remain clearly visible. Overall, the redevelopment is considered to improve the relationship of the Museum with its setting.

88. With specific reference to the southwest corner, the report concludes that the important relationship between buildings and their settings is strengthened by the café window opening views between the Museum and the Botanic Gardens and the new work on the southwest corner presents a more confident facade to the Botanic Gardens than the existing building.
89. Finally, with respect to the wider matters contained in Rule 9.8.6.1 d., they have been assessed in the HIS³, where it notes that the southern and western elevations of the Roger Duff Wing are proposed to undergo the greatest degree of change, which responds, in part, to this element having been substantially altered since its construction in 1977. The assessment stating that the existing projecting element of the façade is reinterpreted as a glazed box housing the principal visitor café, a characteristic, and increasingly fundamental, feature of contemporary cultural institutions. This element provides a strong visual connection between the museum and Botanic Gardens and has been designed to reflect the proportions and module of the original pre-cast cladding panels.
90. When considering the complete package of redevelopment works against the relevant matters of discretion in rules 9.3.6.1 and 18.4.1.3 RD9, the following conclusions are drawn:
- The proposal will provide for ongoing and viable uses, including adaptive reuse, of the identified heritage items (9.3.6.1 (c));
 - New work is distinguished through the use of contemporary materials and detailing. These are integrated in a sensitive manner to the historic fabric through referencing the scale, massing, forms, colour and texture of the heritage items (9.3.6.1 (d));
 - The exposure and restoration of previously hidden or removed heritage features will enhance heritage values (9.3.6.1 (d));
 - The redevelopment works are in accordance with the principles in Policy 9.3.2.2.3(b), the related conservation plans and are supported by two independent heritage experts (9.3.6.1 (e));
 - The scope of non-reversible works have been minimised wherever possible, and in the case of the Duff Wing primarily affect previously altered fabric (9.3.6.1 (f)).
91. Weighing the conclusions reached in both expert reports, it is considered that the heritage values of the respective heritage items and heritage settings is maintained, and any adverse effects on public spaces and heritage settings are no more than minor with respect to the southwest corner and loss of less significant heritage fabric, and overall, are positive.

Building Height

92. There is a bespoke height limit of 15m for the Canterbury Museum and the Robert McDougall Gallery sites under Rule 18.4.2.4 iv. The peaks of the new museum building's roof forms, chimneys and the fleche will exceed this.
93. Exceeding the permitted standard requires an assessment against the matters of discretion listed in Rule 18.10.17 - Building height. These matters are set out below.

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- a. *The extent to which the increased building height will result in:*
 - i. *visual dominance;*
 - ii. *loss of privacy and outlook for adjoining residents;*
 - iii. *incompatibility with the character and scale of buildings within and surrounding the site;*
 - iv. *adverse visual effects that are mitigated by landscaping. Reference should be made to General Rules and Procedures, Appendix 6.11.6, Part B for guidance and information on tree species.*
- b. *Whether the increased building height will result in any benefits in terms of retention of open space, significant trees or the satisfaction of specialised recreational needs.*
- c. *Whether the development is designed and laid out to promote a safe environment and reflects the principles of Crime Prevention through Environmental Design (CPTED).*
- d. *In addition, in respect of the Canterbury Museum and Robert McDougall Art Gallery site (Rolleston Avenue), the extent to which the increased building height:*
 - i. *reflects or complements adjoining or nearby areas of important public or open spaces;*
 - ii. *impacts on the use of adjoining public open space (e.g. shadowing and wind funnelling);*
 - iii. *impacts on the definition or containment of any adjoining public open space;*
 - iv. *visually dominates nearby focal points or features (e.g. statues, memorials, water features or specimen trees);*
 - v. *impacts on any vistas or pedestrian linkages.*

94. An assessment of the above matters is included in both the HIS and the Heritage Landscape Report. Both reports conclude that the effect of these height breaches will be minor.

95. The HIS includes the following assessments:

- *Roof top plant, lift overruns and the like are provided with an exemption from the 15m height limit. The reconstructed chimneys above the gable end form at the centre of the eastern elevation of the 1877 building exceed the height limit. While these paired chimneys exceed 1.1m in width they are proposed to be an accurate reconstruction of lost heritage fabric and their reinstatement is considered a positive and appropriate outcome.*
- *Likewise, the spire-like fleche that was dismantled in 1958 is intended to be reconstructed. While it does not fulfil or form part of a spiritual activity, it terminates the key Worcester Boulevard axis and forms a counterpoint to the spire of Christ Church Cathedral. The reconstruction of this element will be an accurate reconstruction of lost heritage fabric and its reinstatement is considered a positive and appropriate outcome.*
- *High quality documentation (in the form of historical drawings and photographs) will enable the accurate reinstatement of the chimneys and fleche without resorting to conjecture. The reinstatement of these elements, while exceeding the 15m height limit, will be a positive action that will help reveal the architectural, aesthetic and contextual significance of the 1877 building as intended by architect, Benjamin Mountfort.*
- *The proposed roof form of new structures has been designed to achieve the internal space requirements for the museum's back-of-house, conservation and staff requirements while minimising any protrusion through the 15m height plane. The height plane falls at the midpoint of the folded roof form and aligns with the flat roof of the boardroom located within the volume of the Centennial Wing. Approximately half of the folded roof and atrium forms exceed the 15m height limit by up to 1m at the ridge lines with half of the new roof form falling below height plane. The folded roof form helps reduce the apparent bulk of the new building*

and subtly references the pitch roof forms of the museum and its context. The minor incursion beyond the 15m height limit has no impact on key views of the complex and are substantially obscured from key viewpoints by the nineteenth century fabric.

96. On the basis of the above assessments, and with regard to the restricted matters of discretion, it is considered that the various breaches to the maximum height standard are appropriate in the context of the site and will not give rise to any visual dominance or loss of privacy and outlook for adjoining residents. The features that exceed the building height standard are compatible with the character and scale of buildings within and surrounding the site.
97. With reference to specific matter of discretion which relates to the Canterbury Museum and Robert McDougall Art Gallery site (Rolleston Avenue), it is considered that the increased building height complements the adjoining areas of important public or open spaces, notably the Botanic Gardens and Rolleston Avenue, and will have little to no impact on the use of those spaces (e.g. shadowing and wind funnelling).
98. A small part (approx. 800mm) of the ridges of the gables will be visible from the north side of the Christs College Quadrangle, above the ridgeline of Harper and Julius Houses and the Chapel. During consultation with Christ's College, concerns were raised as to privacy effects of potential overlooking of the Quadrangle area by Museum Staff in level 3. This will not arise.
99. Overall, the glass canopy peaks only exceed the height limit by a small margin, which would be barely perceptible in the context of the overall buildings and site, and that the canopy is also set back and located generally behind the ridgelines and facades on the Botanic Gardens and Rolleston Avenue frontages, such that it not generally be viewed from most public viewpoints.
100. For these reasons, any adverse effects resulting from the proposed building height are considered to be less than minor.

Internal Boundary Setback

101. There is a bespoke internal boundary setback of 5m for the Canterbury Museum and the Robert McDougall Gallery under Rule 18.4.2.2 v. Various components of the redevelopment works do not meet the minimum 5m setback. These are:
- The RMG basement;
 - Level 2 Café;
 - The Level 2 build out over the service lane and staff deck adjacent to Christ's College; and
 - Works within 5m of the Rolleston Avenue boundary which is technically an internal boundary.
102. Exceeding the permitted standard requires an assessment against the matters of discretion listed in Rule 18.10.15 – Setback from boundaries. These matters are set out below.
- a. *The extent to which a reduced internal boundary setback will result in:*
 - i. *Adverse visual effects on open space and/or adjoining residents;*
 - ii. *Potential for activities within the building to give rise to disturbance to neighbours or nuisance effects;*
 - b. *The extent to which a reduced road setback will detract from the pleasantness, coherence, openness and attractiveness of the site as viewed from the street and adjoining sites, including consideration of:*

- i. Compatibility with the appearance, layout and scale of other buildings and sites in the surrounding area;*
 - ii. The classification and formation of the road, and the volume of traffic using it in the vicinity of the site.*
 - c. Whether the scale and height of the building/s is compatible with the layout, scale and appearance of other buildings within the site and/or on adjoining sites.*
 - d. The extent to which the provision of planting or screening will mitigate adverse effects of the encroachment. Reference should be made to General Rules and Procedures, Appendix 6.11.6, Part B for guidance and information on tree species.*
 - e. Whether the development is designed and laid out to promote a safe environment and reflects principles of Crime Prevention through Environmental Design (CPTED).*
 - f. The extent to which the reduced setback will result in a more efficient, practical and better use of the balance of the site.*
 - g. Whether a reduced setback from the railway corridor will enable buildings, balconies or decks to be constructed and/or maintained without requiring access above, on, or over the railway corridor.*

103. The RMG basement setback intrusion is entirely below ground and it is therefore considered that it will not give rise to any adverse effects in terms of the above matters.

104. The Level 2 Café continues the existing building line of the Roger Duff wing, and it is considered that the additional building bulk within the setback is compatible in terms of appearance and scale with the existing building will have no more than minor adverse effects in the context of the overall building and location.

105. Effects of the Level 2 overhang adjacent to the Christs College boundary are largely mitigated by the fact that most adjoining activities on the Christ College site comprise less sensitive uses such as outdoor storage, bike sheds, kitchens and other utility uses. While the building may also be viewed in the context of the College Chapel and Dining Hall from within the Christ College site, in the context of the existing built form of both sites, it is considered that the effects of the internal boundary setback non-compliances are no more than minor.

Food and Beverage Activities

106. Food and beverage outlets are a permitted activity in the Open Space Community Parks zone however the permitted activity standard limits the gross floor area to 250m² or 10% of the gross floor area of all buildings on the same site, whichever is the lesser.

107. Two separate food and beverage premises are proposed:

- A 325m² café located on the south western corner of the Roger Duff wing. The café is split level on L2 and mezzanine on L2M; and
- A 190m² café located on the north eastern corner of the Centennial wing. The café is also split on L1 and mezzanine L1M.

108. The total GFA of food and beverage is 515m².

109. Exceeding the permitted standard requires an assessment against the matters of discretion listed in Rule 18.10.2 (Scale of activity, displacement, multifunctional, non-recreational, community and cultural facilities) and Rule 18.10.3 (Traffic generation and access). The relevant matters are set out below.

18.10.2 Scale of activity...

- a. *Whether the activity/facility has a practical or functional need to be located within the open space and/or recreation facility.*
- b. *Whether the activity/facility and/or its scale will:*
 - i. *Significantly reduce open space or impede access to it;*
 - ii. *Displace recreation facilities or recreation activities;*
 - iii. *Be compatible with open space functions and recreation activities;*
 - iv. *Have a layout and design that is appropriate to the locality, context, character and/or natural values of the area;*
 - v. *Adversely impact on the amenity values of adjoining open space and residents, including visual impacts, noise, glare, nuisance and traffic effects;*
 - vi. *Promote a safe physical environment and reflect principles of Crime Prevention through Environmental Design (CPTED).*
- c. *The extent to which the ground level area of the building interacts with pedestrians and pedestrian linkages.*
- d. *Whether the activity will provide economic benefits enabling the ongoing operation and maintenance of recreation facilities and/or open spaces.*
- e. *The extent to which the activity/facility maintains existing or future public access connections to walking/cycling track networks including alignment with the Council's Public Open Space Strategy 2010-2040.*

Rule 18.10.3 (Traffic generation and access)

- a. *Whether traffic generation and vehicle access will adversely affect the character and amenity of the surrounding area and/or safety and efficient functioning of the road network.*
- b. *The ability to cater for increased traffic generation taking into account:*
 - i. *The classification and formation of the connecting road network; and*
 - ii. *The hourly, daily and weekly pattern of vehicle movements;*
 - iii. *The ability to provide safe vehicle access and adequate on-site car parking and circulation;*
 - iv. *Traffic Management plans.*
- c. *Any adverse effects in terms of noise, vibration, dust, nuisance, glare and fumes that are incompatible with the amenity of the open space and/or adjoining residents.*

110. In the context of the overall Museum and RMG development and site, the scale of food and beverage sales is considered ancillary to the primary use of the site and considered appropriate.

Cycle Parking

111. The redevelopment does not provide the minimum number of cycle parking facilities. This requires an assessment against the matters of discretion listed in Rule 7.4.4.4

- a. *Within the Central City, the following are matters of discretion for Rule 7.4.3.2*
 - i. *The extent to which alternative adequate cycle parking is available which is within easy walking distance of the development entrance.*
 - ii. *Whether the provision for cyclists is sufficient considering the nature of the activity on the site and the anticipated demand for cycling to the site and adjacent activities.*
 - iii. *Whether the provision for cyclists is practicable and adequate considering the layout of the site, and the operational requirements of the activity on the site.*
 - iv. *Matters of discretion a.ii. and a.iv. also apply within the Central City.*

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112. The proposal will provide staff cycle parking, but no public spaces are provided. However, there are several public cycle parking facilities nearby, including secure facilities at nearby public car park buildings, and spaces in the vicinity of the Botanic Gardens.

Positive Effects

113. The redevelopment works include a number of positive effects which are reflective of the project's key drivers, including:

- Better enabling the function of the museum by providing significantly enhanced, contemporary visitor facilities and collection display.
- Remedying the numerous structural and operational deficiencies with the current Museum building.
- Substantial positive heritage outcomes through the reconstruction of the prominent fleche and paired chimney to the Rolleston Avenue façade of the 1877 building (east), and two paired chimneys to the 1877 building (south).
- The removal of the un-listed parts of the Centennial Wing and the enclosing structures over the Garden Court constructed in the mid-1990s will also allow significant fabric to be revealed, including:
 - the northern gable end, the west façade and roof of the 1870 building;
 - part of the north elevation of the 1872 building;
 - the quatrefoil at the northern gable end of the 1877 building; and
 - the end elevation and gable roof form of the 1882 building.

114. The additional opening in the Centennial Wing façade will make the original Miller, White and Dunn design more legible as well as provide for the ongoing socially and culturally significant use of the complex and assist in addressing contemporary visitor needs.

115. A number of other positive effects are outlined in the HIS.

Summary

116. Having regard to the restricted matters of discretion and the expert assessments, it is considered that:

- The loss of some heritage elements, being largely limited to fabric of little or no significance within the Museum and the basement of the Robert McDougall Gallery, will have only a minor impact on the cultural heritage significance of the heritage places.
- Alterations to identified historic fabric are generally limited to those elements of secondary significance and will help reveal the significance of previously hidden nineteenth century fabric of Canterbury Museum
- New structures are scaled and massed to avoid adversely affecting the visual appearance or setting of the subject site.
- The full base isolation of the complex will ensure seismic resilience.
- The height breach of the new buildings will have a minor visual impact, being substantially obscured by the nineteenth fabric of the Canterbury Museum from key viewpoints. Other elements that more substantially exceed 15m in height will restore the original appearance of and help recover the architectural and aesthetic significance of Benjamin Mountfort's design

of Canterbury Museum.

- The cantilevered gallery spaces= in the north elevation is recessive in materiality, articulation and form to ensure that the contribution that the museum makes to the broader context and setting of the Arts Centre and Christ's College is retained.

117. Overall, the proposed redevelopment of the Canterbury Museum and the Robert McDougall Art Gallery is considered to rejuvenate and enhance these facilities, with any effects considered to be minor with respect to discrete matters and overall, positive.

Assessment of Objectives and Policies

119. The relevant objectives and policies of the Christchurch District Plan are assessed in Table 2 below.

Table 2: Assessment of relevant Objectives and Policies

Objective/Policy	Assessment
<p>3.3.1 Objective - Enabling recovery and facilitating the future enhancement of the district</p> <p><i>a. The expedited recovery and future enhancement of Christchurch as a dynamic, prosperous and internationally competitive city, in a manner that:</i></p> <ul style="list-style-type: none"> <i>i. Meets the community’s immediate and longer term needs for housing, economic development, community facilities, infrastructure, transport, and social and cultural wellbeing; and</i> <i>ii. Fosters investment certainty; and</i> <p>iii. Sustains the important qualities and values of the natural environment. 3</p>	<p>The museum is a significant district and regional cultural facility and the redevelopment will enable it to better meet the future needs of the community, and support Christchurch as a dynamic city.</p>
<p>3.3.8 Objective - Revitalising the Central City</p> <ul style="list-style-type: none"> <i>a. The Central City is revitalised as the primary community focal point for the people of Christchurch;</i> <i>b. The amenity values, function and economic, social and cultural viability of the Central City are enhanced through private and public sector investment, and</i> <i>c. N/A</i> <i>d. The Central City has a unique identity and sense of place, incorporating the following elements, which can contribute to a high amenity urban environment for residents, visitors and workers to enjoy:</i> <ul style="list-style-type: none"> <i>i. a green edge and gateway to the City defined by the Frame and Hagley Park;</i> <i>ii. a variety of public spaces including the Avon river, squares and precincts and civic facilities;</i> <i>iii. built form and historic heritage that reflects the identity and values of Ngai Tahu, and the City’s history as a European settlement; including cathedrals and associated buildings at 100 Cathedral Square and 136 Barbadoes Street;</i> <i>iv. a wide diversity and concentration of activities that enhance its role as the primary focus of the City and region; and</i> <i>v. a range of options for movement within and to destinations outside the Central City that</i> 	<p>The museum redevelopment will contribute positively to the revitalisation of the Central City as a main community focal point, enhancing its place as a regionally significant cultural facility within the Central City, and contributing to the diversity of Central City activities.</p>

Objective/Policy	Assessment
<p><i>are safe, flexible, and resilient and which supports the increased use of public transport, walking and cycling.</i></p>	
<p>3.3.9 Objective - Natural and cultural environment</p> <p>a. A natural and cultural environment where:</p> <ul style="list-style-type: none"> i. <i>People have access to a high quality network of public open space and recreation opportunities, including areas of natural character and natural landscape; and</i> ii. <i>N/A</i> iii. <i>Objects, structures, places, water/wai, landscapes and areas that are historically important, or of cultural or spiritual importance to Ngāi Tahu mana whenua, are identified and appropriately managed.</i> 	<p>The historically important Museum and Art Gallery buildings will be appropriately managed.</p>
<p>9.3.2.1.1 Objective – Historic Heritage</p> <p>a. <i>The overall contribution of historic heritage to the Christchurch District’s character and identity is maintained through the protection and conservation of significant historic heritage across the Christchurch District in a way which:</i></p> <ul style="list-style-type: none"> i. <i>enables and supports:</i> <ul style="list-style-type: none"> A. <i>the ongoing retention, use and adaptive re-use; and</i> B. <i>the maintenance, repair, upgrade, restoration and reconstruction; of historic heritage; and</i> ii. <i>recognises the condition of buildings, particularly those that have suffered earthquake damage, and the effect of engineering and financial factors on the ability to retain, restore, and continue using them; and</i> iii. <i>acknowledges that in some situations demolition may be justified by reference to the matters in Policy 9.3.2.2.8.</i> 	<p>The objective and policy framework enables and supports the ongoing retention, use and adaptive re-use, maintenance, repair, upgrade, restoration and reconstruction of identified heritage items which directly aligns with this proposal.</p>
<p>9.3.2.2.3 Policy – Management of scheduled historic heritage</p> <p>a. <i>Manage the effects of subdivision, use and development on the heritage items, heritage settings and heritage areas scheduled in Appendix 9.3.7.2 and 9.3.7.3 in a way that:</i></p> <ul style="list-style-type: none"> i. <i>provides for the ongoing use and adaptive reuse of scheduled historic heritage in a manner that is sensitive to their heritage values while recognising the need for works to be undertaken to accommodate their long-term retention, use and sensitive modernisation and the associated engineering and financial factors;</i> 	<p>The redevelopment provides for the ongoing use of heritage buildings in a manner that is sensitive to their heritage values while recognising the need for works to be undertaken to accommodate their long-term retention.</p> <p>Changes have been largely limited to areas that do not form part of the Heritage Items identified in the Christchurch District Plan.</p>

Objective/Policy	Assessment
<p><i>ii. recognises the need for a flexible approach to heritage management, with particular regard to enabling repairs, heritage investigative and temporary works, heritage upgrade works to be building code requirements, restoration and reconstruction, in a manner which is sensitive to the heritage values of the scheduled historic heritage; and</i></p> <p><i>iii. subject to i. and ii., protects their particular heritage values from inappropriate subdivision, use and development.</i></p> <p><i>b. Undertake any work on heritage items and heritage settings scheduled in Appendix 9.3.7.2 in accordance with the following principles:</i></p> <p><i>i. focus any changes to those parts of the heritage items or heritage settings, which have more potential to accommodate change (other than where works are undertaken as a result of damage), recognising that heritage settings and Significant (Group 2) heritage items are potentially capable of accommodating a greater degree of change than Highly Significant (Group 1) heritage items;</i></p> <p><i>ii. conserve, and wherever possible enhance, the authenticity and integrity of the heritage item and heritage settings, particularly in the case of Highly Significant (Group 1) heritage items and heritage settings;</i></p> <p><i>iii. identify, minimise and manage risks or threats to the structural integrity of the heritage item and the heritage values of the heritage item, including from natural hazards;</i></p> <p><i>iv. document the material changes to the heritage item and heritage setting;</i></p> <p><i>v. be reversible wherever practicable (other than where works are undertaken as a result of damage); and</i></p> <p><i>vi. distinguish between new work and existing heritage fabric in a manner that is sensitive to the heritage values.</i></p>	<p>The conservation works will enhance the authenticity and integrity of the Canterbury Museum, through revealing previously hidden nineteenth century fabric of the Highly Significant (Group 1) Mountfort buildings.</p> <p>Recording of changes to the heritage items that comprise the Canterbury Museum and their setting will be undertaken in accordance with Article 12 (Recording) of the ICOMOS New Zealand Charter.</p> <p>New work is distinguished through the use of contemporary materials (including concrete, steel and glass) and detailing. These are integrated in a sensitive manner referencing the scale, massing, forms, colour and texture of the heritage items.</p>
<p>9.3.2.2.5 Policy – Ongoing use of heritage items and heritage settings</p> <p><i>a. Provide for the ongoing use and adaptive re-use of heritage items and heritage settings scheduled in Appendix 9.3.7.2 (in accordance with Policy 9.3.2.2.3), including the following:</i></p> <p><i>i. repairs and maintenance;</i></p> <p><i>ii. temporary activities;</i></p> <p><i>iii. specific exemptions to zone and transport rules to provide for the establishment of a wider range of activities;</i></p>	

Objective/Policy	Assessment
<i>iv. alterations, restoration, reconstruction and heritage upgrade works to heritage items, including seismic, fire and access upgrades; v. signs on heritage items and within heritage settings; and vi. new buildings in heritage settings.</i>	

Part 2 Matters

120. Schedule 4 of the RMA requires that all applications for resource consent include an assessment of the activity against the matters in Part 2 of the Act.

121. The purpose of the RMA under Section 5 is to promote the sustainable management of natural and physical resources. Sustainable management involves managing the use, development and protection of these resources in order to enable people and communities to provide for their social, economic and cultural well-being and for their health and safety, while –

- sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations;
- safeguarding the life supporting capacity of air, water, soil and ecosystems; and
- avoiding, remedying, or mitigating any adverse effects of activities on the environment.

122. The protection of historic heritage from inappropriate subdivision, use and development is a matter of national importance under s6(f) of the RMA. This protection is provided for under the provisions of the District Plan which identifies specific heritage items on the application site. The District Plan provides regulatory controls which enables and supports the ongoing retention, use and adaptive re-use; and the maintenance, repair, upgrade, restoration and reconstruction of the identified heritage items. Based on the preceding assessment of effects, it is considered that historic heritage is protected in a way that achieves the purpose of Section 6(f). No other matters of national importance in Section 6 of the RMA are applicable to the application.

123. In terms of Section 7, the following matters are relevant:

- the efficient use and development of natural and physical resources;
- the maintenance and enhancement of amenity values; and
- maintenance and enhancement of the quality of the environment.

124. As discussed in the Assessment of Environmental Effects, the development will adequately mitigate any adverse effects on the environment.

125. Having weighed all the relevant factors, it is considered that the proposal is consistent with the purpose and principles of the RMA and the application is in order for approval.

Notification Assessment

127. Notification of an application lies at the discretion of the Consent Authority.

128. Section 137 of the Resource Legislation Amendment Act amended the provisions of sections 95A to 95E on 18 October 2017. Section 95A and 95B now include steps to determine whether an application should be notified. These steps are assessed in relation to the application as follows:

Table 3: Section 95A – Public notification

Step 1: Mandatory notification – section 95A(3)	
Has the applicant requested that the application be publicly notified?	Yes
Is public notification required under s95C (following a request for further information or commissioning of report)?	No
Is the application made jointly with an application to exchange reserve land?	No
Step 2: If not required by Step 1, notification is precluded if any of these apply – section 95A(5)	
Does a rule or NES preclude public notification for all aspects of the application?	No
Is the application a controlled activity?	No
Is the application a restricted discretionary or discretionary activity for a subdivision?	No
Is the application a restricted discretionary or discretionary activity for residential activity?	No
Is the application a boundary activity (other than a controlled activity)?	No
Step 3: Notification required in certain circumstances if not precluded by Step 2 – section 95A(8)	
Does a rule or NES require public notification	No
Will the activity have, or is it likely to have, adverse effects on the environment that are more than minor?	No
Step 4: Relevant to all applications that do not already require notification – section 95A(9)	
Do special circumstances exist that warrant the application being publicly notified?	No

129. Due to the high level of public interest in the project, and the high cultural and heritage significance of the Museum and Robert McDougal Gallery and buildings and the setting within the Botanic Gardens and cultural precinct, in terms of section 95A(3)(a) of the Resource Management Act, the applicant requests public notification. As such, an assessment under Section 95B Limited Notification is not required.

Conditions of Consent

131. Sections 108 of the RMA allows councils to include conditions on land use resource consents, however, under section 108AA, a council must not include a condition in a resource consent for an activity unless—

- (a) *the applicant agrees to the condition; or*
- (b) *the condition is directly connected to one or both of the following:*
 - i. *an adverse effect of the activity on the environment;*
 - ii. *an applicable district or regional rule, or a national environmental standard; or*
- (c) *the condition relates to administrative matters that are essential for the efficient implementation of the relevant resource consent.*

132. The applicant requests the opportunity to review a draft set of conditions prior to the granting of consent, as per the requirements of s108AA of the RMA.

133. It is noted that detailed building and engineering design has not yet been carried out, and will be undertaken during the developed design stage prior to any building consents. The extent of some works on heritage fabric will also not be possible until some demolition work has been undertaken to expose presently hidden fabric.

134. It is proposed that detailed design will be undertaken under the supervision of a recognised heritage professional, and submitted to Council heritage staff for assessment by way of conditions of consent. This will enable the finer details of the works including connections with heritage fabric and temporary protection at that stage.

Conclusion

135. This AEE has been prepared on behalf of the Museum Board to accompany a resource consent application for the redevelopment of the Canterbury Museum and Robert McDougall Gallery.

136. The application is identified as a restricted discretionary activity under the provisions of the District Plan. Consequently, the assessment of any actual or potential effects has focussed on the restricted matters of discretion identified in the District Plan as set out in the preceding assessments.

137. In terms of that assessment, the AEE and supporting technical reports demonstrates that:

- The proposed redevelopment of Canterbury Museum and the Robert McDougall Gallery will enable the continued use of these iconic facilities.
- The works have been carefully refined following extensive consultation and thorough analysis of the heritage values and historic fabric of the subject site.
- The full base isolation of the complex will ensure seismic resilience of new and existing structures on the site to meet the New Zealand Building Code and provide the highest possible protection to the collections they house as well as staff and visitors.
- The HIS and Heritage Landscape Report are both supportive of the proposal.
- Assessment against the restricted matters of discretion have shown that any effects are less than minor and when weighing up all aspects of the proposal, can be supported.
- The redevelopment works include a number of positive effects which are reflective of the project's key drivers.

138. The assessment of relevant objectives and policies indicates that the proposal meets the objective and policy framework, in particular it enables the ongoing retention, use maintenance, repair, upgrade, restoration and reconstruction of the identified heritage items.

139. An assessment under Part 2 of the Act has found that the proposal is consistent with the enabling provisions of the Act while ensuring that sustainable management is upheld.

140. As such, we consider the application can be granted, subject to conditions.

Resource Management Group Limited
4 December 2020

Appendices

Appendices are attached separately



Need FOR Change

Canterbury Museum's Proposed Redevelopment Project

Concept Design Report

**Final for Resource Consent
25th November 2020**

athfieldarchitects.co.nz

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Christchurch 8013
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New Zealand

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SECTION A - INTRODUCTION

Introduction

Canterbury Museum is an iconic feature of the Christchurch cultural precinct and the wider Canterbury region. The Museum has the only remaining undamaged neo-Gothic building in the city as well as use of the Robert McDougall Gallery category 1 heritage building.

The Museum houses and displays more than 2.3 million items of Canterbury's heritage, our taonga/treasures. The collections of the Museum have an estimated value in excess of 1 billion dollars. In the seismic era, the Museum's guardians have also identified the imperative to "save and protect" the two heritage buildings and treat them as, in effect, the first two artefacts in the collection.

The Museum is an important and significant contributor to the city's and region's economy. Annual visitor numbers currently exceed 750,000 per annum and this is expected to rise to 1 million visitors with a redeveloped facility.

The redevelopment of Canterbury Museum looks to address the challenges facing the Museum as it looks forward 100 years to be a world-class facility for storing, protecting, celebrating and respectfully remembering our heritage and stories, including the earthquakes. Even prior to the 2011 Canterbury earthquakes the Museum was facing a number of challenges operating within the current buildings including: increasingly high numbers of international and domestic visitors each year resulting from 29% growth over the last decade from 580,000 to 750,000 per annum, requirements for improved exhibition facilities and proper storage of collection items, the need for environmental control, significant structural, fire, safety and security upgrades, clarity in visitor circulation, integration of the Robert McDougall Gallery with the Museum buildings and improved customer facilities.

The Museum Board is embarking on this redevelopment in response to the need to actively position and shape the Museum for its next 50 years – indeed 100 years – and because it believes it has to as a result of the challenges above – not because it is 'nice to do'.

The result of the 2011 Canterbury earthquakes has increased the importance of seismic strengthening issues in relation to these buildings and the importance of the protection of its collections in an active seismic zone. Whilst seismic strengthening is a significant part of the redevelopment project to the Museum and Robert McDougall buildings, this has to be undertaken whilst also addressing other key brief requirements for the project, particularly:

- Respecting heritage
- Integration of the Cultural Narrative

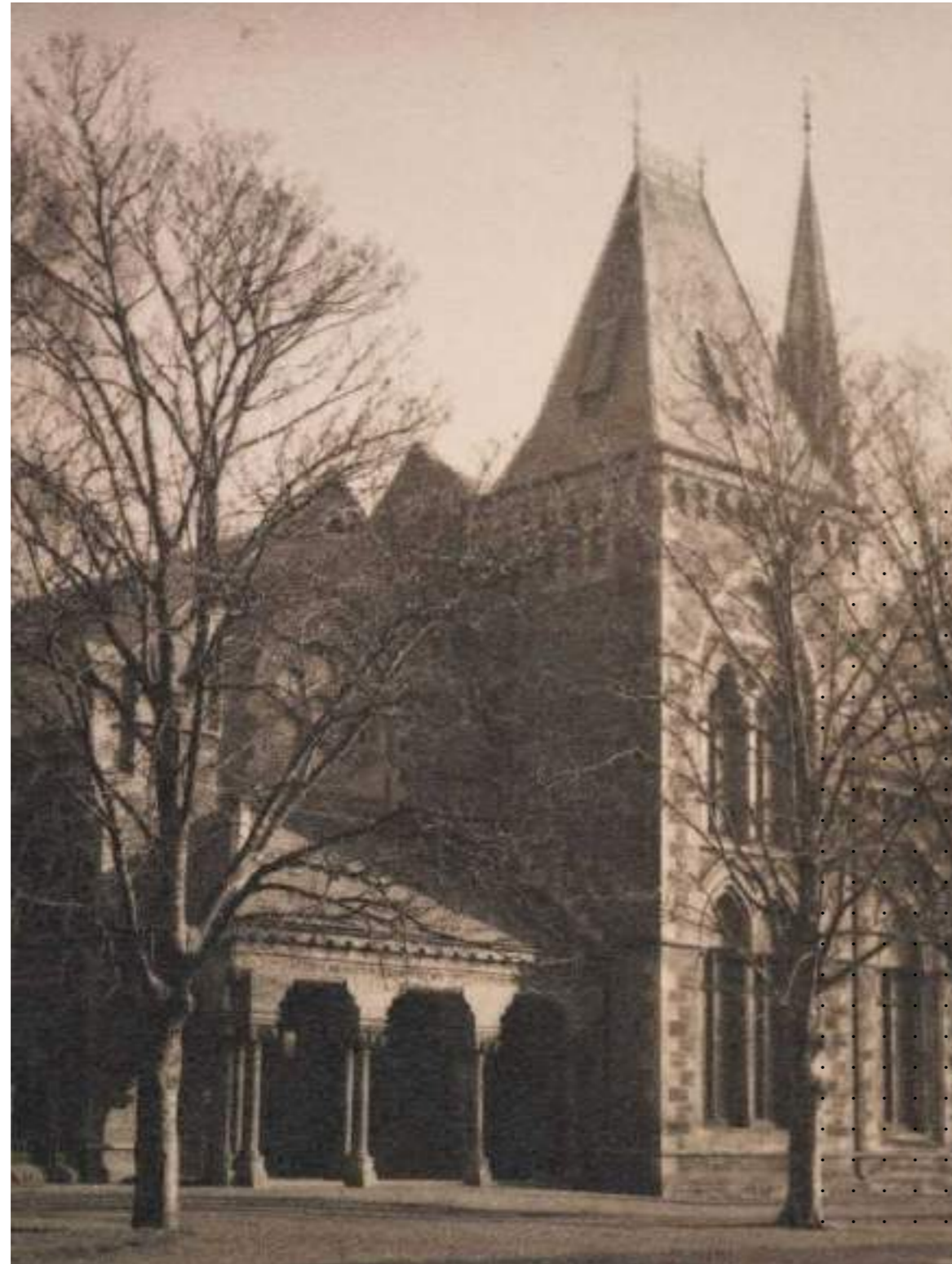
- Achieving additional space on the current site
- Protecting people, collections & buildings
- Expanding within planning and legislative requirements
- Storing collections properly, particularly providing appropriate environmental control
- Future flexibility

In June 2020, the Museum launched to the public "The Need for Change", outlining the urgent challenges they are facing.

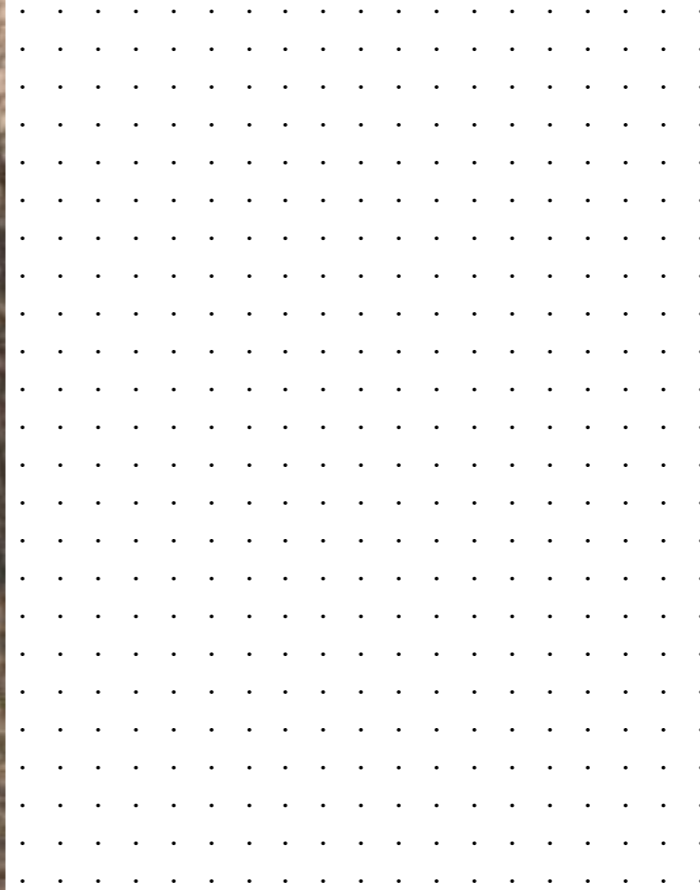
Between June to October, Athfield Architects along with the Museum have held multiple workshops to diverse stakeholder groups to share ideas of the concept design as it progressed. The public have also given us feedback. This feedback has informed the concept design in this report.



Canterbury Museum in context



HISTORY & GROWTH OF CANTERBURY MUSEUM

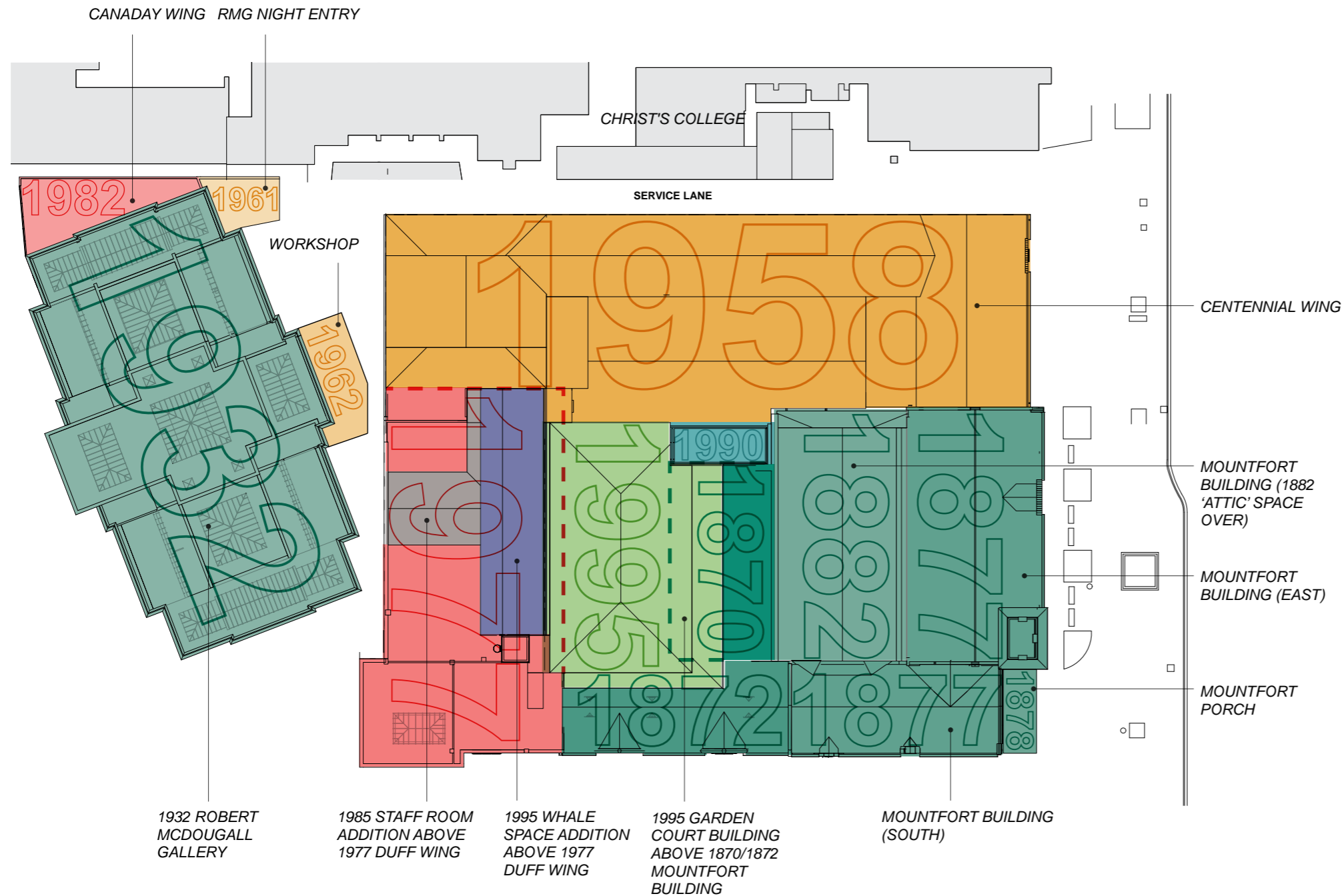


HISTORY & GROWTH

EXISTING COMPOSITE PLAN

20.02
 Canterbury Museum Redevelopment Project
Concept Design Report
 Final for Resource Consent
 25th November 2020

a t h f i e l d
 a r c h i t e c t s
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Establishment of Canterbury Museum

The establishment of Canterbury Museum was largely due to the drive of Prussian scientist, Julius Haast, who arrived in the colony in 1858. In the following year he accompanied Austrian scientist Ferdinand von Hochsetter on geological expeditions in the North Island and Nelson. Through exchanges, mainly of moa bones and bird skins, Haast formed the basis of what was to become the Canterbury Museum collection. Public pressure was mounting for the erection of a 'proper' Museum. The provincial government responded by arranging a design competition for a new Museum, won jointly by Mountfort and Isaac Luck along with Robert Speechley.

The Mountfort Period 1870-82

After Haast appealed to the government, the Provincial Government acted and set aside £1200 for a building in the Domain, now the Botanic Gardens (1870 in figure). Haast, now working as the Museum's Director, successfully appealed to the public for more funds. This allowed Mountfort to form the first part of the total design he envisaged. Timber framed roof with skylights along its ridge, and 9m high timber columns of heart kauri, which houses what is now called the Mountfort Gallery. The proportions of the building with its steeply pitched roof gave it a vaguely Gothic appearance, but there was little decoration except for some details in the interior woodwork.

The Museum had no sooner opened than it was identified that there was a lack of space for the collections and plans were made for additions. Another stage was completed in 1872 (see figure), the exterior of which was described by journalists as 'modern Gothic in style', with more elaborate pointed windows on the south façade recessed into arches and two subsidiary gables along the south façade, adding variety to the otherwise plain form of the roof.

Further additions were planned in 1873 and in the following year. The alterations took the form of an extension of the 1872 wing and another parallel to Rolleston Avenue. Completed in 1877 (see figure), this relocated the entrance to its current location, more directly to the street, while Mountfort's signature geometric rose window featured in the gable above the entrance. The south elevation included a pair of gables from which chimneys extended, along with arched openings typical of the Gothic Revival style.

The entry portico with its decorative Oamaru stone (by John Smith) stonework was added in 1878 (see figure) and clearly defines the entry to the Museum.

The last building work undertaken at the Museum to Mountfort's designs occurred in 1882. The 1882 building was a major engineering feat. The roof spanned on massive timber trusses 48ft (14.6m) and was one of the "most impressive interior spaces built in 19th-century New Zealand"

HISTORY & GROWTH

GROWTH OVER TIME

1870



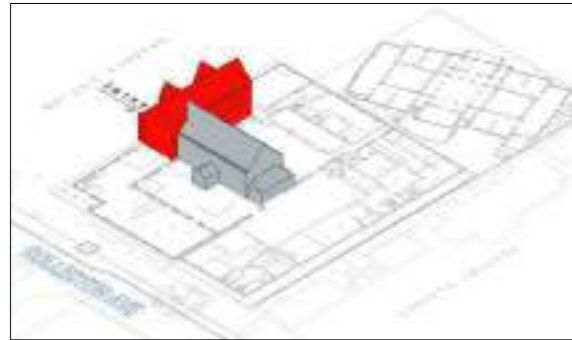
Architect: Benjamin Mountfort

1 level with mezzanine and lean-to addition to north
 Corrugated steel roofing, Halswell basalt, random square bolstered stones in courses, timber roof structure

Total Floor Area: 525 sqm



1872



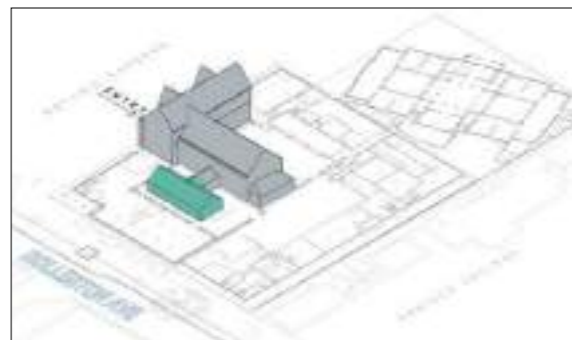
Architect: Benjamin Mountfort

2 storey addition.
 Halswell basalt in random rubble brought to course, Port Hills trachyte stone detailing. Corrugated steel roofing on timber roof structure. timber first floor structure.

New total floor area: 1040 sqm



1874



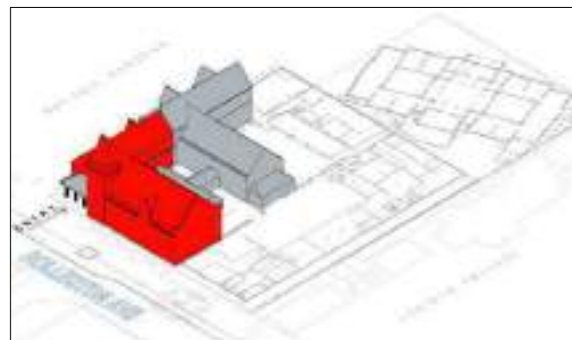
Architect: Hoani Taahu, Tamati Ngakaho

Single level carved meeting house interior for display of Maori taonga.
 Concrete slab, timber framing, corrugated steel wall and roof cladding. This was mostly an interior exhibition.

New total floor area: 1177 sqm



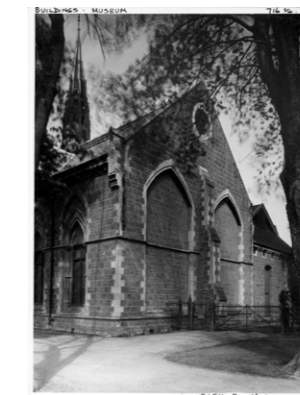
1877



Architect: Benjamin Mountfort

2 level south wing - ground floor offices, first floor exhibition space.
 1 level east wing - exhibition space with mezzanine
 Port hills trachyte walls in random squared coursed rubble with dressed Oamaru stone detailing. Slate roofing with glazed skylights.

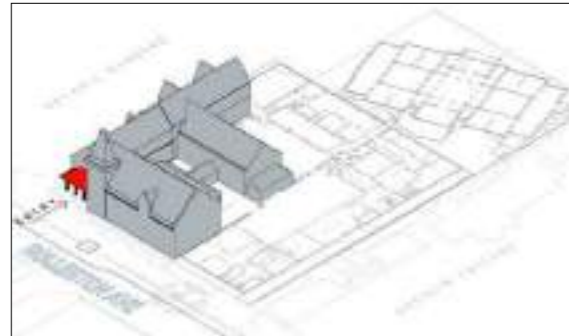
New total floor area: 2437 sqm



HISTORY & GROWTH

GROWTH OVER TIME

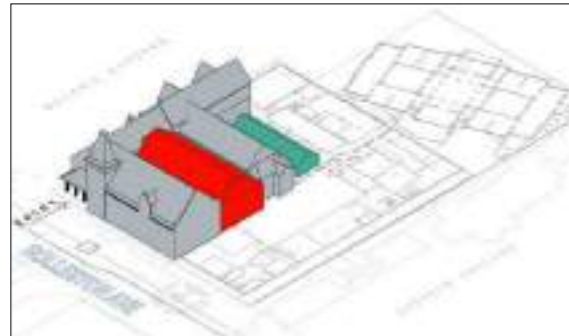
1878



Architect: Benjamin Mountfort
 New entrance porch
 Port hills trachyte columns with dressed Oamaru stone. Slate roofing.
 New total floor area: 2437 sqm



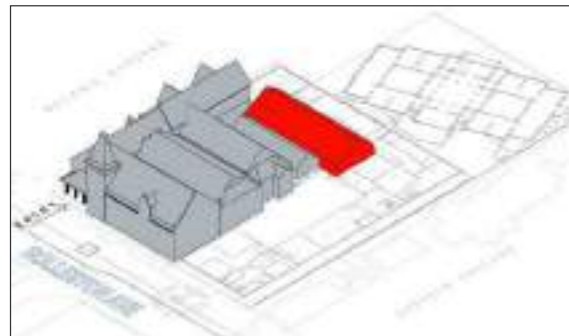
1882



Architect: Benjamin Mountfort
 Whare whakairo relocated to West side 1870 gallery.
 Courtyard roofed between existing 1870 and 1877 wings
 Stone north wall, corrugated steel roofing on timber trusses supported off existing walls
 New total floor area: 2857 sqm



1910

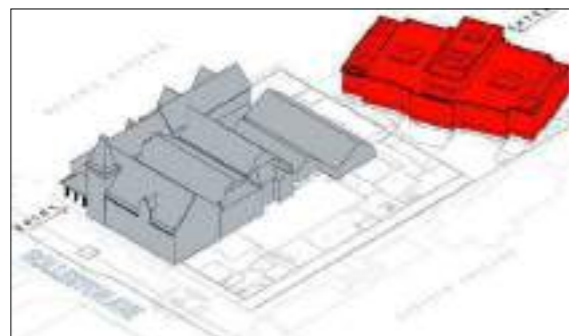


New shelter for blue whale skeleton.
 Corrugated iron clad timber framed structure.
 New total floor area: 2857 sqm



The Okarito blue whale skeleton (Photograph The Press, 1999).

1932



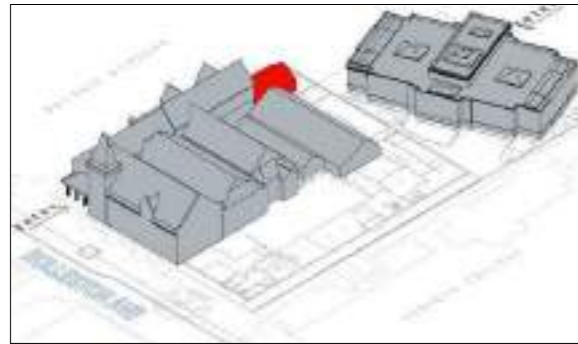
Architect: E W Armstrong
 Single level exhibition spaces with basement storage.
 Concrete slab, brick wall construction, concrete and steel roof, glazed skylights.
 New total floor area: 4447 sqm



HISTORY & GROWTH

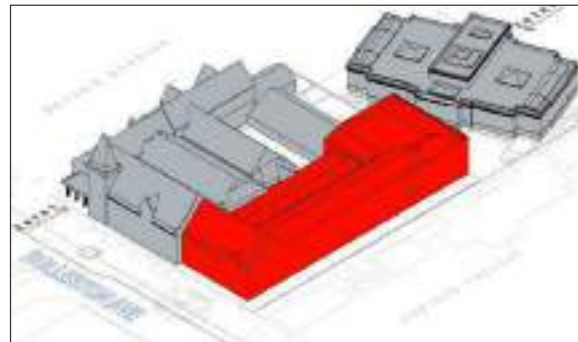
GROWTH OVER TIME

1940



Prefabricated room for display of relief model
 Corrugated iron roofing, timber framed structure
New total floor area: 4447 sqm

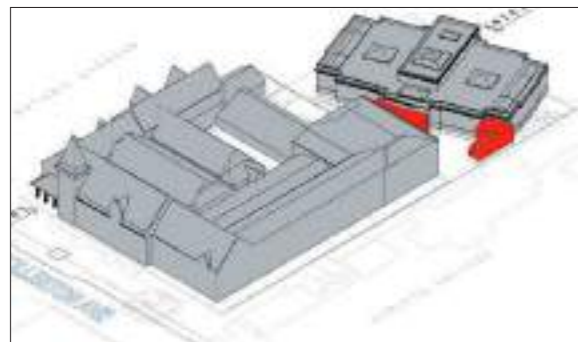
1958



Architect: Miller White Dunn
 Centennial wing - single / double storey
 exhibition spaces with 3 storey office area to
 west and lecture theatre along east.
 Reinforced concrete wall construction, steel
 frames, asbestos roofing, stone veneer replica
 cladding to street frontage.
 Whare Whakairo & 1877 flèche removed
New total floor area: 8315 sqm



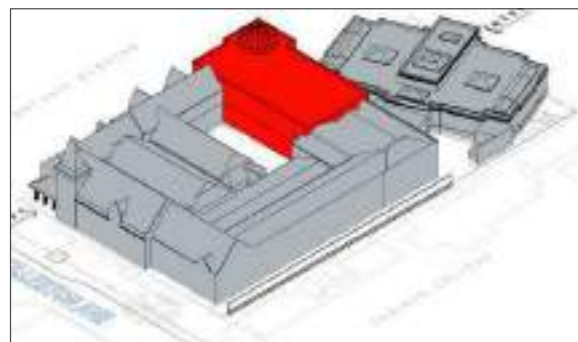
1962



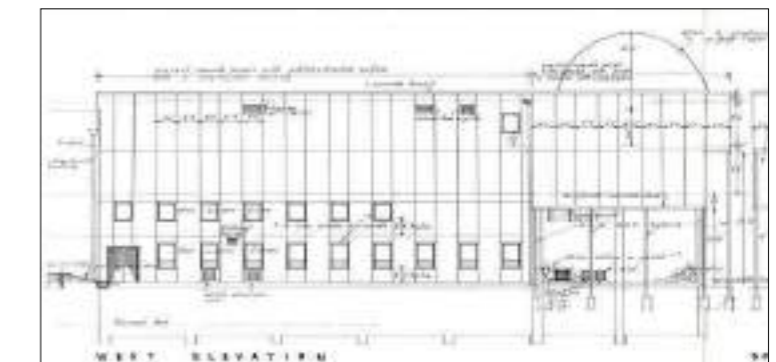
Architect: Christchurch City Council
 Night entry and store added to east facade of
 gallery. Openings created in original walls.
 Concrete block and brick walls.
New total floor area: 8430 sqm



1977



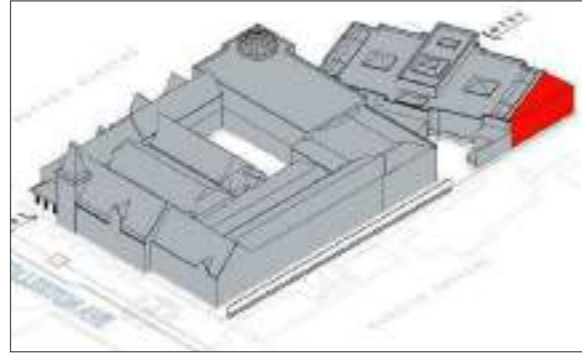
Architect: John Hendry
 4 storey addition comprises exhibition spaces,
 storage and research library
 Concrete frame, in situ slab, precast aggregate
 panels, flat roof.
New total floor area: 11,810 sqm



HISTORY & GROWTH

GROWTH OVER TIME

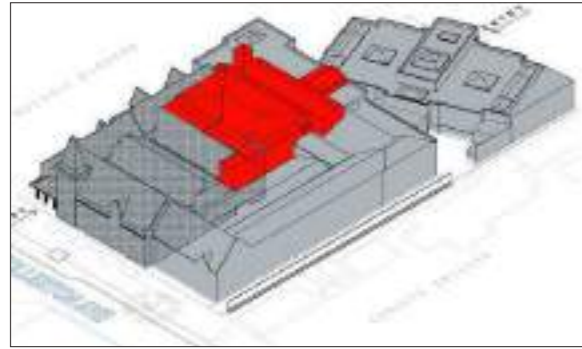
1982



Architect: Neil Carrie - Christchurch City Council
 Canaday Wing. 2 storey office addition to north. New opening in existing wall. New basement. Concrete block roof, timber walls and interior framing, aluminium curtain walls.
New total floor area: 12,465 sqm



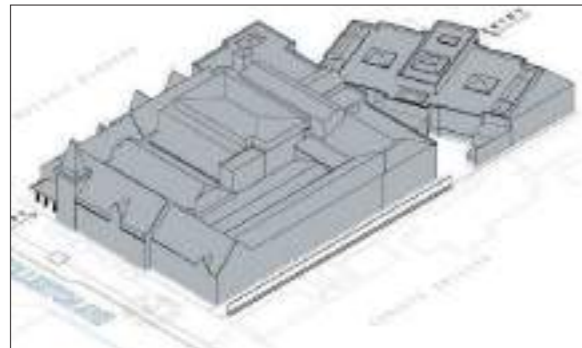
1995



Architect: Christchurch City Council
 Seismic strengthening to Mountfort buildings. Infill of courtyard space with 5 storey building for exhibitions, storage and laboratories. Concrete column and beam structure with concrete slabs over double tee flooring system.
New total floor area: 14,970 sqm



PRESENT DAY



Most of the buildings remain unchanged. Some minor internal fit-out has been undertaken since 1995.

CURRENT MUSEUM HERITAGE FACADES IN THE CULTURAL PRECINCT

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1877 The Clock Tower
and Rutherford's Den

1882 The Great Hall

1877 Mountfort Building (East)

1958 Centennial
Wing

Service Lane

1925 Christ's College Dining Hall

East facades viewed from Rolleston Avenue



1932 Robert McDougall Gallery

1977 Roger Duff Wing

1872 Mountfort Building

1877 Mountfort Building (South)

1882 The Great Hall

1888 Classics

South facades viewed from Botanic Gardens

CURRENT MUSEUM HERITAGE FACADES IN THE CULTURAL PRECINCT

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1983 Canaday Wing addition

1932 Robert McDougall Gallery

1977 Roger Duff Wing



West facades viewed from Botanic Gardens



Centennial Wing North Facade, Roa's Moa mural visible from the street



Service lane on the northern boundary, RMG night entry at the rear end



RMG night entry



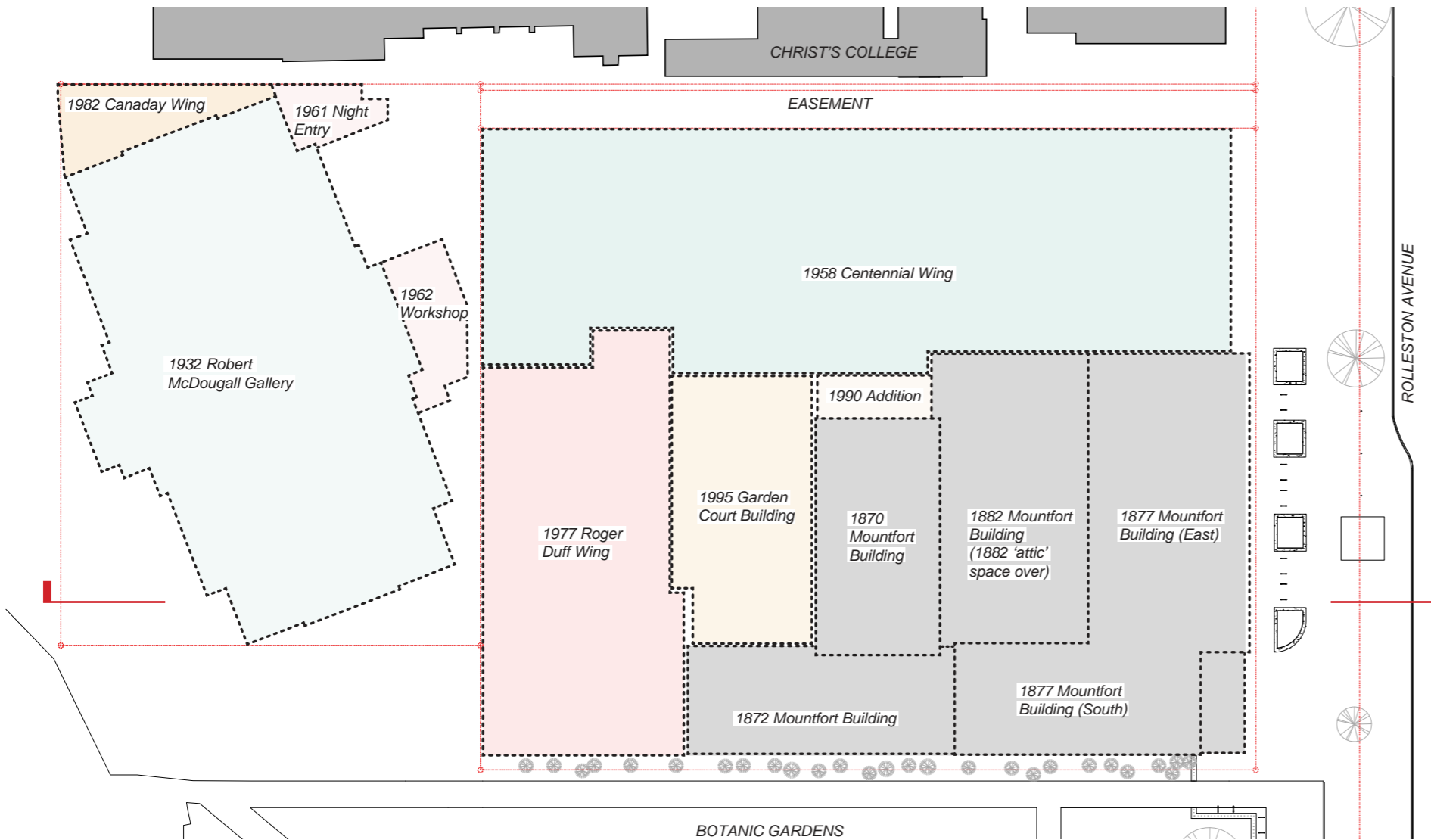
RMG workshop, entry from Museum service lane, RMG can be seen to the right

Service Lane, North Facades

CURRENT CANTERBURY MUSEUM SITE & LEGAL INFORMATION

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Canterbury Museum is governed under the Canterbury Museum Trust Board Act, 1993.

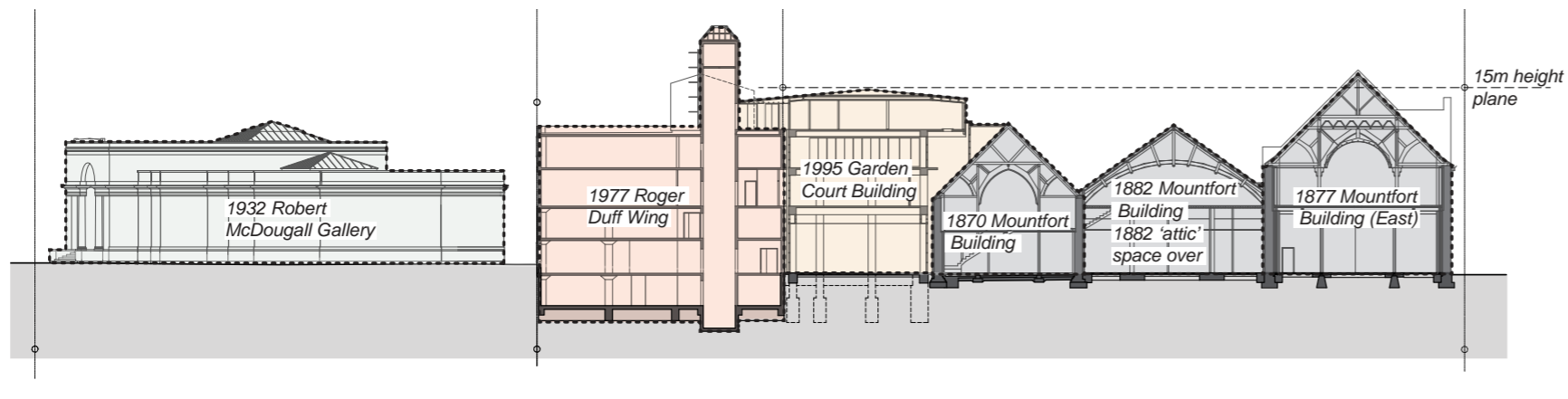
The Robert McDougall Gallery at Canterbury Museum is governed under the Christchurch City Council (Robert McDougall Gallery) Land Act, 2003

The legal descriptions of the two sites are;

Canterbury Museum; Pt Res 25, SO 6610 area 4995m²

Robert McDougall Art Gallery; Lot 1 DP45580 area 2216m²

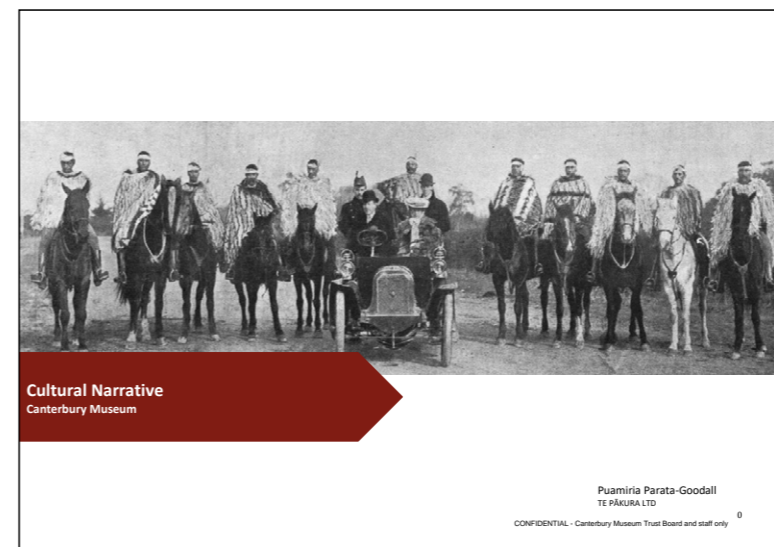
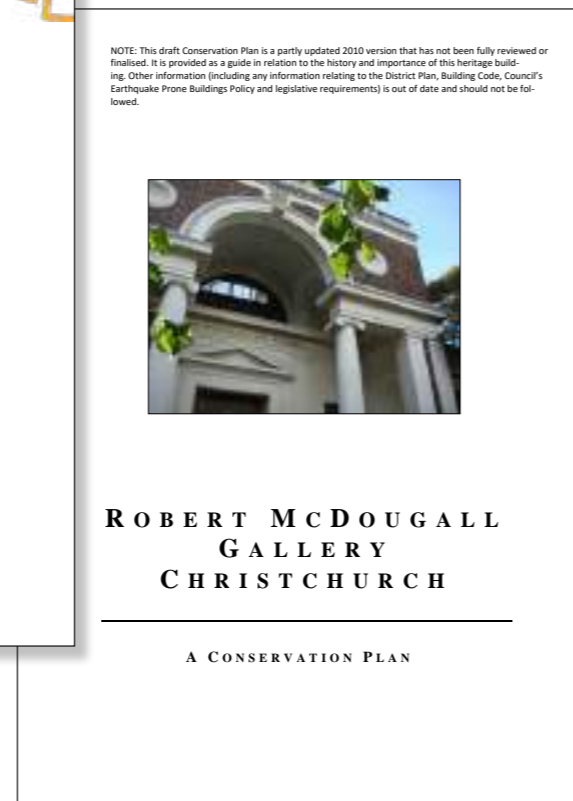
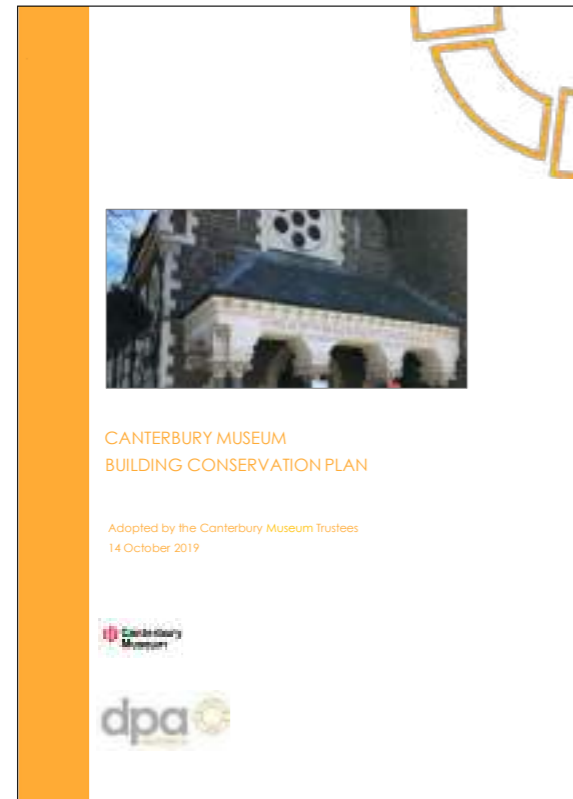
A legal easement exists along the northern side of the Museum boundary.



DOCUMENTS THAT INFORMED CANTERBURY MUSEUM REDEVELOPMENT

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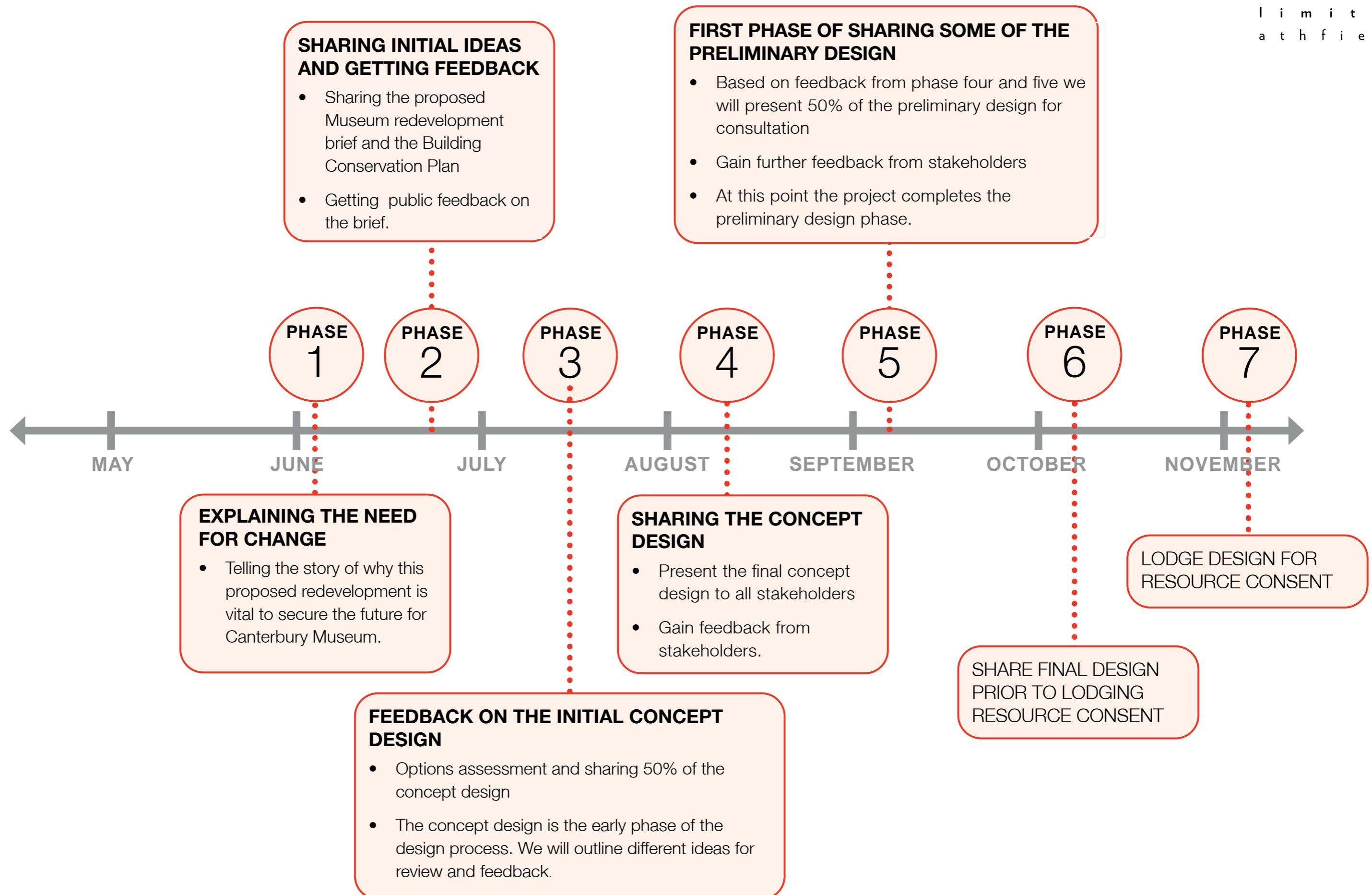
The Canterbury Museum redevelopment have been informed by "Canterbury Museum Building Conservation Plan, 2019" and the "Robert McDougall Gallery Christchurch - A Conversation Plan, 2013".

The Museum redevelopment shall be unpinned by the Canterbury Museum Cultural Narrative, developed by Puamiria Parata-Goodall, September 2019.

The Museum Project Brief
Athfield Architects Limited, 2019

CONSULTATION PROCESS

DESIGN TIMELINE





Need FOR Change

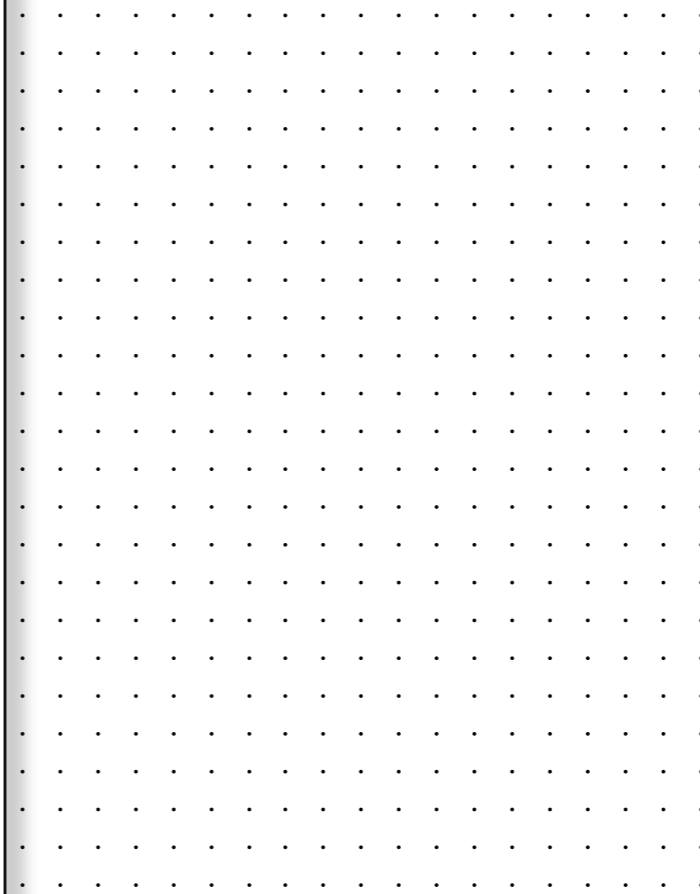
Canterbury Museum's Proposed Redevelopment Project

Concept designs for the proposed redevelopment of the Museum.

Please use a comment card to give us your feedback.



SECTION B - A NEED FOR CHANGE



A NEED FOR CHANGE

DEFICIENCIES & CHALLENGES OF THE CURRENT BUILDINGS

Kia Ora

Canterbury Museum opened on Rolleston Avenue 150 years ago. We're proposing a redevelopment of the Museum to secure our future on this site for many years to come.

We are one of the country's oldest museums, but sadly the years have taken a toll on our buildings. We need to protect the heritage buildings and the collection and create a fit-for-purpose modern Museum for you to enjoy for many years to come.

This is not a nice to do project, but a response to a set of challenges that threaten the future of the Museum as a much-loved Canterbury institution.

Over the past 4 months we have met with many people to explain why we need to redevelop the Museum. Hundreds more have given us feedback about what they like and dislike about the Museum and what they would like to see in a redevelopment.

This feedback has informed the concept designs on display here.

Your opinion is important to us. Please tell us what you think about the plans.

Ngā mihi



David Ayers
 Chair, Canterbury Museum Trust Board



Anthony Wright
 Director, Canterbury Museum



West African Bowl – splitting due to lack of temperature and humidity control.



This elephant is stored in an attic space above one of the ground floor galleries, along with thousands of other treasures.



This rabbit was on display in the Living Canterbury exhibition; his fur was eaten by case moths.

Why the Need for Change

More space to bring back treasures and display all of our exhibits

More storage to extend the life of our collections

More public space that is safe, welcoming and comfortable for everyone

More room for new education spaces for lifelong learning

More space to tell stories of our shared history

More space to welcome and host visitors

More space for new exhibitions that are accessible, relevant and inspirational



The much-loved blue whale skeleton could be displayed again.



The heritage buildings are our greatest treasures.



Sir Edmund Hillary's tractor in the Antarctic Gallery.



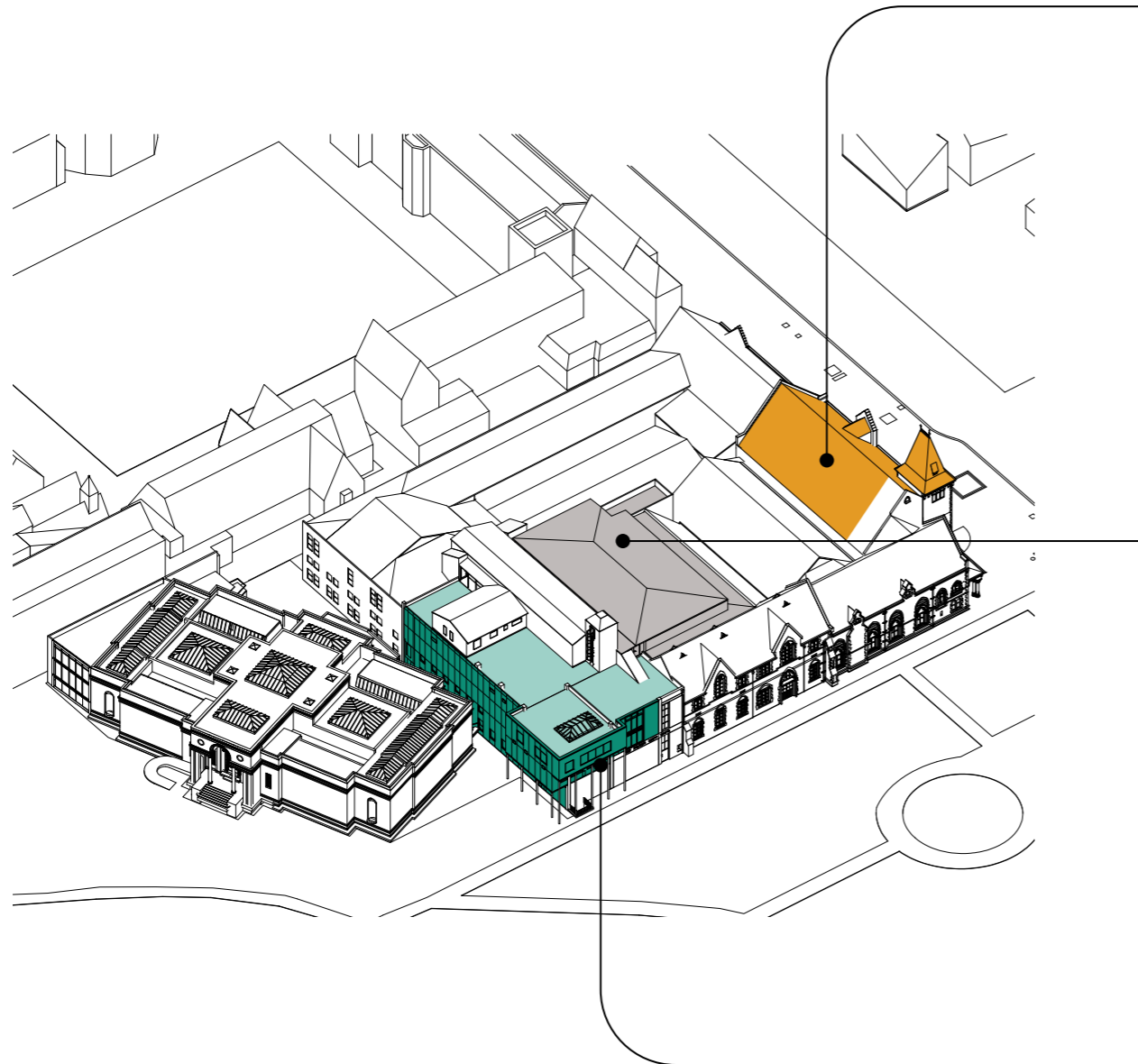
Medals awarded to the great Antarctic explorer, Ernest Shackleton would be on display for the first time in a redeveloped Museum.

DEFICIENCIES

DETERIORATING BUILDING ENCLOSURE

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1877 MOUNTFORT BUILDING SLATE ROOFING

- Roof changes and spot repair over time has led to a patchwork of tiles.
- These are now lifting in strong winds, causing water inlet and safety hazards.
- The galvanised nails have reached the end of their useful life.
- The roof requires repair.



1995 GARDEN COURT BUILDING ROOF / WALLS

- Repair needs include:
- Reclad the 1995 garden court building with a durable rainscreen
- Make good complex roofing and gutter junctions with adjacent structures.
- Replace all membrane roofing
- Remove chiller plant, remove concrete topping and waterproofing
- Overclad concrete walls with a rainscreen
- Renew waterproofing and properly detailed mounting for chiller plant.



1977 ROGER DUFF BUILDING WALLS

- Precast joints badly detailed and cladding panels required to be removed and installed correctly.

1977 ROGER DUFF BUILDING ROOF

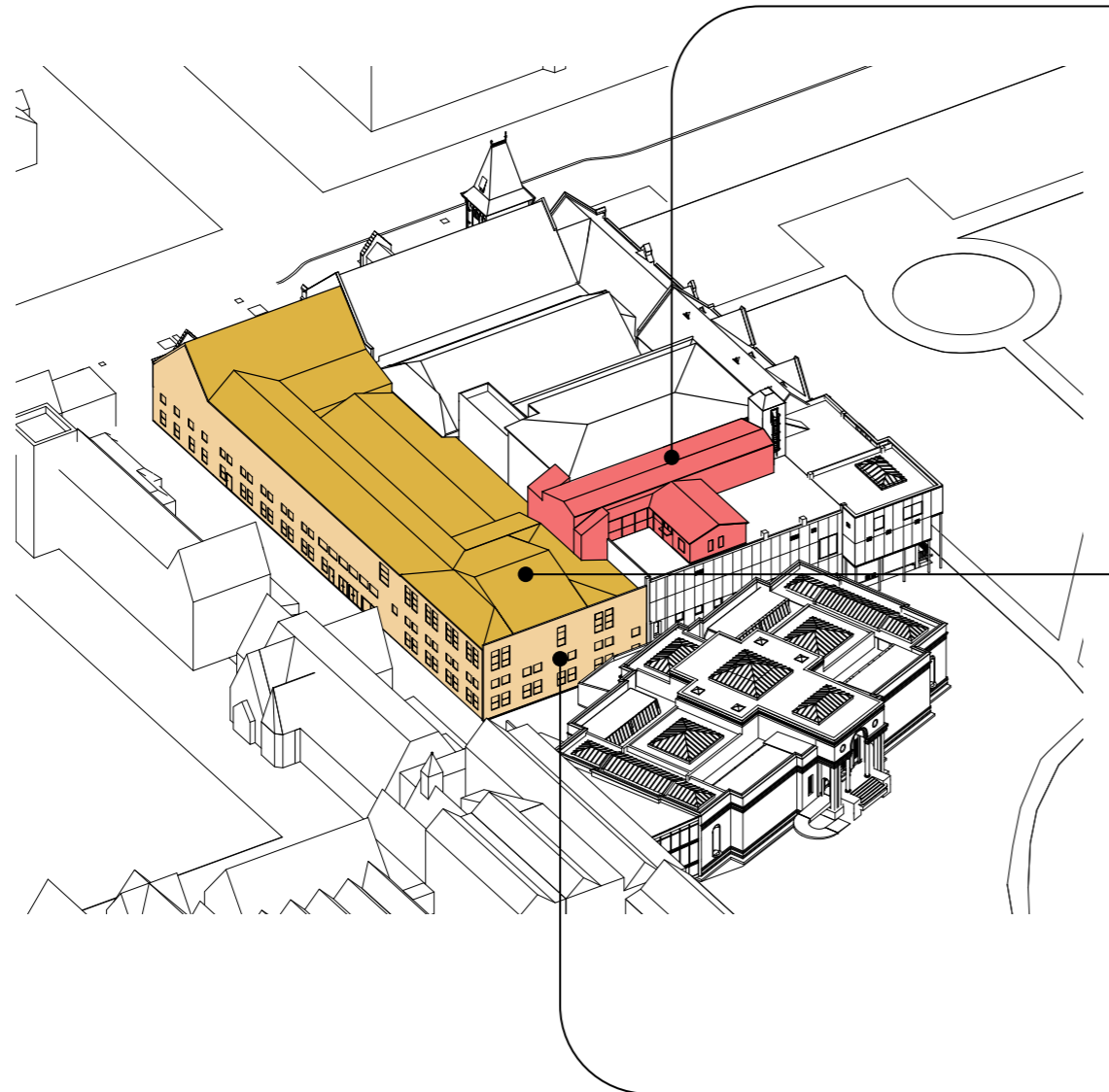
- Repair needs include:
- Remove all concrete topping slabs from the roof and all waterproofing membrane to expose the original concrete roof substrate. Lay a new screed and membrane to falls.
 - Replace the glazing and aluminium frame to skylight

DEFICIENCIES

DETERIORATING BUILDING ENCLOSURE

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1980'S & 1995 STAFF ROOM & WHALE STORE

- Whale store repair includes:
- Replace all freezer panel roof and wall cladding
- Provide new wall and roof framing and reclad in more durable material
- Staff room is severely infected with insect damage and rotting cladding. All roofing and cladding requires replacement, and it is likely the timber framing requires significant replacement as well.



1958 BUILDING ROOF

- Asbestos. As the product weathers over time there is increased risk that asbestos fibres get released which poses a health risk.
- The roof is brittle and cracking, cannot be walked on, and is well beyond it's useful life. It has so far been patched with clear acrylic sheeting.
- No insulation
- The only long-term solution to provide any confidence around a watertight roof and mitigate health risk from the release of fibres is to replace this roof.



1958 BUILDING WALLS

- Basic construction: single skin concrete - poor waterproofing.
- No insulation.
- Single glazed steel windows
- Significant cracking to wall from earthquakes damage
- Basement tanking requires extending
- New over-cladding / rainscreen remedial to address waterproofing, new insulation, replace all windows with double glazing required, extend basement tanking

DEFICIENCIES

GENERAL APPEARANCE



East Facade



Blacked-out windows and doors create an unapproachable, uninviting facade



South Facade



Exterior

Externally, because there are galleries beyond displaying collection items, many windows have been blacked out. This is particularly noticeable behind the Rolleston Avenue frontage. This results in a blank, cold and unapproachable appearance to the building as a whole and there is little connectivity or activation between the exterior and internal spaces along the Rolleston Avenue frontage.

Historic Appreciation

The exterior of the complex retains most of the original facades. Inside there is little appreciation of the separate buildings and original fabric.

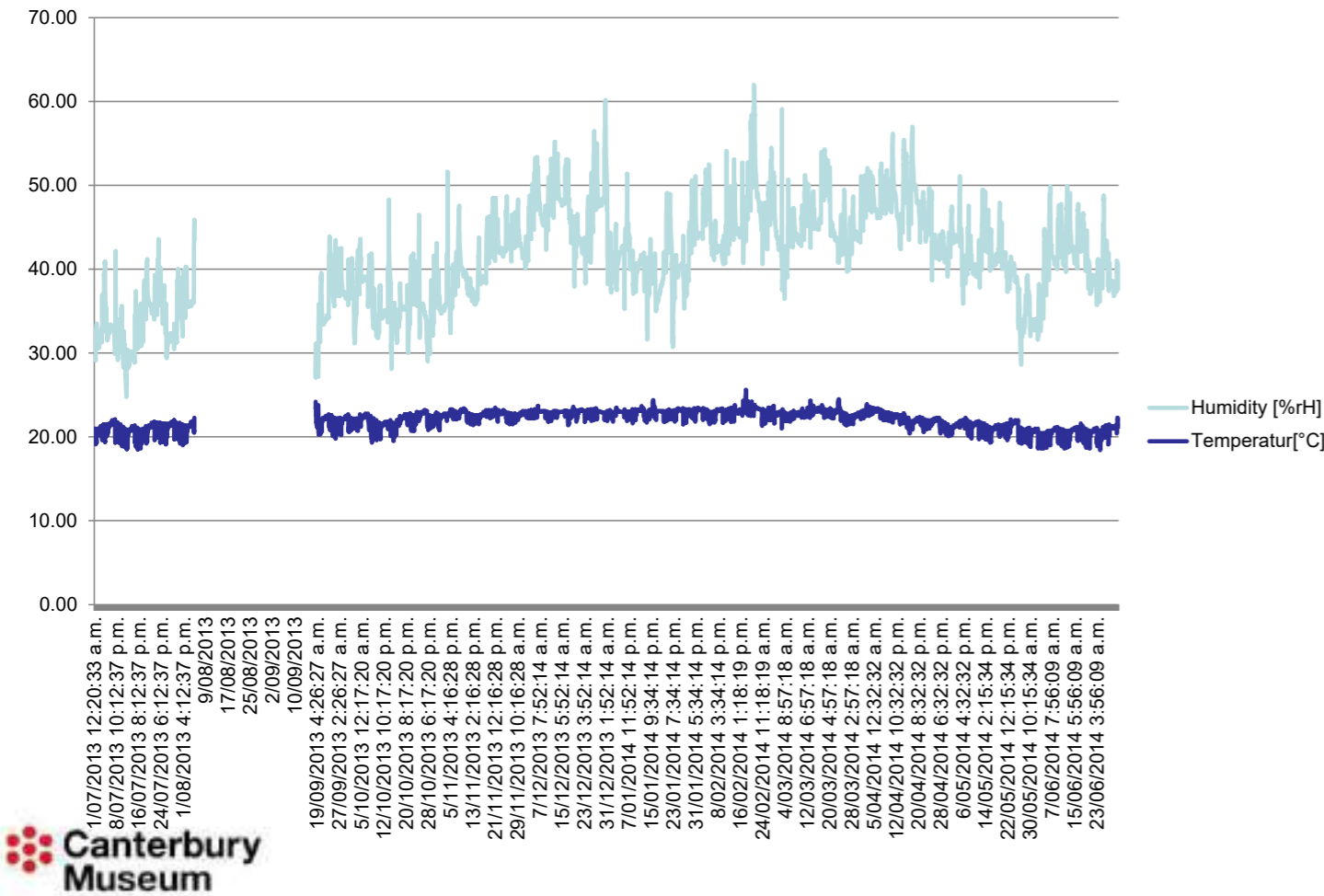
Impression of the Interior Unattractive

Because the complex is formed of many relatively small spaces linked by small openings, the Museum as a whole has a somewhat gloomy and piecemeal interior.

DEFICIENCIES

LACK OF ENVIRONMENTAL CONTROL

Ethnology store environmental levels 2013/2014



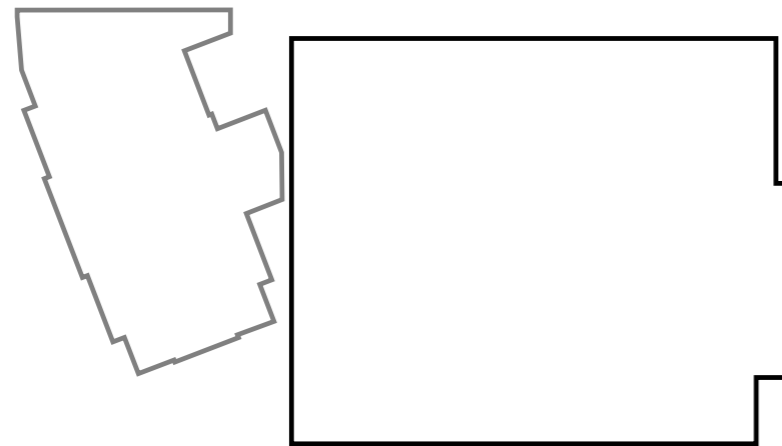
This rabbit was on display in the Living Canterbury exhibition; his fur was eaten by case moths.



The Museum struggles for many decades with poor climate control. None of the Museum's world-class collections were stored in conditions remotely near international standards designed to prevent deterioration. Their survival are in jeopardy. Graph on the right shows the extensive fluctuation of humidity, where consistent humidity and temperature should be maintained.

DEFICIENCIES

SERVICES UPGRADE



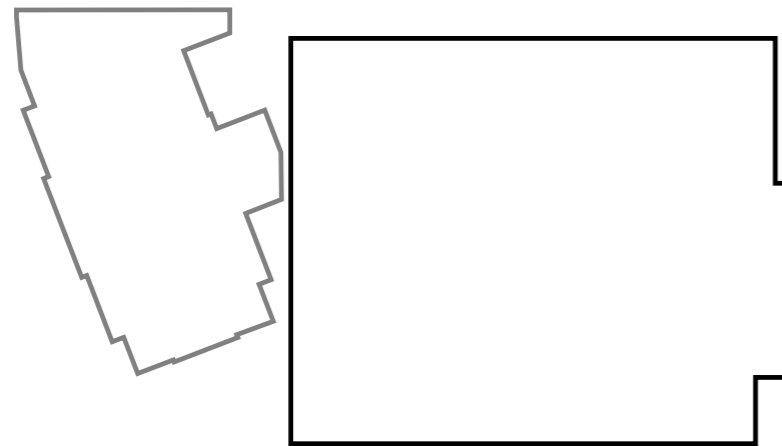
24m²
 (Not including
 roof plant)

490m²

RMG

CM

Footprint of plant space currently accommodated within the existing building.



300m²

1870m²

RMG

CM

Footprint of mechanical services plant space required for the building, including thermal control required to keep the Museum collection safe.



The existing Museum conditions do not meet the needs of collection storage or visitor comfort. There is a general lack of fresh air in spaces, the control system is not operating correctly in some areas.

In the Museum existing mechanical plant space is spread throughout the building, is difficult to access and cables and ducts reticulation and installation are substandard and exposed.

The Robert McDougall Gallery roof is a potential 'view' from the new development, but is currently littered with mechanical plant. This plant is considered "intrusive to the heritage fabric" in the RMG conservation plan.

DEFICIENCIES

LACK OF EXHIBITION SPACE

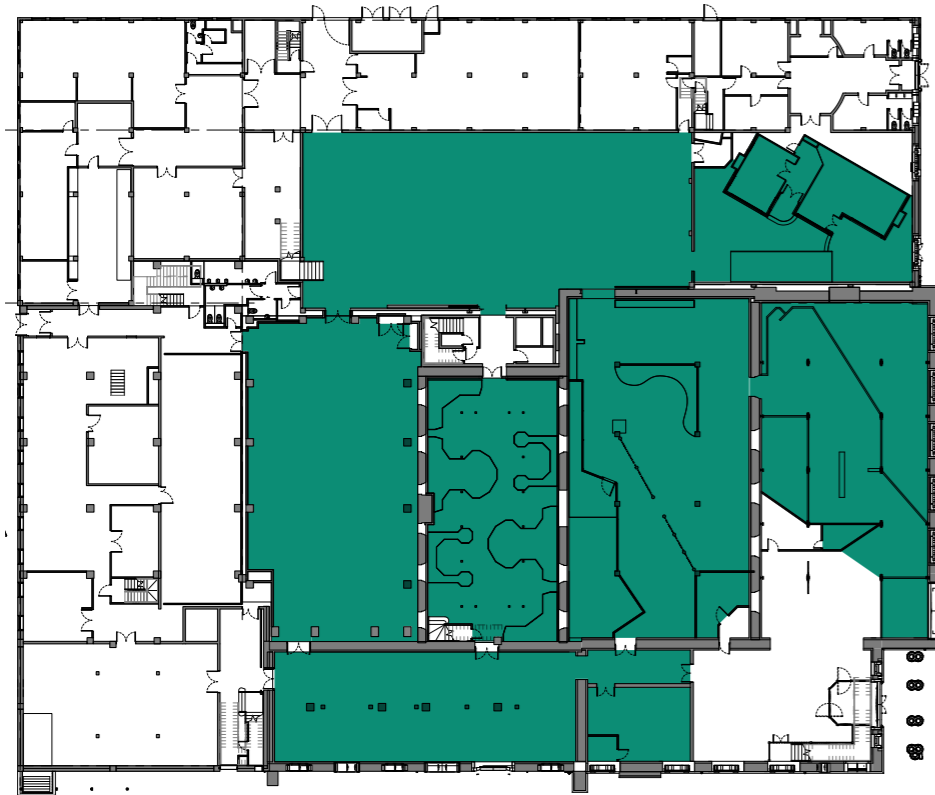
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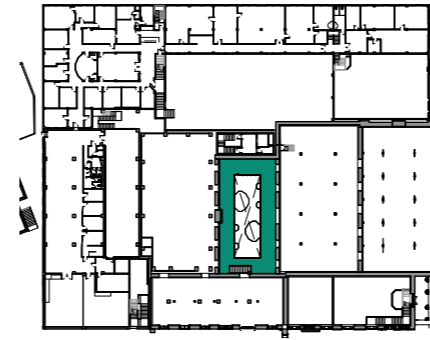
Scale: L1: 1:400

Other levels:
 1:1500 @ A3

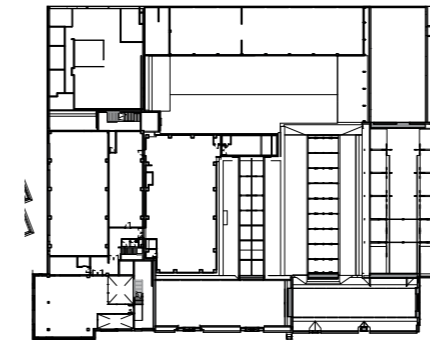
 **Exhibition Space**



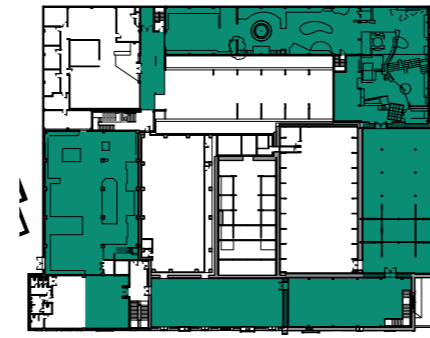
LEVEL 01



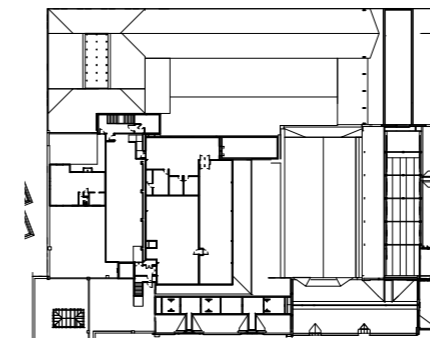
LEVEL 02



LEVEL 04



LEVEL 03



LEVEL 05

At present only 1% of the Museum's collection is on display at any one time because of the lack of gallery space.

Large, significant items in the collection such as the Whare Whakairo and the Blue Whale skeleton cannot be displayed at all.

Limited exhibition spaces also means that only a small number of items of Ngāi Tahu taonga and objects from the Antarctic collection cannot be displayed.

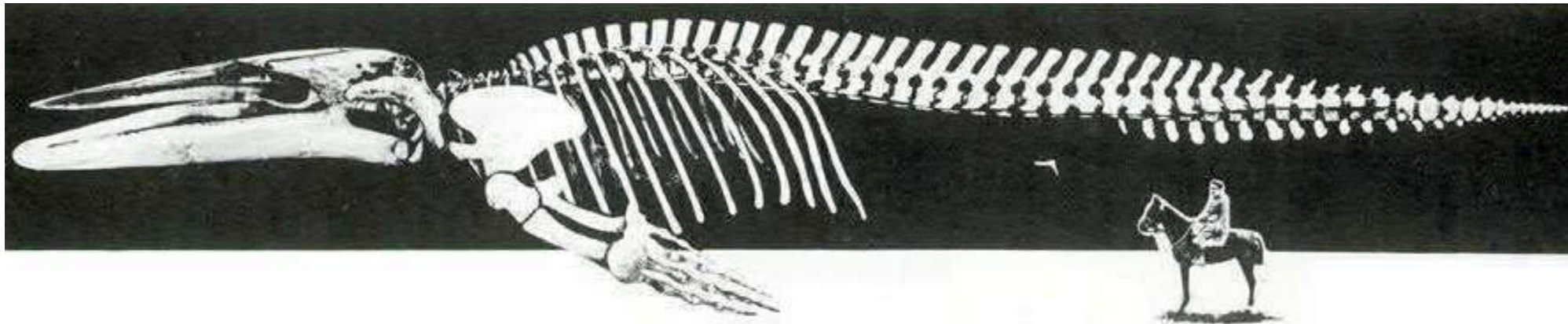


DEFICIENCIES

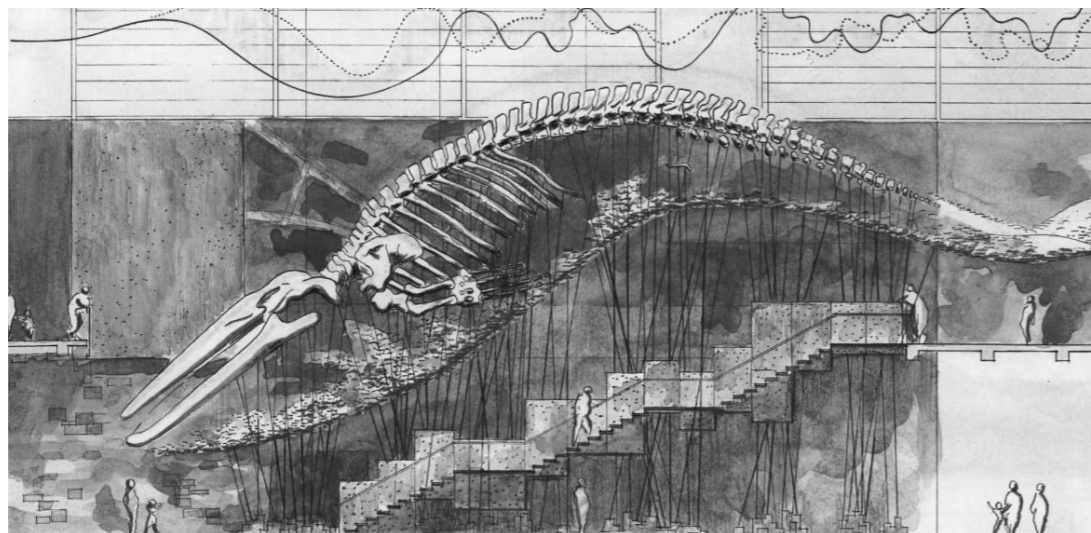
LACK OF SPACE TO EXHIBIT THE OKARITO BLUE WHALE



One of the treasures of Canterbury Museum, the Okarito Blue Whale skeleton (26.5m in length), requires a space appropriately sized to allow for a dynamic and exciting display of this large and important exhibit. The bones are now fully conserved but not as yet assembled as a whole skeleton.



The Okarito blue whale skeleton (Photograph The Press, 1909).



Preliminary exhibition concept for the display of the Blue Whale in an atrium space (note intent includes representation of full scale of the whale form including the tail / fluke)



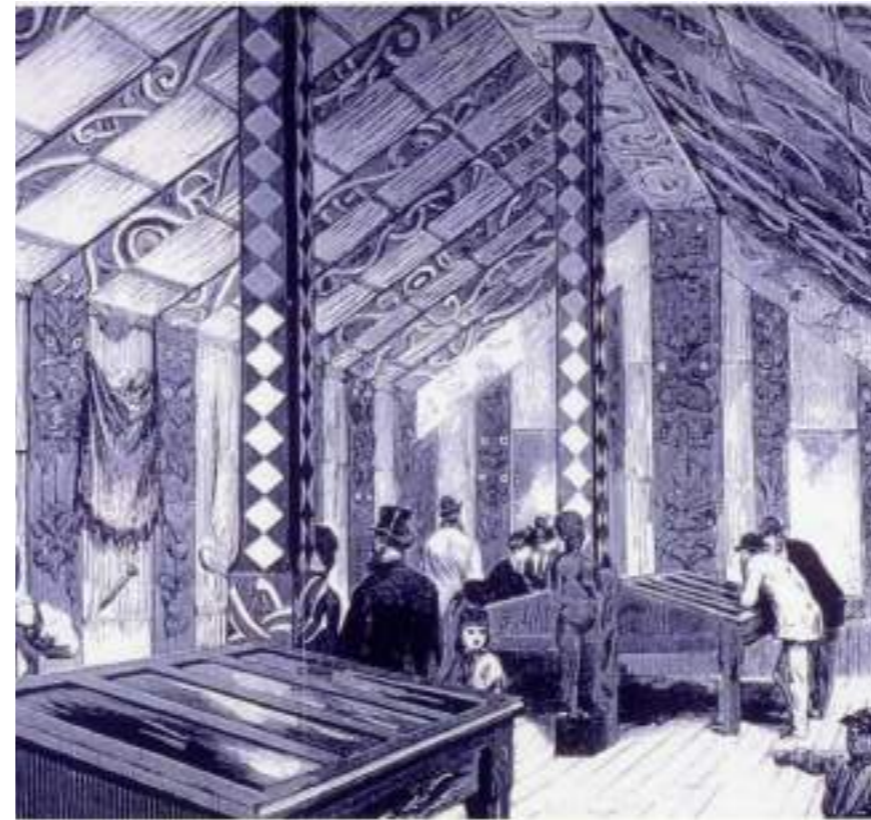
Blue whale skeleton displayed in the Garden Court 1995

DEFICIENCIES

LACK OF SPACE TO EXHIBIT THE WHARE WHAKAIRO HAU-TE-ANANUI-O-TANGAROA

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The Whare Whakairo Hau-Te-Ananui-O-Tangaroa was originally carved for Ngāti Porou by artists Hone Taahu and Tamati Ngakaho, with the unfinished house carvings purchased by Canterbury Museum.

These have been located in a number of positions around the Museum from 1874 to 1956.

The carvings are currently retained in a Museum collection store and have not been on display since the commencement of the construction of the Centennial Wing for over 64 years.

"It is important that the Museum consider how its guests and visitors will be welcomed into the museum and how they will be hosted once they are in the museum. There are tikanga associated with whakamanuhiri, thresholds and spatial layout that should be recognised and represented in the redeveloped museum.

Significant consideration and consultation will need to be undertaken regarding the re-erection and appropriate placement, based on kawa and tikanga, of Hau Te Ana Nui o Tangaroa. There is a significant whakapapa relationship between Te Whānau a Ruataupare, Te Aitanga a Hauiti and Ngāi Tūāhuriri which will need to be carefully navigated and negotiated through"

Canterbury Museum Cultural Narrative 2019, Puamiria Parata-Goodall



DEFICIENCIES

LACK OF SPACE FOR TEMPORARY EXHIBITIONS

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Temporary Moon exhibition 2020

More space for new exhibitions that are accessible, relevant and inspirational

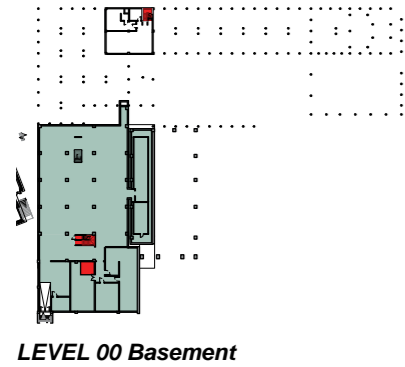
Every year the Museum stage 10 – 12 temporary exhibitions. These range from large international touring exhibitions to Museum-curated exhibitions based on the collections and smaller community initiatives.

New exhibition space will allow the Museum to tell more of the stories that are important to Canterbury and in a range of different ways. Modern technology could be integrated into the building, finally bringing the Museum into the digital age. A new purpose-built exhibition space will allow the Museum to host major international shows that is unable to show in the current small, inflexible spaces.

The current area is also poorly located, with no adjacent preparation space. When separated from the other exhibitions during pay-for special exhibitions it has a significant adverse impact on the circulation pattern to the ground floor.

DEFICIENCIES

INADEQUATE FACILITIES



LEVEL 00 Basement

- CIRCULATION
- CLASSROOM
- CAFE / RETAIL
- COLLECTION STORES

TOILETS:		
total:	public:	staff:
pan: 22	pan: 9	pan: 13
urinal: 6	urinal: 6	urinal: 0



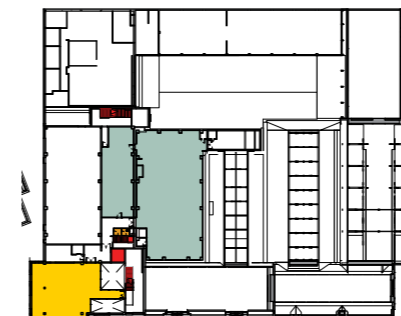
LEVEL 01



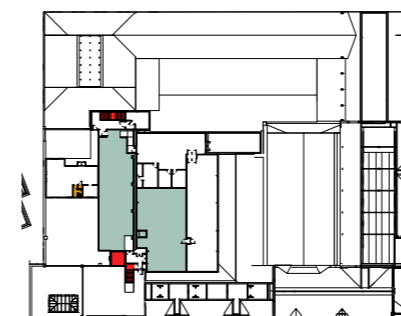
LEVEL 02



LEVEL 03



LEVEL 04



LEVEL 05

The Museum's current buildings and visitor facilities are overstretched and ill-equipped to cope with growing number of visitors. Redevelopment will bring the visitor experience into the 21st century and the digital age. New, fit-for purpose facilities will attract and meet the needs of more than one million visitors - locals and tourists - a year.

Lack of accessible routes

Currently the Museum have one small lift which is difficult to locate. It moves people as well as collection objects, and often breaks down.

Limited toilets

The Museum is non-compliant with the NZ Building code for the number of toilets provided for visitors; additional toilets need to be installed.

Cafe

A small cafe on Level 4 and a constrained retail shop the foyer.

Collection Storage

The collection stores are dispersed throughout the building, and none have HVAC environmental controls as per internationally recognised Museum standards.

There is visual evidence that collection items have suffered damage as a result of these environmental fluctuations.



Current public toilets - not enough stalls and in poor conditions that needs urgent upgrade



Current cafe - tired looking and hard to find



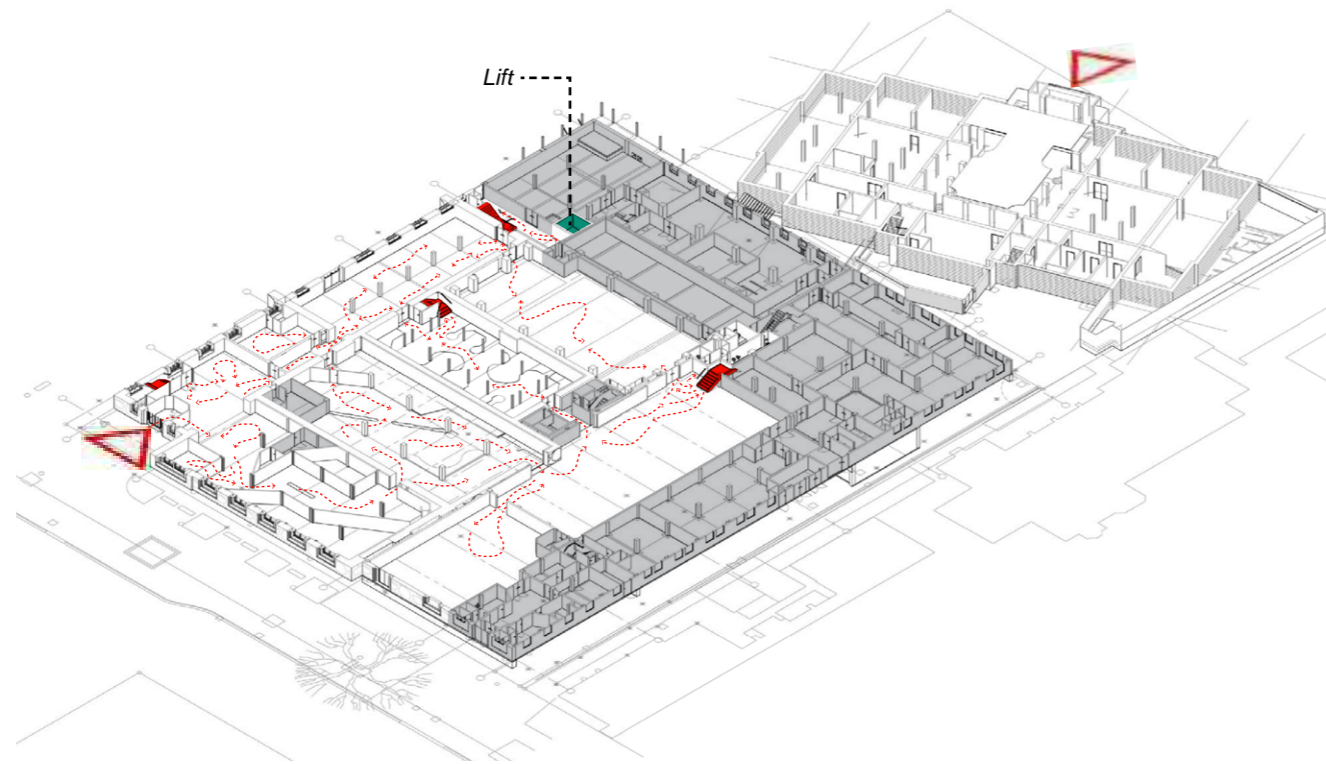
Poor Collection store conditions

DEFICIENCIES

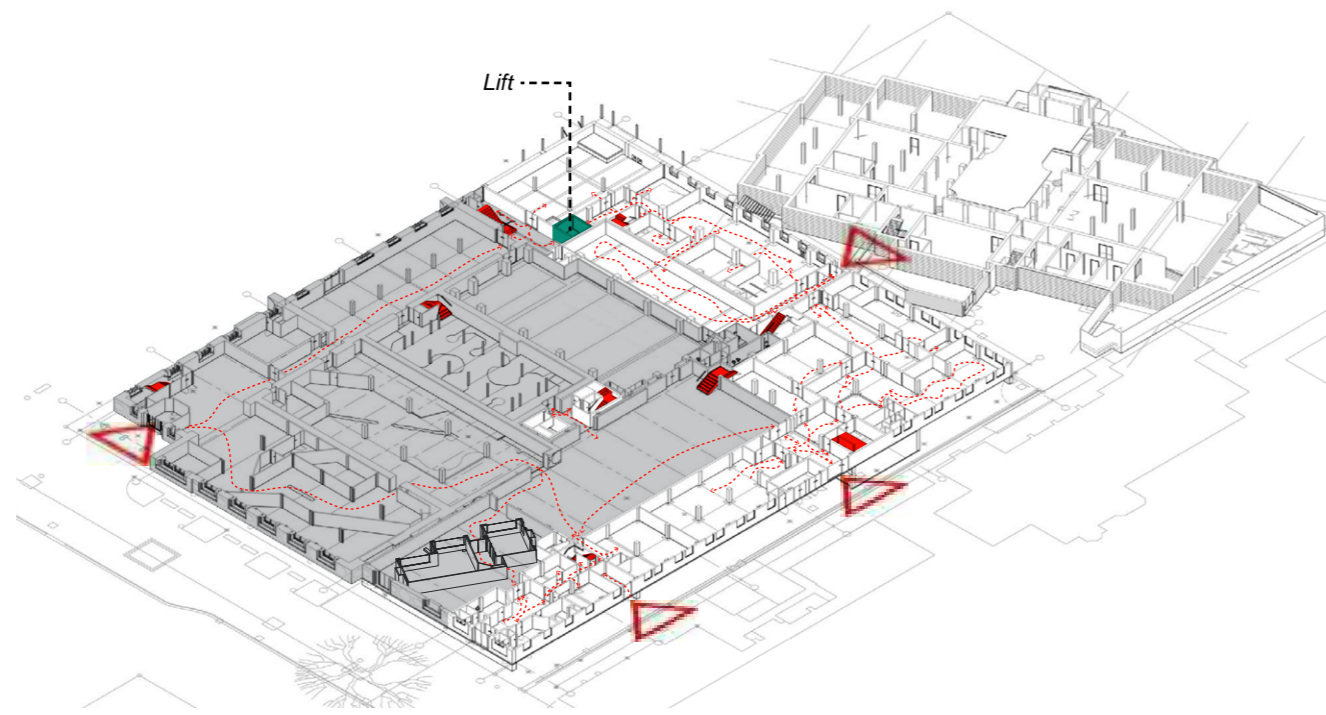
CONFUSING CIRCULATION

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Level 1 Public Circulation



Level 1 Non-Public Circulation

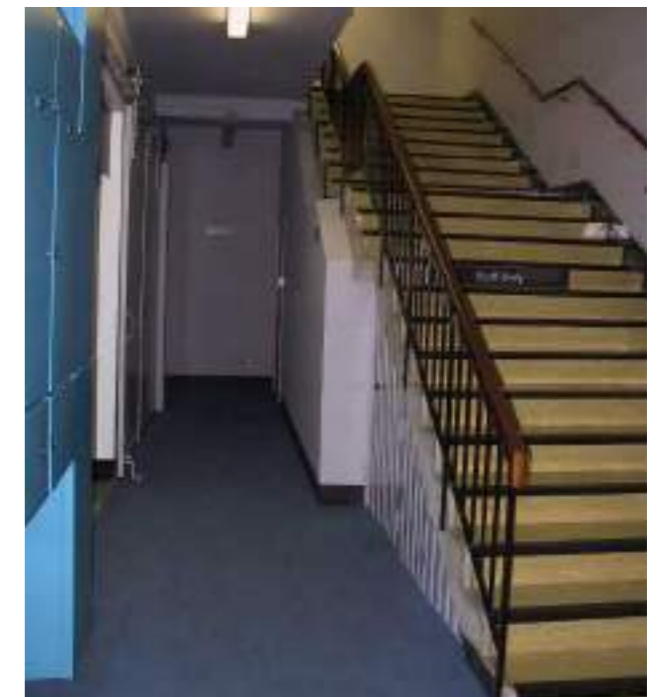
Both the public and non-public circulation is often illogical and difficult to navigate. Especially toward key destinations such as toilets or the lift.

Staircases are small, far between and no staircase runs the full height of the building.

There is no lift access to the exhibition mezzanine of the Mountfort Gallery: thus not complying with the NZ Building Code.

There is currently only one lift in the entire Museum complex. The dual lift door access between public and staff areas is a security risk. Transportation of large exhibits is incompatible with heavy public use.

The current lift regularly breaks down.



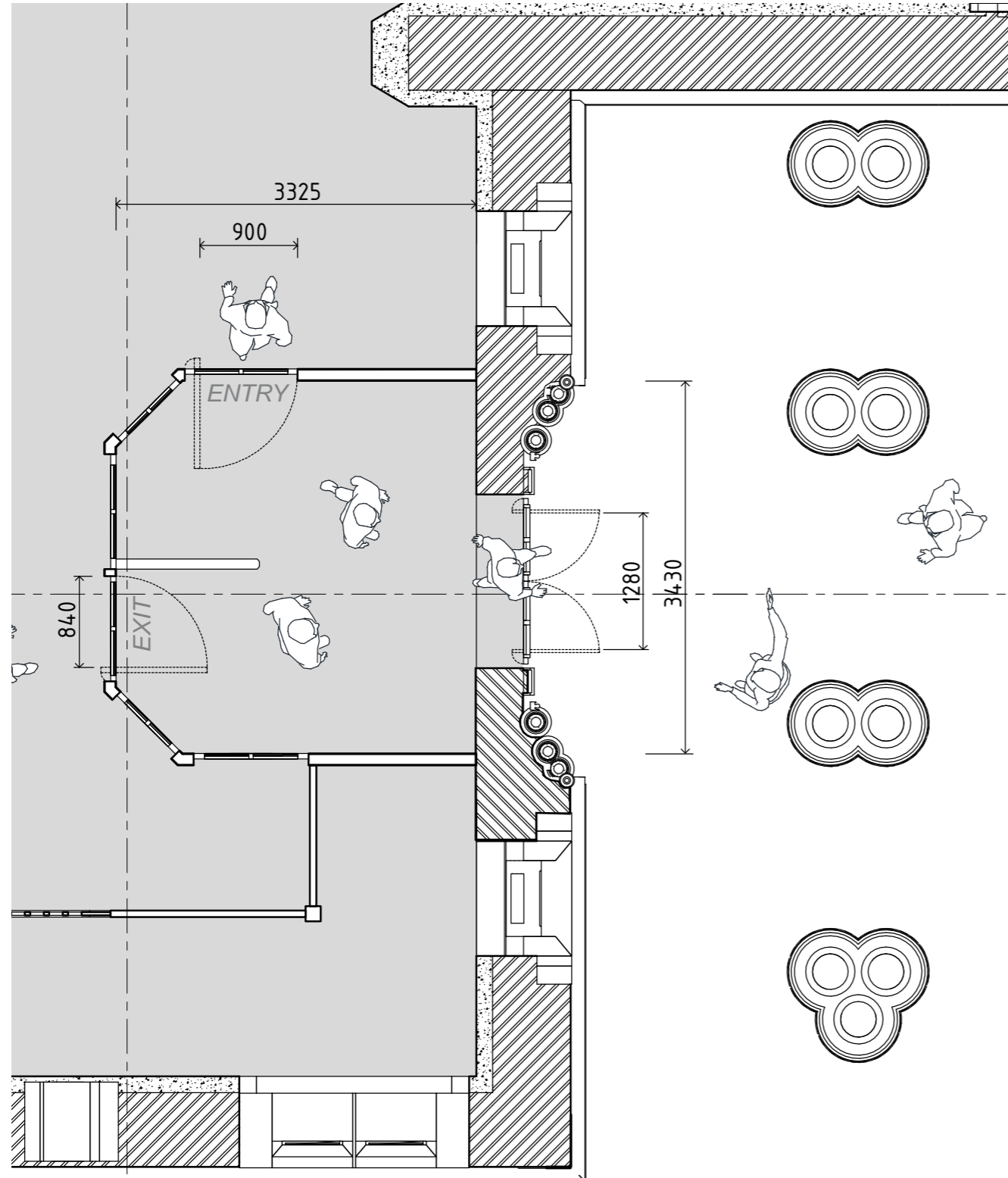
DEFICIENCIES

NARROW ENTRANCE

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Scale: 1:50 @ A3



The main door acts as both entry and exit. This is not big enough to accommodate the number of visitors the Museum receives, and results in significant congestion. The problem is compounded by school and other large groups entering or exiting the Museum. The Museum also struggles to host events in this area due to these constraints.

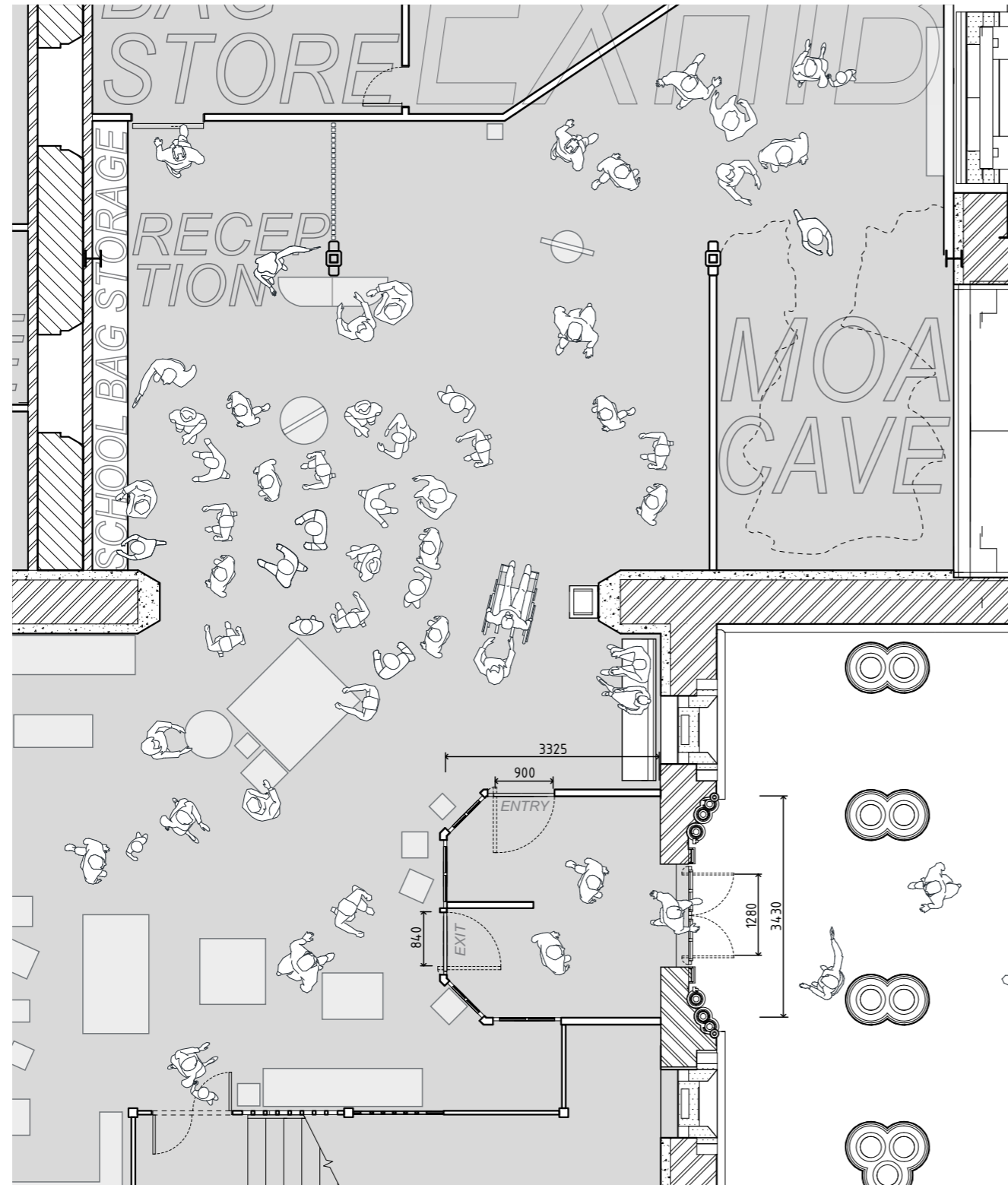


DEFICIENCIES

FOYER CONGESTION

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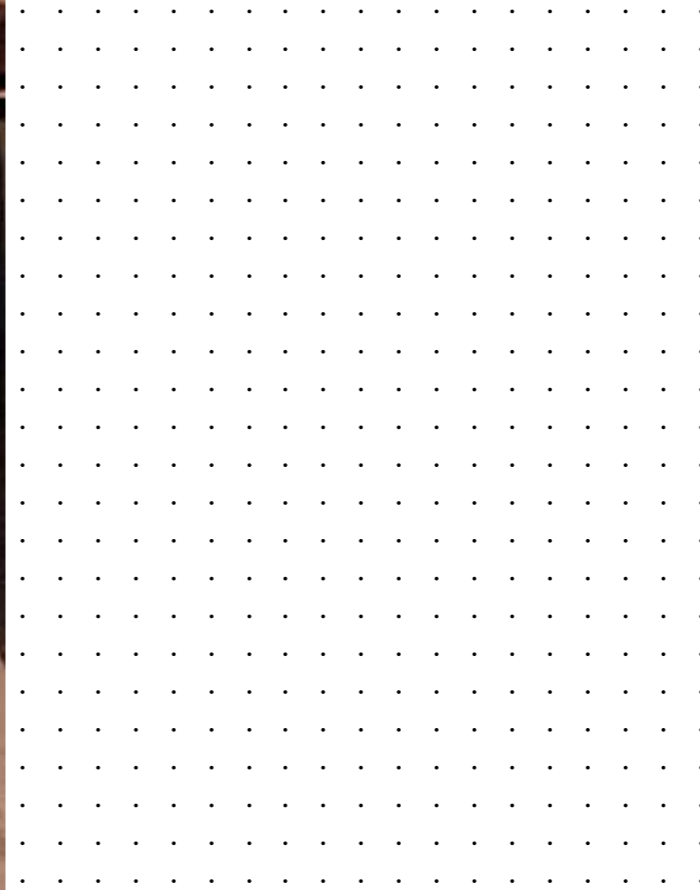
The current foyer reception area is cramped. It acts as both reception and welcoming space for regular visitors and a gathering space for school groups. Multiple groups inside the small space causes congestion and access issues. Making it difficult to properly welcome all the visitors. It also restricts the ability for the Museum to host guests and hold other special occasions.

Multi-purpose and flexible gathering spaces will better enable the Museum to provide the hospitality – manaakitanga – that is appropriate for guests.





SECTION C - PROJECT BRIEF



PROJECT BRIEF

VISION FOR THE MUSEUM

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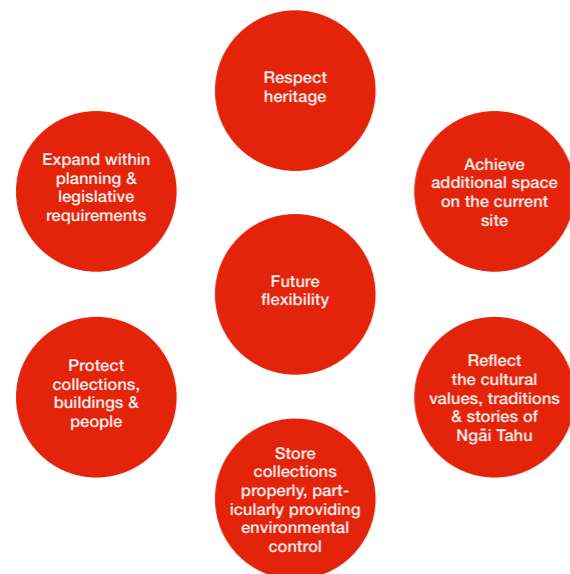
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The Need for Change

Canterbury Museum has been on the same site for 150 years – since October 1870. With more than 750,000 visitors a year, we are the most visited indoor tourist attraction in Te Wai Pounamu (South Island) and a significant contributor to the city and regional economies.

The Museum cares for 2.3 million taonga (treasures) on behalf of the Canterbury community. The Benjamin Mountfort-designed heritage buildings are an iconic feature of Christchurch's Cultural Precinct and the only remaining undamaged neo-Gothic buildings in the city.

In planning for the proposed redevelopment, our key objectives are:



Canterbury Museum Vision

The objectives of Canterbury Museum as expressed in the Canterbury Museum Trust Board Act 1993 are:

- To collect, preserve, act as a regional repository for, research, display and otherwise make available to the people of the present and future, material and information relating to the natural and cultural heritage of New Zealanders
- To promote interest and education in the natural and cultural heritage of New Zealanders
- To place particular emphasis on those activities as they relate to the greater Canterbury region, the Antarctic and Subantarctic, and where appropriate, their relationships in a wider global context.

The over-arching vision for a redeveloped Canterbury Museum is;

"We want to maintain the 'familiar' much-loved quirky, intimate feel. While we want to embrace the contemporary and the technology to enable access and interpretation we still want to keep it reasonably discrete – a tool rather than a draw card in itself.

We would like to increase the sense of discovery, surprise and never being quite sure what's around the corner.

We want to continue with a variety of styles in presentation of collections and stories.

International and domestic visitors should get a sense of Canterbury and ideally come away with an understanding of the South Island's unique history, identity and characteristics.

Local visitors should find the place relevant to them, enough familiarity to feel like home and yet open them up to a world beyond Canterbury. The collections should be stored safely and securely with ease of access and movement around the buildings.

Staff should have the space and facilities to undertake all their work including international level research, exhibition development, education and public programmes.

Quake City and Ravenscar House will remain separate to the main Museum complex.

Project Principles for The Museum Project

1. Maintain presence on a single existing city site.

Aim for single city site solution whilst meeting remaining principles.

Reasons are:

- Conserve primary significant heritage value of Museum being on site since 1870
- Operationally superior and more economically viable if everything on one site
- Maintain primary tourism attraction in the city centre
- Anchor the Cultural Precinct
- Able to incorporate an appropriate use of the Robert McDougall Gallery building

2. Respect heritage values

Respect built heritage, maintain and enhance heritage values according to Building Conservation Plans and ICOMOS Charter.

Reasons are:

- Canterbury Museum cares for its built heritage as it cares for the taonga within its walls.
- The heritage protected buildings form an integral part of the 'Canterbury Museum story'.
- Canterbury Museum is obligated to protect our heritage buildings under the Christchurch District Plan.
- Canterbury Museum Heritage Buildings are recognised by the Heritage New Zealand Pouhere Taonga Act 2014.
- Maintain original context - deliberately placed axially on Worcester Boulevard with Christ Church Cathedral, with the Botanic Gardens and educational facilities (University now Arts Centre and Christ's College).
- Refer to the Building Conservation Plan policies and recommendations.

3. Design within district planning rules

Design within district plan rules and tie development into wider urban planning context. Reasons are:

- Compliance with District Plan will make for a smooth consent process.
- Protect the building and contents from damage caused by seismic events.
- Show respect to rationale for height and visual plane requirements.
- Complement city urban design aspirations of slowing traffic and enhancing pedestrian access and amenity in the cultural precinct.

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4. Base isolate the buildings

Base isolate the buildings to 100% of the New Building Standard (NBS) for an IL3 building (buildings serving large crowds or holding contents valuable to the community). Reasons are:

- To bring the buildings up to 100% NBS, base isolation is the only effective seismic protector of people, buildings and contents.
- Base isolation is the recognised international industry standard and provides the most suitable form of protection of heritage and Museum buildings and collections in active seismic regions.
- Base isolation will provide the necessary resilience to significantly improve public safety, help protect the heritage buildings and help protect the Museum's heritage collections.
- Other seismic strengthening options would provide significantly less protection of the building and its contents.
- Without the protection afforded by base isolation the Museum is unable to adequately insure its building and collection for earthquake damage as the cost of premiums is prohibitive.
- Without base isolation the Museum is unable to attract and host national and international temporary exhibitions containing valuable and vulnerable collection items.

5. Bi-cultural by design

Demonstrate commitment to bi-culturalism through new building design. Reasons are:

- We are a bicultural nation.
- Acknowledgment of European expression of earlier built forms and now to be complemented with design incorporating Māori design or principles.
- Interior design will also find expression of bi-culturalism and acknowledge multiculturalism of Canterbury.
- The Cultural Narrative shall inform the building design.

6. Safe and accessible buildings

Demonstrate the Museum's commitment to universal access and health and safety. Reason are:

- Ensure equitable access for all.
- Public and staff safety and comfort (expecting over a million visitors a year and 150 staff in the foreseeable future).
- Collection security and protection.
- Ethical and statutory requirement.

7. Protect and conserve collections

Provide international standard collections storage facilities for all collections. Reasons are:

- Statutory requirement of Canterbury Museum Trust Board Act 1993
- Appropriate kaitiakitanga for Canterbury's local, national and

internationally important taonga

- Improve access to collection resource for exhibition and research purposes
- Ensure the preservation of collections long-term

8. Visitor experience

Enable visitor access to the collections through a welcoming reception area that is respectful of traditional access points, gallery spaces and related visitor facilities that meet the expectations of over a million local, national and international Museum visitors a year. Reasons are:

- Need to accommodate and orient large numbers of visitors coming independently or in large groups.
- Recognise need to maintain traditional entrances of the Museum and Robert McDougall Gallery.
- Need to provide modern visitor facilities capable of meeting the broad physical, intellectual, technological and language needs of locals and tourist alike.
- Maintain access to much-loved community facility for local population.
- Maintain relevance to audience, realise Museum vision and enable mission.
- Acknowledge need to include well-loved exhibitions and themes with new content in a format that is contemporary and flexible but at the same time our style.

9. Environmental sustainability

Incorporate good environmental design which reduces reliance on non-renewable energy resources, secures our own energy supply if possible, enables passive environmental control, embraces principles of Crime Prevention through Environmental Design and improves future environmentally sound operability

10. Life expectancy and flexibility

Aim for a 50-year solution to Museum's needs incorporating as much flexibility as possible. Reasons are:

- Good corporate citizenship - setting an example.
- If we can source our own energy we will minimise operational risk.
- Economically sustainable as well as good for the environment.
- Look at national / international best practice vs on-going costs of operating.

11. Openness and Transparency

Undertake redevelopment in as open and transparent a manner as possible. Reasons are:

- Meet the community's expectations.
- Build public confidence in solutions proposed
- Create positive climate for fund-raising



A cornerstone exhibition: The Antarctic Experience

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VISITOR EXPERIENCE

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Visitor experience

A key requirement of the development of Canterbury Museum is to provide clearly articulated circulation along with identifiable and accessible public exhibition spaces. The foyer space is to be of sufficient size to establish visitor introduction appropriate to this important building and its use. The entrance foyer shall enhance the uniqueness of the Canterbury Museum experience.

Special attention shall be given to the resolution of the existing issues around the deficiencies of the existing entrance, particularly given the potential increase in visitor numbers from 750,000 to 1 million patrons per annum. The existing entrance shall be maintained as a public entrance, but alternative options shall be explored to enhance access for the increasing number of visitors to 1 million and large groups. For education groups, options shall be considered to avoid congestion within the main entrance spaces.

For security of collections and enjoyment of the customer experience, staff and public circulation shall be made separate wherever possible.



The Auckland Art Gallery Toi o Tāmaki

Entrance

Visible and inviting. Able to deal with large numbers including school groups and coach groups. Includes an airlock for climate control and includes automatic doors for equitable access.

Signage easy for visitors to understand.

Opportunities to integrate the Museum's cultural narrative into the entry experience shall be considered e.g. mauri stone outside of the front entrance and / or use of traditional Māori entry makers.

Foyer and Circulation

Welcoming orientation space / foyer that is not cavernous nor intimidating, but works to handle different kinds of groups (school children / coach load). Access to other language, digital screening and other orientation formats. Meeting point for tours etc. Enough seating for people to wait for others in their party. Ability to insert possible security screening point at a later date.

The entrance and foyer should also consider ceremonial welcomes. Good sized cloakroom area for secure storage of handbags through to hiking backpacks and prams/strollers. Special attention is required to accommodate school group bag storage – however this may be adjacent to a separate education group entrance. Reception desk; needs to be capable of providing ticketing service for special exhibitions.

Small meeting room; 10 person multi-functional interface room / meeting space is required for collection viewing, i.e. public bringing items to the Museum and for public to view Museum collections. This could also double as a first aid room. Entrances to galleries to be obvious, flow through spaces to be intuitive.

Between galleries there are to be rest areas & interstitial spaces to combat Museum fatigue and orient the visitor. Natural light to be introduced wherever possible - at least in these spaces. Dedicated visitor lifts appropriate to the number and needs of visitors in the Museum.



Suter Cafe, Suter Gallery, Nelson

Food and Beverage

Food and beverage outlets are an important component of the modern Museum visitor experience, particularly with larger Museum complexes like the Canterbury Museum. They are a place for visitors to pause, relax and recharge during a visit, thus extending the potential length and increasing the enjoyment of the Museum experience.

As recognised in the Skelton Report, the placement of the food & beverage facilities was an issue with the previous revitalization project. Options for the positioning of food & beverage within the Museum complex shall be explored during the concept design process.

It is likely that two quality food and beverage outlets will be required - one family friendly style and one more upmarket. These are designed to drive longer visits by providing sustaining 'time out'.

SPACE & FUNCTION REQUIREMENTS

VISITOR EXPERIENCE

Retail

Reference to the High Court decision and the Skelton Report needs to be considered with all commercial activities within the Museum redevelopment. All commercial activities (incl. F&B and retail) shall be ancillary to main Museum functions.

An allowance for additional retail space reflecting the potential 50% increase in visitor numbers shall be provided.

The retail flavour shall be funky, New Zealand, Kiwiana, arts and crafts, Museum memorabilia and further information about collections. Showcasing the best of New Zealand culture - not tourist tacky. To be off the foyer but not in the foyer.

If the building egress is through the retail space then consideration needs to occur on how to maintain egress after a seismic event



V&A Shop in London

Events / Functions

Provide versatile spaces to allow to host events and functions. These may be held in the Museum entry space, McDougall centre court, auditorium / lecture theatre, classrooms or exhibition spaces (when not in exhibition mode).

Provide setdown space for food / catering preparation. This area should have benches for laying out food and room for a couple of large fridges, plus storage for cutlery, crockery and some beverages. This would be used as the main food prep / assembly area but ideally there would also be smaller food prep / layout areas adjacent to and serving the main catering spaces (Foyer, McDougall, Lecture Theatre).

Attention to access (particularly after hours) and operations requirements for function visitors and external catering will need to be considered in the proposed design. Food service spaces should remain separate and remote to areas of collections and exhibitions.

Auditorium for 200

Ideally flat floor with pull out raked seating. Technically savvy enough to make connections and televise anywhere in the world. Access from foyer/entry to enable secure use after hours. Green room with auditorium. Catering space adjacent. Chairs, lectern, function gear are all required.

Visitor Lounge

Comfortable lounge area for visitors wanting a little time out to combat Museum fatigue. Have dedicated quiet space off this for special needs visitors who may have auditory / visual issues.

Toilets

Toilets to be located on each gallery level of the Museum, shall be generous in quality and size with user friendly parenting facilities. It is important to have some facilities close to main entry foyer. Allow for Male, Female and Unisex.



Function held in the Auckland Art Gallery Toi o Tāmaki

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Exhibitions

There are a number of long-term cornerstone exhibitions proposed for the Museum visitor experience, including;

- Antarctic Experience
- Blue Whale
- Discovery Centre
- Whare
- Paua Shell House
- Pounamu
- A Christchurch Street

In association with these are number of other galleries, some of which are already dedicated and treasured by visitors to Canterbury Museum and will be complemented by exhibitions which will rotate more regularly to display selections of the Museum collections.

To enhance the Museum experience and reduce fatigue, a number of relaxation / green spaces shall be provided between galleries. These spaces shall accommodate seating, natural light and views wherever possible.

General

Gallery spaces to make the most of the space, e.g. heritage spaces to showcase the heritage.

All galleries to have;

- Wifi – fast speed.
- Use of visitor personal electronic devices to help enhance the visitor experience by providing self-guiding / interactive explanations of Museum exhibitions, eg the “O” around galleries like at MONA, Tasmania and the “wand” from CooperHewitt Museum in NYC.
- Smartscreen/touchscreens.
- Augmented reality enabled.
- Film and sound.
- Be designed with acoustics in mind.
- Multiple Load points.
- Secure space for multi-media components/servers etc.
- Galleries able to be closed off with no or minimal impact on other galleries.
- Galleries that have minimum door widths of 2.0m and a cherry picker can travel on floors without damage.

Short-term Special Exhibitions

A new enlarged, flexible Short-term Special Exhibitions space shall be provided which is large enough to take biggest international opportunities (3 every 2 years), but flexible to take lots of smaller locally produced and touring shows. It requires a high level of environmental control suitable for the strict requirements of travelling international exhibitions.

Allow for an overall net area of a minimum 600sqm; sub dividable with a movable wall system, into three spaces of 300sqm, 150sqm & 150sqm. To allow for up to three paid-for exhibitions to be able to be held concurrently each space shall have an independent entrance directly off a public circulation space. Allow for ticketing for pay-for exhibits to be issued either at main reception counter in entry foyer or at entrances to the short-term special exhibitions. Short-term special exhibition retail shall be included within exhibition space with ideally one staff member able to control both retail and admission.

The placement of the Short-term Special Exhibition space shall ensure that when there is restricted entry this shall not interrupt the circulation flow of the rest of the Museum complex and it is preferable that the location is close to the main entrance foyer. Preference is also for the location to be close to (ranked in high to low priority) storage space, loading bay, goods lift and workshop spaces.

The ceiling height to be a minimum of 4.5 metres and the ceiling shall include a grid of structural fixing points at 5m centres which will be suitable to hang items, banners, signage, etc. A raised accessible floor is to be provided for the reticulation of power and data with outlets on a 5m grid under the floor.

Separate store space required adjacent to contain large travelling exhibition crates (separate to general display case / props store). Setup of exhibitions within this space shall not conflict with the Museum visitors or other Museum functions.

Wall linings shall be solid durable panel system to allow for flexibility for fixings (or moveable wall partitions on sliding / roller system embedded in floor / ceiling). A suitable hanging system integrated into wall design of a robust and aesthetic design shall be explored. Finishes shall minimise maintenance requirements after each exhibition.

Preferable to be able to allow in natural light if desired to full or part of space.



Canterbury Museum long-term exhibition - Christchurch Street

Long-term Cornerstone Exhibitions

Retain or re-install much-loved Canterbury favourites;

- Blue Whale
- Christchurch Street
- Paua Shell House
- Expanded Discovery Centre (to also include human and documentary history)
- Expanded Antarctic experience focused on heroic era of Discovery to complement airport Antarctic Attraction (to be pay-for)
- Develop new national pounamu experience.

Whare

Provision shall be made for a whare experience which will be used as an educational resource as well as a major cornerstone exhibit. This shall be located on the ground floor. This shall include the reinstatement of the Whare Whakairo Hau-Te-Ananui-O-Tangaroa, one of the great treasures of the Museum collection, as well as a newly commissioned modern, contemporary whare or mahau. These exhibits would not be a marae, but would form an important ceremonial bi-cultural space within Canterbury Museum.

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The Whare Whakairo Hau-Te-Ananui-O-Tangaroa would not be used as a ceremonial space as it doesn't have a direct connection to Ngai Tahu. A separate new contemporary whare / mahau is to be provided which will cater for ceremonial and education purposes and sleep overs. This new contemporary, symbolic whare / mahau would be approximately 6 x 7m, and wouldn't require any cladding / enclosure - it could be a skeletal frame or similar. Ideally this whare would be open to the sky, but as it needs to be located on the ground floor this may not be possible.

For use as an educational resource the whare exhibit area will need to accommodate classroom size numbers of people, possibly on overnight stays (up to 30 children & 10 adults). To do this there will need to be a bag storage area, a mattress store, ablution areas and a kitchen/dining area reasonably adjacent. Associated with the above spaces is the need for a forecourt in front of the whare for formal occasions, which could also be used as a recreational space when there are groups staying overnight. Attention to after hours entry would need to be considered.

A small collection store containing the highly tapu toi mōkai and kōiwi tangata would need to be located adjacent the new whare, however this should not be in front of any whare and in a basement location directly under the whare would be more appropriate.

The integration of both Māori & Pakeha art through out the Museum, including appropriate use and referring of Māori patterning and spatial design which has been informed by the cultural narrative, shall form part of the re-development project. Mana whenua shall have an active role in telling of their story.

Blue Whale

One of the treasures of Canterbury Museum, the Okarito Blue Whale skeleton (26.5m in length), requires a space appropriately sized to allow for a dynamic and exciting display of this large and important exhibit. The bones are now fully conserved but not as yet assembled as a whole skeleton.

Antarctic Experience

Provision of a large 1,200sqm space for a specific Antarctic exhibition is required. This expands on the current Antarctic exhibition and will include many oversized elements which have loading, access and space requirements which will need to be specifically addressed in the design.

Within this pay-for exhibition space allowance shall include for;

- approx 300sqm double height space for the Sno-Cat crevice proposal & Hallett Station dome.
- cashier set up for selling tickets and retail as a stand alone business
- access to toilets
- raised accessible floor for flexibility
- specific requirements for an Ice Wall exhibit.

Discovery Centre

The redevelopment shall allow for the increase in area to a minimum of 400sqm for an expanded Discovery Centre - an exhibition targeted for children of all ages. This exhibition is unlikely to continue as a paid for experience. A raised accessible floor is preferable within this space.

Robert McDougall Gallery at Canterbury Museum

The Robert McDougall Gallery high quality exhibitions spaces are ideally suited to displaying a large proportion of the Museum's art collection which is currently in storage due to lack of exhibition space. The public spaces in the McDougall would be used in a very similar way, and with a similar ambience, to the previous use as a Art Gallery. These would be used as long-term flexible exhibition spaces.

The Christchurch City Council (Robert McDougall) Land Act 2003, which defines the use of this space, specifically notes that the gallery is for 'the purpose of a public gallery for the display of art and decorative arts and crafts and ancillary activities'.

The nature of exhibitions within the McDougall would be for selections of the Museum's extensive paintings and drawings collection (numbering over 7,000 objects), photographs (over 800,000), architectural plans (13,000), costume and textiles (13,500), furniture (3,000) and European and Oriental decorative arts (8,500 objects) collections, and appropriate travelling exhibitions.



Tucker Sno-cat Able in antarctica 1957-1958



Geology Exhibition at Canterbury Museum

SPACE & FUNCTION REQUIREMENTS

COLLECTIONS & CURATORIAL

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Long-term Flexible Exhibitions

Collections rich - more collections on show and greater turnover.
Ability to tell lots of stories - large and small - over time. Committed to retaining key elements:

- Māori
- Early Canterbury
- Canterbury today and our place in the world (including our multi-cultural communities)
- Dioramas
- Treasures (Canterbury, NZ, World)
- Acknowledge the generosity of Cantabrians and others – eg showcase new acquisitions

Collections & Curatorial

A key driver of the redevelopment project is to address the current poor state of current collection stores and to provide an increase in space and quality of collection storage to international standards. The increase in storage size shall meet 50 year growth with a strategy developed for further growth after this time. All new collections stores shall have air conditioning to meet the specific environmental conditions for the collections held and spaces shall have wifi for inventory control.

The likely location on site of a major large collection storage space to accommodate the briefed requirements would be in a new basement area with potential connection into, and improvement of, the existing basement of the McDougall. Construction methodologies and design detailing for any collections within new basements areas shall ensure there are multiple levels of waterproofing protection to minimise risk and this shall be undertaken to international best practice. To minimise risk to collections, all water borne services shall be kept out of collection stores. Electrical switchboards or access hatches to services shall not be located in collection stores.

The design shall endeavour to provide the largest flexible space free of obstructions as possible, with a minimum 2.7m high clear space (of all services) for shelving units. Specialised storage systems and access equipment shall be reviewed and integrated into the design to maximise the storage potential of the spaces formed.

Special attention shall be given to accommodating and providing access for the larger and heavier items within the collection. Allow for approximately 600sqm of double height space is required for oversized objects and a pallet storage system.

There shall be optimal access to collections for exhibitions, programmes and research purposes. These must meet tikanga requirements for storage of and access to taonga Māori.

Collection Storage (Special Needs)

- Photography cool store
- Film / negative cold storage
- Secure firearms and weapons storage
- Freezers for DNA storage (deep freeze)
- Costume / textile storage
- Bunded room for wet collections
- Storage of dangerous items (eg asbestos, radium etc)
- Safe / extra secure storage for high value items
- Kōiwi tangata
- Large items
- Specialised storage for vulnerable collections (eg plastics, food etc)

Collection Work Spaces

A loading dock is required where a forklift can operate securely with the door shut and transfer material directly into the Special Exhibition space. A separate staff entry shall be provided to the loading dock circulation.

Direct access from the loading dock is advantageous to;

- Collections receiving room (store crates for exhibition, allow acclimatisation and space to unpack and undertake a condition assessment)
- Quarantine room (capable of being fumigated safely) include freezers for pest control. Close to loading bay, but away from collections stores.
- Large and heavy objects lift (capacity to be confirmed)
- Whānau room which can be accessed both from public and back of house circulation areas. Include facility for cultural practice (e.g. tapu to noa) or space for researcher (multipurpose facility)
- Photography room
- Wet lab and dry lab
- Conservation lab
- Storage for Emergency supplies and equipment (collection disaster and otherwise)
- Trolley parking lot
- Storage of flammable liquids
- Storage for Conservation packaging / materials
- Workrooms (double the size of current conservation workroom) with temporary collection store near them



- Dedicated lift/s for movement of collection items across different Museum floor levels (not to be shared with visitors)

Education & public programmes

Canterbury Museum provides organised educational experiences for school groups and an informative calendar of public programmes for the wider public. School trips can be up to 3 hours duration, with children's ages 3 year and up. These support whole-of-life learning

SPACE & FUNCTION REQUIREMENTS

EDUCATION & PUBLIC PROGRAMMES

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opportunities, create an atmosphere where self-learning is easy and offer more in-depth knowledge to those desiring it by a range of secondary means.

Currently 37,000 individuals (including 23,000 school children) engage in education programmes per annum at the Museum which is predicted to rise to 45,000 individuals (30,000 school children per annum). A further 31,000 individuals attend public programmes at the Museum each year and this is expected to increase to 35,000 post development.

Within any 30min period there could be up to 160 children in the Museum at any one time. Currently it is difficult to control large groups of children, particularly within the main entry foyer which causes disruption to other visitors. To address this, options shall be explored for alternative entrances and waiting areas for educational groups. Consideration shall also be given to where school groups can eat within the Museum complex – currently there is nowhere. A possible option could be to utilise the classroom for this purpose, however this will require special attention for storage and secure waste disposal.

Specific spaces required for Education and Public Programmes include;

- Classroom / Seminar spaces;
- multifunctional space for curatorial and education programmes which includes good storage within the space.
- Space shall be 140sqm in total, divisible into two 70sqm independent spaces and shall be located close to toilets and parenting facilities.
- These spaces should be set up to be capable of throwing water, paint, clay etc, as well as smart screens, digital connection to the rest of the world, 3D printing etc
- Lecture Theatre; tiered seating included for 150 - 200 people for lectures and cultural performances. Ideally adjacent to the classroom with a large performance area at the front and separate back of house entrance. Consider retractable seating for greater flexibility.
- Education Store; a 25sqm space for storage, with access independent of the classrooms.
- Consideration is required for after hours access to both the classroom and lecture theatre.

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OFFICES & WORKSPACE

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Office and Workspace

Any new design shall plan to limit public access to the exhibition floor levels only. Staff shall be located on one floor in open, flexible spaces encouraging a 'one team' approach and easy communication. There shall be sufficient space to carry out the various required tasks. The staff room shall be on the same floor as the offices.

The extent and necessity of cellular offices shall be reviewed as part of the design process with the overall desire to provide a high quality functional work environment which also considers the operational issues and costs with future potential change.

Currently there are 80 FTE staff positions, consisting of 87 staff. This includes 68 back-of-house workstations, 10 visitor hosts, 6 PSO's housed in the Security command centre and 3 visitor hosts housed at Quake City. There are also 5 workstations provided for regular researchers and volunteers. Allowance shall be made for the increase in staff numbers to 150 individuals.

- Separate circulation shall be provided for staff, which means that exhibitions can be set up, material can be delivered and collections can be moved without effecting security or conflicting with public movement and access.
- The ability for direct public access to the administration reception area would be preferable.
- A staff locker space for 60 lockers, shower and toilet facilities close to the staff entrance and bike parks for 30 shall be accommodated within the redeveloped plan.

General

The current feedback suggests that two open plan areas for 120 staff in total with 30 private office spaces are required, however a more detailed workplace assessment should be undertaken during the concept design stages to test what the most appropriate workspace is for the activities that are undertaken at the Museum. Include an office for the Director and adjacent EA space of appropriate size.

- Four joint project working rooms for teams of 8 (people come together for project for 2-3 months etc and leave). These shall be fitted out with smart screen planners etc. A creative space as well as ability to work.
- Storage for collection finding aids near office workspace with room for researcher.
- 20 people Board Room (with IT/sound/video conferencing etc) with adjacent kitchenette and ideally with direct access from a publicly

accessible space.

- Walk in safe for money and legal documents
- Storage for stationary, publications, uniforms, marketing collateral, files, registration files and other storage materials.
- Bike storage internally undercover, showers, lockers, change rooms
- Staff room for 150 people (at tight fit) with outdoor area and located close to staff work areas if possible with equitable access for all staff
- Separate room for photocopier/printers (noise and fumes)
- Emergency supplies (Collection disaster and otherwise)
- Kitchenette on each office level if staffroom not located on that level
- Quiet Room/Sick Bay

Exhibition Work Spaces

The present back-of-house areas have over the years been accommodated in the most expedient way so that there is now no clear overall logical arrangement of identifiable departmental areas. The present impression is of a rabbit warren of interconnecting spaces.

The following spaces should be located adjacent to the loading bay or goods lift (if adjacent goods lift then it is not necessary for these spaces to be on ground floor):

- Carpentry Workshop; used by exhibitions and building services and can be reduced to half the current size by relocation of building maintenance storage.
- Metal Fabrication Workshop
- Paint Workshop
- Clean & Dirty Fabrication Workshop; one large space for mounting paper based exhibit material and fabrication of exhibits. A sink required within this space and not accessed via dirty spaces to ensure collections are protected.
- Media / Photographic Studio; 25sqm windowless space for photography of collection and exhibit items.
- Sound room for digital/film/sound production
- Storage is required for display cases etc. The preference is one large space, however it may be split into several smaller spaces throughout the complex.
- Maintenance and cleaning equipment, PPE and similar supplies
- Trolley/Dolley parking lot
- Lighting equipment storage
- Space for large scale printing

IT

- Data server rooms
- Faster network speed, larger storage capacity with comprehensive hi speed wifi coverage
- Comprehensive cellphone coverage
- Direct links to Ravenscar House
- More 'portable' workstations so people can move around to work
- Storage room for computers and related equipment

Security

- Security Control Room

Other

- Cleaning supplies

Other Design Considerations & Requirements

- During the design stage the following specific design exercises shall be undertaken;
- Check journey of items around the buildings in public and back of house spaces
 - Show an average size crate moving around exhibition spaces from loading dock
 - Make sure work spaces have correct adjacencies
 - Check journey of food and beverage from delivery point through to serving for venues and function spaces.
 - Show movement of appropriate sized scissor lift around building
 - Look at flow of water/sewage around building to make sure not over or in collection spaces.

PROJECT BRIEF

SUMMARY SCOPE OF WORKS

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SUMMARY SCOPE OF WORKS

The primary requirement of the redevelopment of Canterbury Museum is to upgrade the existing facility to provide more space and to meet current international standards for Museums, especially in relation to visitor experience, exhibitions and collection management. This all needs to occur along with the complex overlay of working within the seismic strengthening, heritage, planning, constrained site and cost parameters which exist with this project.

The following is a summary of the scope of work required with the new redevelopment.

- International standard seismic strengthening for Museum Buildings
- Meet fire safety and other building code obligations
- Improve vertical access via stairs, lifts and possibly escalators
- Simplify public circulation routes
- Provide fitting arrival/orientation space
- Improve visitor experience and facilities
- Provide bigger, more flexible special exhibition space able to take major international shows
- Provide flexible, fully upgraded spaces for longer-term flexible exhibitions
- Provide human comfort heating, ventilation and air conditioning (HVAC) for public spaces
- Upgrade security provisions
- Consolidate staff offices into one area
- House reserve collections to accepted international standards
- Share workrooms, collection stores across disciplines
- Celebrate the heritage values of the Museum and McDougall buildings and underpin the whole development with Building Conservation Plans agreed with the heritage authorities and ensure compliance with the Christchurch District Plan where possible / practical
- Demonstrate commitment to bi-culturalism through new building design
- Link the Robert McDougall Gallery to the Museum buildings
- Conserve and re-display the Blue Whale skeleton
- Conserve & re-erect the Whare Whakairo Hau-Te-Ananui-O-Tangaroa and provide a new whare experience
- Future proof the Museum for the long term

PROJECT BRIEF

SPACE SCHEDULE

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Ref.	Type of Space	Existing Area (sqm)	Briefed Area (sqm)	Comments / Notes	Potential Level
A	Exhibition Galleries				
A1	Special Exhibition	570	600	Adjacent loading bay / good lift / subdividable - ideally would be larger than 600sqm	1
A2	Antarctic Exhibition	440	1200		2
A3	Discovery Centre	260	400		1
A4	Bi-Cultural Exhibition	-	incl in general		1
A5	Paua House	170	incl in general		1
A6	Blue Whale	-	incl in general		2
A7	General Exhibition	2600	*	*Redevelopment shall maximise area for additional general exhibition.	1 & 2
	<i>subtotal</i>	<i>4040</i>			
A8	Robert McDougall Gallery	960	960		1
	Total Exhibition	5000			
C	Collection Management				
C1	Collection Stores (acceptable standard)	1120	*	*Redevelopment shall maximise additional collection storage.	0
C2	Collection Stores (yet to be upgraded)	1670	0		
	<i>subtotal Museum site</i>	<i>2790</i>	<i>0</i>		
C3	RMAG Collection Stores (link)	0	*		0
C4	RMAG Collection Stores (double height under existing building)	410	*	Redevelopment shall maximise additional collection storage.	0
	Total Collection Stores	3200			
C5	Natural History Dry Workroom	31	30		3
C6	Natural History Wet Workroom	21	20		3
C7	Natural History Workroom (offices)	125	125		3
C8	Quarantine Room	7	10	Adjacent loading bay	1
C9	Conservation Workroom (Collection Workroom)	183	80	Ex Comprises 69sqm level 2 & 114sqm level 5	3
C10	Clean Workroom	-	60		3
C11	Viewing Lounge	19	20		3
	<i>subtotal</i>	<i>386</i>	<i>345</i>		
D	Education & Public Programmes				
D1	Lecture Theatre	-	200		1
D2	Classroom	73	150		1
D3	EPP Store	154	25		1
D7	Plating Kitchen to Seminar Space	-	20		1
D8	Furniture Store to Seminar Space	-	20		1
	<i>subtotal</i>	<i>227</i>	<i>415</i>		

Ref.	Type of Space	Existing Area (sqm)	Briefed Area (sqm)	Comments / Notes	Potential Level
E	Offices				
E1	Reception / Waiting	40	50		3
E2	Office / Enclosed & Open Plan	674	1200	total no. of offices & open plan workpoints t.b.c, incl circulation (approx 120-150 staff)	3
E3	Board Room	40	60		3
E4	Meeting Rooms	36	60	mix small & medium meeting spaces	3
E5	Resource Room	17	30		3
E6	Staffroom	68	120		3
E7	Staffroom deck	68	70		3
	<i>subtotal</i>	<i>943</i>	<i>1590</i>		
F	Back of House Exhibition				
F1	Clean / Fabrication Workroom	45	80		1M
F2	Carpentry Workshop	130	130		1
F3	Metal (Hot) Workshop	14	20		1
F4	Paint Workshop	40	30		1M
F5	Photography Studio	-	25		1M
F6	Sound Room	-	10		
F7	Loading Bay	35	40		1
F8	Special Exhibition Store	-	30		1
F9	General Storage		100		1M & 2M
	<i>subtotal</i>	<i>264</i>	<i>465</i>		
G	Food & Beverage				
G1	Public Café (FOH)	150	200	incl mezzanine	1 & 1M
G2	Café Kitchen (BOH), incl chiller & stores	25	50		0, 1
G3	Office	-	10		1M
	<i>subtotal</i>	<i>175</i>	<i>260</i>		
H	Retail				
H1	Retail FOH)	88	120		1
H2	Store	15	20		1
	<i>subtotal</i>	<i>103</i>	<i>140</i>		
J	Public Areas				
J1	Reception Foyer	80	200		1
J2	Air Locks	11	30		
J3	Bag Store / Lockers	14	25		1
J4	Meeting Room (Visitor Interface Space)	-	20		1
J5	Visitor Lounge / Rest Spaces		100		
	<i>subtotal</i>	<i>105</i>	<i>375</i>		

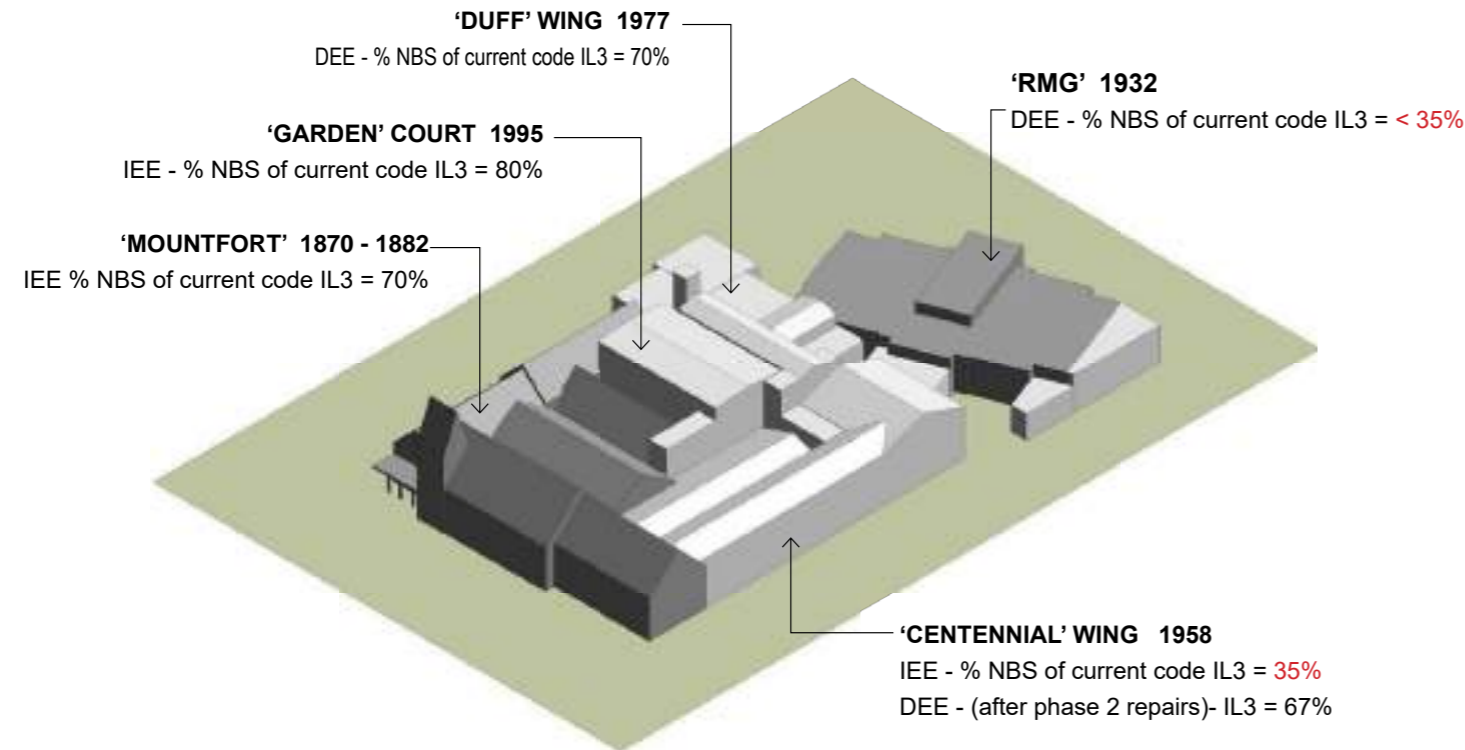
Ref.	Type of Space	Existing Area (sqm)	Briefed Area (sqm)	Comments / Notes	Potential Level
K	Toilets & Amenities				
K1	Public Toilets	72	200		1 & 2
K2	Staff Toilets	90	120		3
K3	Parenting Room	6	10		2
K4	Cleaners Cupboards	15	15		
K5	Male / Female Changing Rooms	-	30	12sqm each (1no. shower / 1no. wc / locker space per changing room)	3
K6	Cleaners Lockers / Store	14	20		
	<i>subtotal</i>	<i>197</i>	<i>395</i>		
L	Plantrooms / Service Spaces				
L1	Security Store	20	20		0
L2	Electrical Switch Room	25	30		1
L3	Server Room	8	20		3
L4	Main Plantrooms / Additional Services Spaces	350	tbc	briefed estimated - tbc by services engineers	
L5	Chiller Deck	40	tbc		3
	<i>subtotal</i>	<i>443</i>	<i>70</i>		
M	Miscellaneous				
M1	Electrical Store	-	5		3
M2	Staff Entry	-	10		1
M3	Security Room	15	20	Adjacent staff entry and loading bay Proposed L1	1
M4	Waste / Recycling Storage	10	10		1
M5	Cycle Parks	10	20	Number tbc	1
M6	Goods & Staff Lift	0	tbc		
M7	Public Lift		tbc	3 levels	
M8	General Circulation		tbc	tbc	
	<i>subtotal</i>		<i>tbc</i>		

TECHNICAL DESIGN REQUIREMENTS

STRUCTURAL & BASE ISOLATION

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Summary of seismic building strength
 initial engineering evaluation (IEE), april 2012 / detailed engineering evaluations (DEE), nov 2012

The Museum's nineteenth century neo-Gothic buildings were extensively earthquake strengthened from the late 1980s to the early 1990s. Following the major Canterbury earthquakes of 2010 - 2011 all the Museum buildings were not structurally compromised leading to permissions from Christchurch City Council and Canterbury Earthquake Recovery Authority to reopen to the public, albeit with conditions of further strengthening of some components of the building to be carried out within 3 years. The Museum Project is the appropriate vehicle for any additional strengthening works to be completed.

Following an initial engineering evaluation in April 2012 the Museum was closed for a period of time as many component buildings were found to be close to the 34% NBS earthquake prone building mark. Subsequently the Museum was reopened to the public in phases, however the RMG is still closed until some further repair works are undertaken.

Post earthquake assessed building strengths

Canterbury Museum buildings as a whole are assessed as IL3 (Importance Level 3) on the basis of the value of the collections held to the community. The four importance levels are:

- IL1: Farm sheds, etc
 - IL2: Normal commercial and residential buildings
 - IL3: Buildings serving large crowds or holding contents valuable to the community (eg Museums, parts of hospitals not required for immediate post-disaster functions)
 - IL4: Facilities required to operate immediately post-disaster
- The site is comprised of fourteen different building stages which are simplified into five main components for seismic strength purposes. The seismic properties of each of these five components are shown below in figure.

The Museum Buildings

The Museum Board requires all Museum buildings to be strengthened to 100% or greater of the New Building Strength (NBS).

Robert McDougall Gallery

A building report prepared by the Christchurch City Council in 1994 described the building as 'Earthquake Prone' (in terms of Section 66 of the Building Act) and states that it is of 'average' structural condition.

The Robert McDougall Gallery performed reasonably well in the 2010 & 2011 earthquakes, however additional assessments have been undertaken by structural engineers to determine the full extent of damage from the recent earthquakes, identify structural weaknesses



ANZ Centre



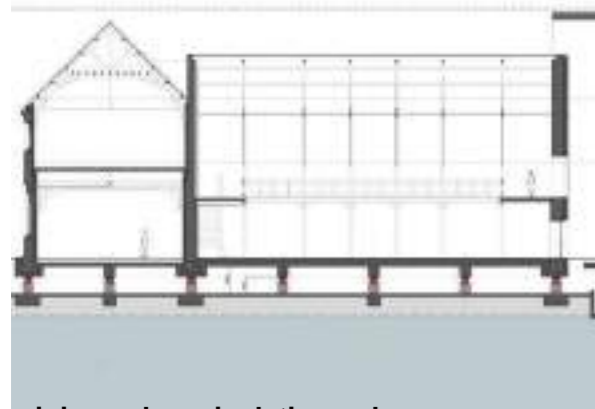
Christchurch Art Gallery (Retro fitted base isolators)

TECHNICAL DESIGN REQUIREMENTS

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minimum base isolation only

and have proposed a repair and strengthening methodology of the structure. Special attention will need to be given to parapets and the out of plane strength of the unreinforced masonry walls.

Floor Loadings to new additions to the Museum Buildings
 The following are the design floor loadings;
 Collection Stores 7 - 10KPa
 Remaining Building Spaces 5KPa

Collection Storage spaces shall be designed for compactor type storage units, with tracks set flush with the finished floor level. Structural loading for major collection items, particularly vehicles, will be need to be specifically addressed.

Seismic Strengthening

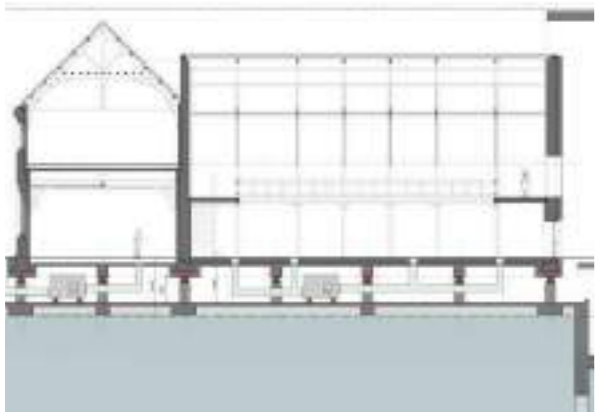
A key component of the Museum redevelopment is to provide greater resilience to both the Museum & RMG buildings, exhibitions and collections during seismic events. Options shall be considered to seismic strengthen the existing buildings and with any new additions to achieve this objective.

General Structural Upgrade Options

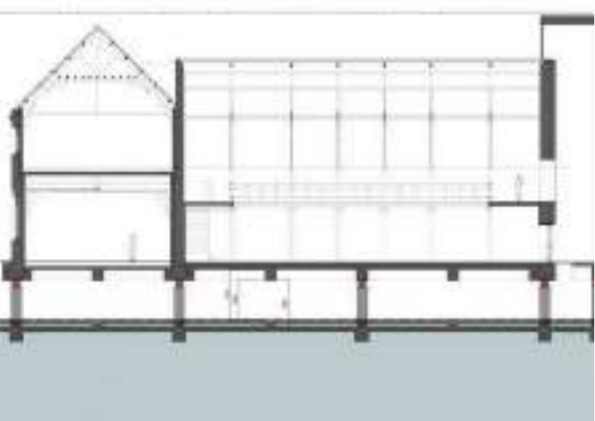
There are three recognised structural strategies for limiting damage in a major earthquake to provide both life safety and property protection;

1. Over design: protects people + buildings
2. Base isolation: protects people + buildings + contents
3. Damage resistant design: not suitable for retrofitting into existing buildings

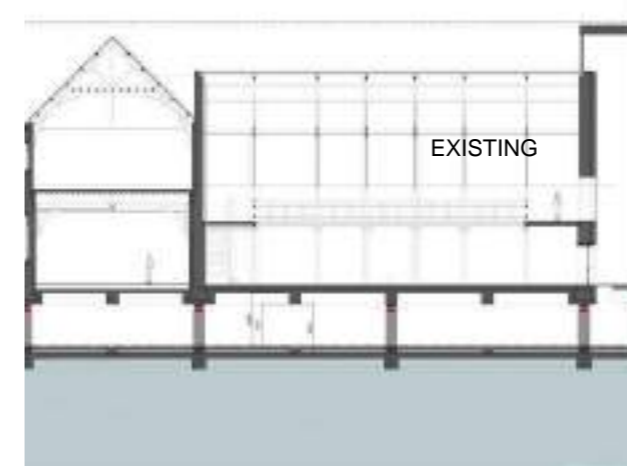
Out of the above strategies, by far the most suitable and recognised as the international industry standard for the protection of heritage and Museum buildings in an active seismic region is base isolation.



base isolation + basement



base isolation + collection storage basement



Base Isolation: What is it?

In concept, base isolation is the separation of the building from the ground so that the violent earthquake motions will not be transmitted into the structure.

It is similar to a suspension system to the building (springs + shock absorbers) and can be compared to a boxer “rolling with the punch” instead of standing firm to take the full force of it.

Why Base Isolation?

- Increased safety. Forces and accelerations are much less, resulting in a greatly reduced life safety hazard.
- Performance.
- Reduced inertia loads result in reduced forces in the structural elements
- Suited to existing buildings which may have no structural ductility, particularly historic buildings
- Protection of contents. Reduced floor accelerations and structural deformations reduce the damage to building parts and contents.
- Continuous functionality.
- The absence of structural damage permits the building to function during and immediately after the earthquake event.



Best Candidates

Natural candidates for isolation are buildings like: Essential Service Facilities, Health Care, Historic Older Buildings, High Value Manufacturing, Museums and Art Galleries.

The conclusion of a structural & quantity surveyor assessment of the construction cost comparison between base isolation & basement construction under an existing building compared to a new build was that the new build was 50% more cost effective.

TECHNICAL DESIGN REQUIREMENTS

HVAC / ELECTRICAL / FIRE

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Environmental Control (HVAC)

The review of the existing systems and conditions within the Museum has identified the following:

- the existing conditions within the Museum are far from ideal for the long term preservation of collections.
- the controls system in some areas are not operating correctly in respect of collections preservation.
- in areas of the building there is a general lack of fresh air.
- high infiltration rates occur, especially affecting galleries adjacent to the main entrance.
- the conditions within the pre-1900 Mountfort Galleries and Special Exhibition Space do not meet international standards
- conditions within the basement areas are unacceptable
- the distribution switchboards in the 1958 building are overdue for replacement.
- some substandard cable reticulation and installation.
- the location of the main switchboard in the entrance corridor to the workshop is unsuitable.

A number of key amendments shall be considered;

- to reduce the effect of present air infiltration loads, it is recommended that the building fabric is sealed wherever possible.
- the mechanical systems should be designed to create a positive pressure regime within areas containing sensitive collections.

At the completion of redevelopment, all public gallery spaces, old and new, shall provide comfortable condition for visitors and will properly protect the Museum's valuable collection when they are on display. The short-term special exhibition areas will be provided with conditions to a higher level which meets internationally required standards for travelling exhibitions.

The scope of mechanical services shall include;

- All existing space and new additions shall have appropriate air conditioning to meet best practice international Museum standards
- McDougall Art Gallery – existing system requires a full upgrade
- Rising damp in existing basement is to be addressed (humidity control very important in collection stores)
- Location of plant to be mindful of noise transfer
- Building Management System is required
- Review options for advantage and disadvantage of centralisation / decentralisation of plant
- Independent energy audit to be completed on proposed design. Running costs - quality equipment, insulation, remedy infiltration, good controls, quality oversized filters etc

- Attention to be given to providing a good thermal envelope, including above code insulation.

Electrical Services

The summary scope for new electrical services requirements are;

Power & Data

- A new substation with 2 no. 750kVa transformers is required to replace existing transformers within the 1958 wing and McDougall courtyard.
- A new main switchboard is required. There shall be suitable cable terminations provided on the MSB to facilitate the temporary installation of the portable generator should an emergency power supply be required in the event of a major power failure.
- In the exhibition and gallery spaces there shall be one double outlet per 3m of wall plus there shall be dual compartment metal trunking with stainless steel lid recessed into the floor at 4m centres.
- Majority of existing reticulation and subboards are to be progressively upgraded as existing spaces are improved. Important to consider staging implications with this.
- Communications and phones - new backbone structure picking up existing hubs.
- Integrate data / power reticulation wherever possible.
- Review option for plug-in generator, or providing a generator to ensure business continuity.

Lighting

- Lighting to exhibition halls and galleries shall generally be with suspended track lighting with attached fittings arranged in a 6m x 4m grid type layout.
- All track lighting shall have the facility to be dimmed.
- Lighting to other public areas including cafe and retail shop will be designed to provide aesthetically suitable lighting for the location.
- Emergency lighting will be provided in all areas. This will be installed to operate on power failure to the local lighting supply circuit only.
- Ground floor relocation for MSB preferred (ventilation, fire rating will be issues)
- Could possibly service the building with 1 rather than 2 transformers
- Energy efficient lights and control systems

Environmentally Sustainable Design (ESD)

The redevelopment of Canterbury Museum, which is an important public building, provides an opportunity to showcase community leadership in constructing a building which demonstrates good practice for Environmentally Sustainable Design (ESD).

There has been considerable recent work around more passive HVAC systems in Museum buildings internationally which lower operational costs and these need to be reviewed during early design stages. Opportunities in the design, construction and ongoing operations of the building shall be considered to incorporate ESD into the redevelopment. Within the design process specific cost analysis shall be undertaken against these objectives to allow for due consideration by the Museum Board of these ESD options.

Many of these requirements are the same or similar to those which have been developed by the Green Building Council of New Zealand for their Green Star office Environmental Rating System, however no Green Star rating tool is available for Museums.

Fire Protection

A detailed review of the current system shall be undertaken and an increase in passive and active fire protection shall be included within the new redevelopment to bring the total building up to meet current New Zealand Building Code requirements. Work to include;

- Fire cells integrated with evacuation system – simplify existing system
- Zoning - pressurisation consideration
- Sprinkler system linked with public address facility (PA system to be provided which will allow for formal staged evacuation system)
- Fire cells - strategy for loss control; limiting fire spread

Consideration within the design shall be given to:

- Verification that a Type 7 sprinkler and smoke detector system is required throughout the Museum.
- Smoke extract systems are required for any atrium areas, as well as smoke control in air handling systems, emergency lighting in exitways and public areas, hand held fire fighting equipment throughout, a fire hydrant in new stairs, and NZFS lift control for the lifts.
- Vesda systems for IT spaces

The McDougall is to be included in any analysis

- Considerations for 'out-of-hours' use
- Ensuring all stairs outside of any atrium areas are safe paths and exit direct to outside

TECHNICAL DESIGN REQUIREMENTS

SECURITY / ENVIRONMENTAL / OTHER

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- All exitways serving Gallery spaces open directly into the Gallery or are easily accessible
- External walls only assessed for ‘Spread of Fire to Neighbouring Property’ if they are being significantly altered as a result of the revitalisation work.
- Any link to the Robert McDougall Gallery at Canterbury Museum needs to be recognized as a Caveat or Memorandum of Encumbrance on the respective Site Titles.

The Fire Engineer needs to be closely involved in the planning for construction staging. Issues that will require a Fire Engineer’s input includes:

- Allowing the non-construction areas to remain open and accessible. This requires a Fire Safety Review for each scenario, and specific application to the Christchurch City Council and FENZ. It is likely that consequential work will need to be designed and implemented to assist in the process
- Advising on option for managing Staged Construction, with specific reference to fire protection and egress design.
- Advising on precautions to be adopted within construction areas to minimise risk of fire and damage to building fabric and contents. The highest exposure to fire for buildings usually occurs during construction activities.

Security

A specialist security consultant, familiar with specialised Museum security, shall be engaged to provide input into all design and documentation stages of the redevelopment process. A summary of the security objectives, considerations and requirements is outlined below.

Objectives

- A comprehensive programme of protective services and loss control is to be provided to safeguard the Museum’s staff, members of the public, visitors and contractors, and the collection itself. The programme will also allow the Museum to fulfil its published institutional objectives, and to demonstrate prudent and appropriate stewardship of the items entrusted to its care, which includes being able to attract and safeguard travelling exhibitions of major significance.
- The protective services and loss control programme is an implicit component of any redevelopment strategy taken into account during all phases of the design and achieved by the three interdependent strands of ‘environmental design’, ‘technology’, and ‘management’.

Environmental Design

The main protective considerations within the ‘environmental design’ strand which need to be balanced with other design requirements include:

- Supporting the principal functional elements of any Concept Plan; improved and open circulation, maximising the Museum experience for the public, addressing the opportunities and constraints provided by the existing structures; maintaining flexibility; and meeting the project budget.
- Wherever practical, planning the various spaces to reflect a hierarchy of efficient access control. This involves attempting to: consolidate public, private and restricted spaces; minimise the number of control points; and rationalise vertical and lateral circulation with a view to separating the movement of members of the public, staff, collections, supplies, and waste; in order to keep protective services staffing at a sustainable level, and to minimise initial and ongoing expenditure on excessive security equipment.
- Recognising the loss prevention challenges and marketing opportunities associated with tour groups, onsite commercial entities, school parties, after hours lectures and functions, etc.
- Detailed design and placement of toilet facilities, the security control room and outlying security positions, reception and customer service desks, cloak and bag storage, and the design of doors and windows.

The design team shall give special consideration to loss prevention and to the management of risks associated with fire, flooding, vermin, dust, vibration, and earthquake related damage, along with unscheduled disruptions to certain vital building services, both during the construction phase and thereafter, as best as can be achieved within the budget.

Protective Services Technology

The protective services technology strand comprises the security systems and building services systems. These are required to manage risks and to provide early warning of conditions requiring control and mitigation.

It is expected that security systems will include;

- personal assistance alarms for staff at public desks and counters;
- electronic and mechanical access control;
- communications systems;
- exhibit and intruder alarms;

- closed circuit television (CCTV); security lighting;
- an integrated security management computer system;
- moisture detection;
- fire protection interfaces and building services systems monitoring;
- 24hr staff on site

The extent of security equipment installed in the Museum will largely depend on the how the space planning evolves within the design phase.

Certain security and building services systems shall allow the Museum or its agents to monitor, diagnose and if necessary control particular conditions from off-site locations, especially after-hours. Loss prevention concepts shall also be incorporated within the design of fire protection and other building services. To the extent allowed by the budget, normal design standards may well be exceeded for loss prevention purposes, in recognition of the unique risks associated with Museum collections and operations.

Management

The risk ‘management’ strand affects, and is effected by, the ‘design’ and the ‘technology’ aspects of the programme. Staffing implications of any proposed design or technology must be taken into account because of the potential consequences for ongoing staffing numbers and costs. Risk Acceptance

The objective is to achieve the right balance between the design, the technology and the management strategies. Once sketch plans have been developed, a Protective Services Brief shall be prepared in a matching level of detail. This document will record the rationale and details of all the protective services arrangements and later, will form the basis for the Museum’s ongoing Protective Services Programme.

Acoustics

An acoustic engineer shall be engaged during the design and documentation stages to review any proposed design, identify areas which are likely to require specific acoustic input and propose options for acoustic treatment which will be compatible with the architectural design. Spaces requiring specific attention shall be; entrance foyer, atrium spaces, lecture theatre, classroom, galleries, office spaces and plantrooms.

TECHNICAL DESIGN REQUIREMENTS

SIGNAGE / ACCESS / STAGING

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Assessment of noise from mechanical plant at the boundaries and neighbouring properties shall be included within the scope.

Signage

The redevelopment project shall include the inclusion of all exterior and interior wayfinding, building compliance and information signage to ensure a fully integrated solution which is complementary to the architectural design and unique nature of the Canterbury Museum complex. A graphic designer shall be utilised to provide input to the signage works.

Vehicle / Service Access

The Museum and Robert McDougall complex have historically experienced problems in efficient servicing and loading, by the very nature of the site and the relationship between the Museum and its immediate neighbours. Loading and unloading of Museum goods and exhibitions will continue from the access driveway on the north side of the Museum.

A loading bay shall be provided with access for 'B-train' sized vehicles and options shall be explored for the unloading of crates and containers, especially in relation to short-term special travelling exhibitions. A gantry system shall be included in the project to facilitate the unloading and loading operation. Courier van and delivery truck access shall be provided which is separate to all other public entrances. A secondary staff / trade entrance shall be provided which is associated with the loading bay and security room for the monitoring of the movement of goods and people.

Access to the McDougall and associated legal easements shall be considered. Options for remodelling the existing driveway in conjunction with Christ's College shall be considered to provide the maximum benefit to both the Museum and the College. No on-site vehicle parking needs to be provided.

Vertical Circulation / Accessibility

Currently there are public areas within the Museum which don't meet New Zealand Building Code requirements for accessibility. The redevelopment project shall rectify this, including provision for accessible access to the mezzanine of the 1870 wing.

The existing Museum building complex has one poorly located lift, which inadequately serves both staff and the public. A new public lift shall be provided, close or easily visible from the main entrance. A new large goods lift shall be provided which links to all exhibition and collection storage floors and shall be close to the loading bay. It shall be sized to accommodate some of the largest collection items. Access to collection and exhibition spaces for those out-sized items which cannot be accommodated within the goods lift shall be considered in the design process.

An option for an escalator shall be considered in the design process.

Staging of Work

The Museum needs to remain a viable visitor attraction and operating entity throughout the development, either onsite or offsite. There has to be an adequate quantity of Museum experience kept intact at any one time and works are required to be completed as early as practicable to minimise the overall period of disruption. A staged approach to the development may need to be adopted if all the works outlined within this brief are not achievable within the current budget provisions.

Given the potential scale of redevelopment, the option to fully relocate the Museum's operations during the construction period should be considered.

Future Proofing & Durability

The redevelopment project is being designed to accommodate Museum requirements over the next 50 -100 years. However as part of the design process, options shall be explored to accommodate potential future expansion opportunities after this period of time. This shall include options around increases in collection storage, exhibitions, plantrooms, offices, retail and food & beverage. To allow for change over time future flexibility shall be built into as much of the redevelopment project as possible, for example raised floors in exhibition spaces, large open collection storage volumes, open plan offices etc...

The selection of all materials and associated detailing shall be based on at least 50 yr + life and shall be of an appropriate quality to be respectful of the existing heritage buildings and as one of the most

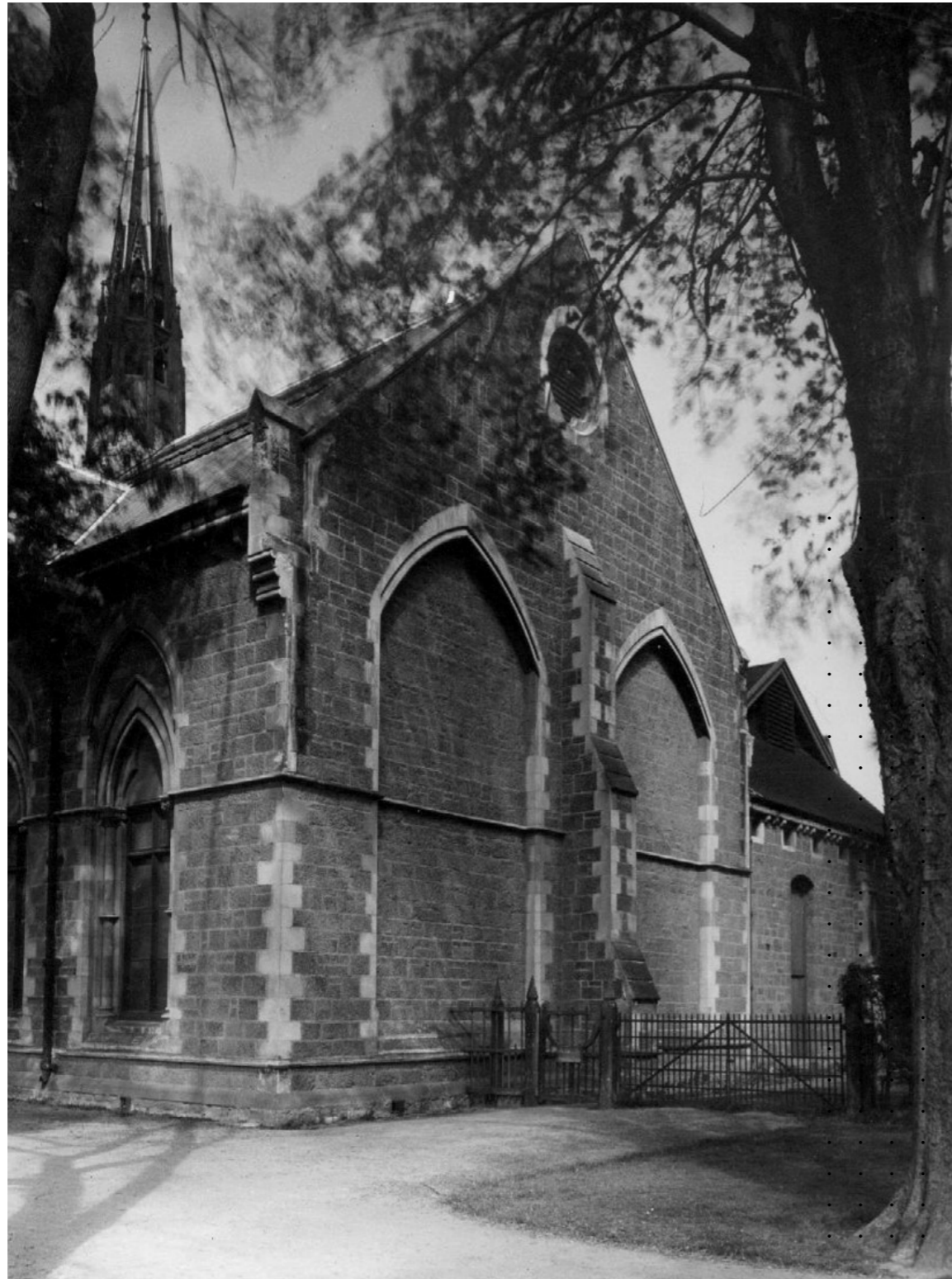
important public buildings in Canterbury.

Finishes & materials should be selected to satisfy the following criteria:

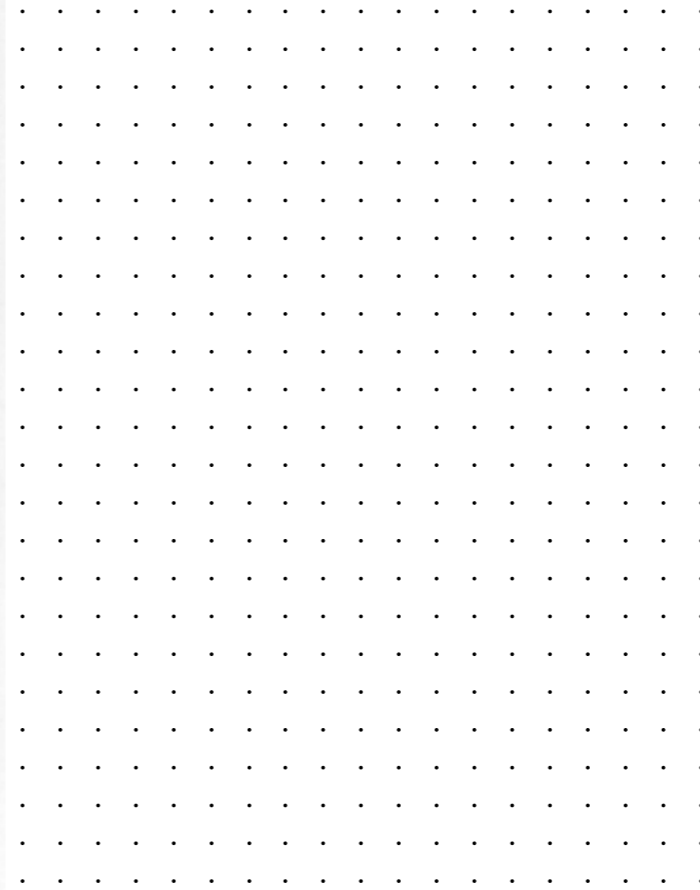
- Highly resolved & sophisticated in the use of materials and in the detailing
- Durability and in-service longevity
- Image & identity within public spaces; to enhance visitor experience and be consistent with Museum identity.
- Appropriate language in association with original heritage fabric and consistent with ICOMOS charter and other heritage considerations.



Wayfinding and signage at the British Museum



HERITAGE SIGNIFICANCE & MUSEUM CONSERVATION PLAN



HERITAGE SIGNIFICANCE

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Canterbury Museum is listed as a Category 1 Place by Heritage New Zealand Pouhere Taonga. The nineteenth century buildings and their setting are listed as "highly significant" in the Christchurch City Council District Plan, while the Rolleston Avenue facade of the Centennial Wing and the south and west facades of the Roger Duff Wing and their settings are listed as "significant".

The present Museum nineteenth century heritage buildings constructed between 1870 -1882 have been subject to a great deal of change, largely due to seismic strengthening of the heritage fabric in the early 1990's. This has resulted in the removal of and covering of important heritage elements, original galleries changing use and courtyards in-filled.

The Robert McDougall Gallery building is listed as a Category 1 Place by Heritage New Zealand Pouhere Taonga and is included in the schedule of historic buildings within the Christchurch District Plan. The McDougall comprises an original building constructed in the 1930's which has been added to over subsequent years.

Any Museum redevelopment shall not diminish either of the buildings cultural value as outlined within the building conservation plans of the respective buildings. It should endeavour to correct some inappropriate alterations to historic fabric where possible and practicable and allow for some conservation works to be incorporated. The redevelopment shall look at opportunities to enhance and celebrate heritage by the unveiling of heritage fabric which is currently hidden and this may include; original stone walls, original timber roof trusses & views of the roof of the Robert McDougall Gallery.

The redevelopment on the Museum buildings should be discussed at an early stage with Heritage New Zealand and the Christchurch



the Mountfort buildings, c1887

City Council heritage team, to ensure that the work is generally in accordance with the principles and policies as set down in the conservation plans and the requirements of the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value. Appropriate standards should be maintained when work is carried out to the buildings. Records should be kept of any changes that might occur to the buildings. This is particularly important in areas where heritage fabric is being removed or modified.

A Heritage / Conservation Architect shall be engaged as part of the consultant design team to provide input during all stages of the redevelopment process. Any deviation from the Building Conservation Plan's policies and recommendations shall be clearly noted for review by the Board.

Building Conservation Plans

Separate Building Conservation Plans for Canterbury Museum (2019) and Robert McDougall Gallery (draft 2014) have been prepared for these buildings by DPA Architects, in consultation with the Museum Board, Heritage New Zealand and the heritage advisors of the Christchurch City Council.

The Conservation Plans are intended to provide guidance for the general management of the buildings as well as enabling future planning and redevelopment work. These documents shall be important guidance documents for the redevelopment.

A key part of the Museum Conservation Plan is the Statement of Significance.

STATEMENT OF SIGNIFICANCE: CANTERBURY MUSEUM

The Canterbury Museum is of national significance for its finely executed Gothic Revival architecture and its historic and continuing function as a major purpose-built Museum. The Museum is of significance for its role in housing taonga and retains community connections with Canterbury's past.

The prominent location of the Canterbury Museum at the end of Worcester Boulevard, with its tower acknowledging the spire of the ChristChurch Cathedral in the square and its grey stone and elegant Gothic Revival detailing matching the buildings across Rolleston Avenue, make it a central pivot of a visually unified townscape.

National Significance

The Museum is nationally significant because of its ongoing operation as a major cultural institution on the site, since 1870.

The nineteenth century buildings at Canterbury Museum are of national architectural and aesthetic significance as outstanding examples of the Gothic Revival style as designed by the pre-eminent nineteenth century architect Benjamin Woolfield Mountfort, the proponent of this style in New Zealand between 1850-98. The Mountfort designed buildings embody a localised form of Gothic architecture which unites the Gothic Revival style from Great Britain and locally sourced New Zealand materials, creating an architectural expression that is distinct from the language of Gothic Revival architecture in Great Britain. Mountfort is regarded as one of the most important nineteenth century architects in New Zealand, and his Canterbury Museum buildings as amongst his finest works. The Mountfort buildings are of national contextual significance for their major contribution to the wider Gothic Revival precinct within Christchurch which creates an identifying architectural style for the city.

The Canterbury Museum is of national historical and social significance for its association with the distinguished geologist Sir Julius von Hasst, the Museum's founder and first director and Benjamin Mountfort as the architect of the complex of nineteenth century buildings.

Local Significance

The Mountfort buildings, constructed over a period of 17 years, are of local technological and craftsmanship significance demonstrating the latest developments in Victorian Museum design and advancements in building technology. The large open span achieved in the gallery of the 1882 building is particularly significant. The fine masonry used on all of the Mountfort buildings and, in particular, the 1878 entry porch demonstrates fine craftsmanship.

HERITAGE SIGNIFICANCE

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The Canterbury Museum has particular local cultural significance to the communities of Christchurch and Canterbury as an important reference point in community identity. This sense of enduring and contemporary connection is strongly expressed today in an appreciation of elements of the Museum buildings and in its role and functions. The Canterbury Museum is of local cultural significance as a symbol of continuity, familiarity and survival, holding safe the stories, objects and knowledge that are regarded as community treasures. Canterbury Museum is of local cultural and spiritual significance to many tangata whenua for the taonga held within the Museum, and for the relationships between people, objects and stories facilitated by the Museum's existence, values and roles which have existed since its inception.

The Canterbury Museum is held in high community esteem for its **aesthetic** qualities derived primarily from the nineteenth century buildings and its contextual setting. It is a cultural and physical landmark with its position on a major city axis symbolising its important role as a cultural guardian.

The Canterbury Museum is of local **contextual** significance as an outstanding feature within the wider arts and education precinct, contributing to both these precincts and helping to define the streetscapes of both Worcester Boulevard and Rolleston Avenue. Through its strong visual relationship with Christchurch Cathedral, the Canterbury Museum contributes to the significance of the wider city centre. Its relationship to the Botanic Gardens is also significant.



figure 7.2 Canterbury Museum, c1887

STATEMENT OF SIGNIFICANCE: ROBERT MCDUGALL GALLERY

In the Building Conservation Plan the Robert McDougall Gallery is a place of considerable significance in Christchurch because of the following;

- The building's association with Robert McDougall, James Jamieson and their philanthropic donations which marked the foundation of the gallery;
- Its association with the development of the arts scene in Christchurch and with the Christchurch Art Society;
- Its design and character as an Early Modern Neo-Classical art gallery;
- A rare example of a permanent purpose-built regional art gallery;
- Its technical significance as an example of a roof lighting system specially designed by Samuel Hurst Seager;
- Its intact and largely original condition;
- Its setting as a landmark within the Christchurch Botanic Gardens;
- It combines with Christ's College and the Canterbury Museum to form a significant group of historic buildings that are also associated with the Botanic Gardens.

Heritage protection

Relevant documents and legislation which will need to inform any redevelopment of Canterbury Museum are;

HERITAGE NEW ZEALAND POUHERE TAONGA

Canterbury Museum is listed as a Category 1 Place by the Heritage New Zealand Pouhere Taonga Act 2014, under the list number 290. The listing appears to make no distinction in the value of the component parts of the Museum. Category 1 Historic Places are defined as to places of special or outstanding historical or cultural heritage significance or value. The Board of New Zealand Heritage Pouhere Taonga agreed in December 2013, that the status of the Canterbury Museum entry remains open and is to be progressed in conjunction after completion of the Conservation Plan for the whole site - which is nearly finalised.

The Robert McDougall Gallery building is listed as a Category 1 Place by the Heritage New Zealand Pouhere Taonga Act 2014, under the list number 303.

CHRISTCHURCH DISTRICT PLAN

In the Christchurch District Plan, the Canterbury Museum (1870-1882 buildings) and setting are identified as being "highly significant" and are scheduled as Category 1 items. The later parts of the Museum being the Roger Duff Wing (south & west facades and setting) and the Centennial Wing (east facade and setting) are identified as being "significant" and are listed as Category 2 items in the Plan.

The relevant objectives, policies and rules of the City Plan shall be carefully considered during the design development stages of the redevelopment which shall comply with these wherever practically possible. The extent of any non-compliant aspect of a proposed design shall be kept to a minimum.

ICOMOS NEW ZEALAND

ICOMOS stands for the International Council for Monuments and Sites and is a world-wide body dedicated to the protection of heritage. In 1993 ICOMOS New Zealand was established with its own Charter (revised 2010) and that continues to be the principle guiding document for heritage conservation in this country. As a way of maintaining the integrity of the place all work should conform to principles set out in the ICOMOS New Zealand Charter (revised 2010).

RESOURCE MANAGEMENT ACT

The Resource Management Act of 1991 is the formal legislation that

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manages the environment. Section 6 of the RMA refers to Matters of National Importance. The RMA Amendment Act 2003 added “the protection of historic heritage from inappropriate subdivision, use and development” to the list of matters of national importance.

As noted, the Canterbury Museum is listed as a Category 1 historic place by Heritage New Zealand Pouhere Taonga. The nineteenth century buildings are listed in the Christchurch District Plan as “highly significant” historic heritage items while sections of the later parts of the Museum are listed as being “significant”. The interiors are currently not included in the District Plan listing.

BUILDING ACT 2004

The Building Act is the legislative framework to comply with the New Zealand Building Code with the primary purpose that buildings are safe & sanitary. There are currently aspects of the existing building, including fire & accessibility issues, which will need to be rectified and incorporated into any redevelopment.

BUILDING CONDITION & CYCLICAL BUILDING MAINTENANCE REPORTS

Separate Building Condition Reports for both the Museum and McDougall buildings have been completed by Fulton Ross Team Architecture in December 2009. Essential remedial work to the exterior of the heritage buildings has been identified to protect these buildings for future generations. The redevelopment project shall include the completion of these repair works by appropriately qualified tradesman under the supervision of a conservation architect. A Cyclical Building Maintenance Plan has also been completed to ensure on-going protection and retention of the Canterbury Museum and McDougall heritage buildings.

Specific Work to Heritage Buildings

Pre-1900 Museum Buildings

The nineteenth century Museum buildings form an important part of the Museum and offer an opportunity to inform the history and development of Canterbury Museum. Adopting conclusions from the Skelton Report and from the experience of the previous revitalisation project, intervention work to the nineteenth century buildings shall be kept to a minimum. Along with this the existing entrance to the Museum shall be retained as a public entrance to Canterbury Museum.

The predominant original heritage elements of Canterbury Museum are experienced by the public on the southern and eastern exterior elevations of the 1872 and 1877 Mountfort buildings. The redevelopment offers an opportunity to enhance the conservation and integrity of these important buildings.

The project should look to reinstate or reconstruct original exterior heritage elements on the nineteenth century Museum buildings, including;

- the flèche on top the 1877 wing which aligns with Worcester Boulevard and Christ Church Cathedral
- Chimneys to the 1877 and 1872 wings.
- repair of building fabric as outlined in the Building Condition Report
- The intervention of seismic strengthening in the nineteenth century buildings during the early 1990’s resulted in a lack of original heritage fabric remaining within the interior of these buildings. Although limited opportunities now exist, during the fitout of these gallery spaces into long-term flexible exhibition spaces and creation of improved circulation within the Museum complex, opportunities shall be explored to enhance and expose original heritage elements.
- Existing heritage gallery spaces shall progressively be upgraded over time to long-term flexible exhibition spaces, with work to include; installation of air conditioning system, electrical upgrade (re-wiring), general refurbishment & the installation of a raised access floor.
- The option for an additional public entrance to the Museum in the Centennial Wing shall be explored to facilitate the resolution of the current poor visitor entrance and circulation experience.

Robert McDougall Gallery at Canterbury Museum

The decision to proceed with a new Art Gallery in Christchurch enabled the Museum to consider the introduction of the Robert McDougall Art Gallery space with the Canterbury Museum. The integration and connection of this currently discrete building with the Museum building complex forms part of the redevelopment project. The McDougall allows the Museum expansion in area for exhibition and collection storage. The building is also deficient in some practical aspects in respect to visitor facilities (for example the current building has no access to toilets for visitors). The redevelopment shall address improving the visitor facilities, either within the building itself or immediately adjacent.

The Robert McDougall Gallery building will be returned, as far as practical, to its original form and design. Since it was built, various additions and alterations have been made, some of which will be removed as part of uncovering original heritage fabric.

Work required to the McDougall is likely to include;

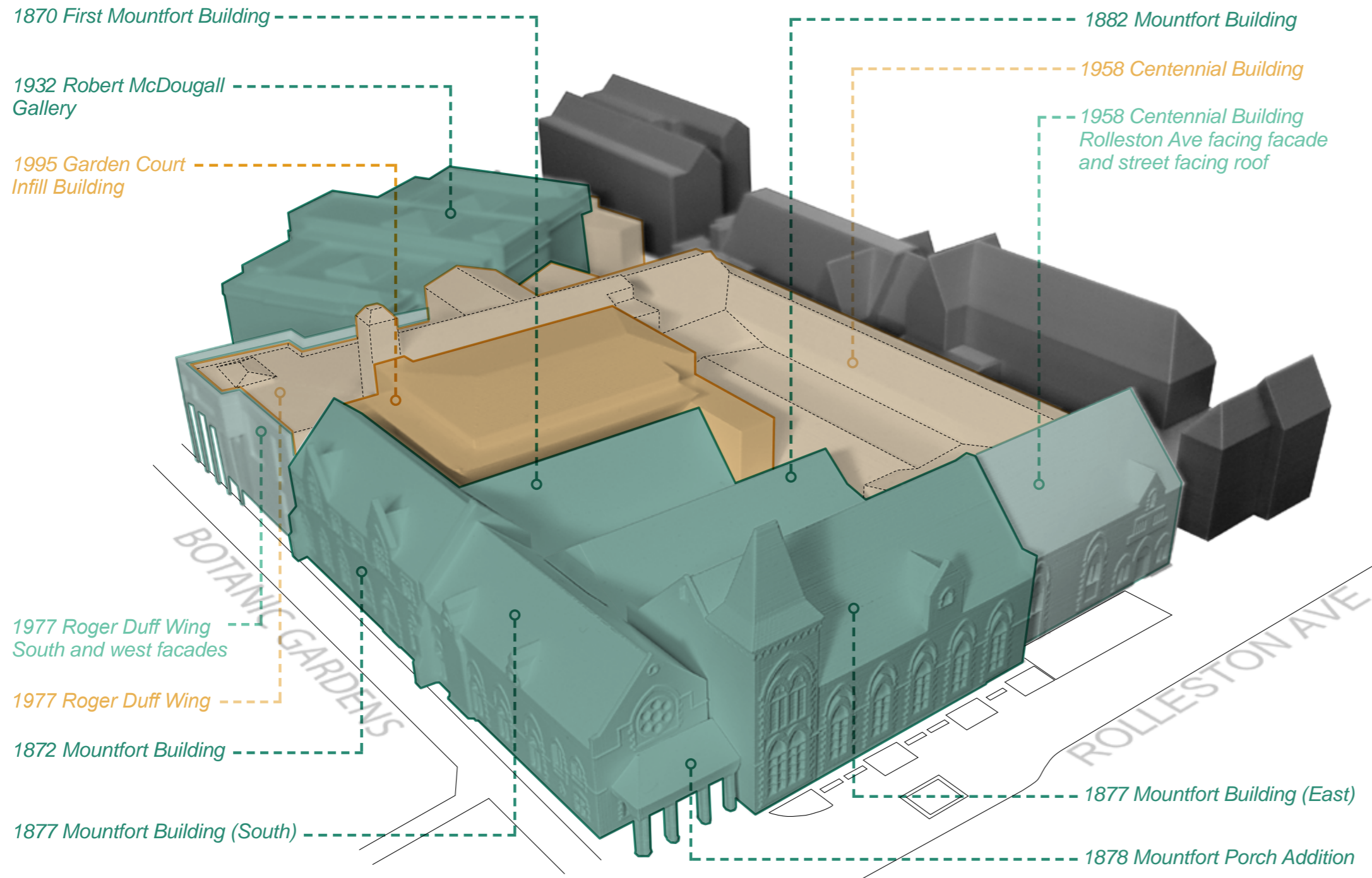
- Earthquake strengthening in association with the building owners, the Christchurch City Council.
- Building services upgrade
- Linkage into the Museum complex at both the basement and exhibition floor levels.
- Improvement of visitor facilities
- Repair of heritage fabric
- All amendments shall be undertaken with reference to the Building Conservation Plan, with particular attention to retention and enhancement of original heritage elements.

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Museum complex viewed from South-East, Rolleston Avenue corner

- Primary heritage significance**

The Robert McDougall Gallery and all 1800s structures (Mountfort buildings). This excludes the copper gutters of the Rolleston Avenue facing 1877 building, and the non-original roof fabric (not visible from the street) of the 1882 and 1870 buildings. The Museum Conservation Plan recommends all fabric of primary significance should be retained. And where possible original fabric revealed and missing elements restored or reconstructed.
- Secondary heritage significance**

1977 Roger Duff wing south and west facade fabric. The 1958 centennial building Rolleston Avenue facade and street facing roof (specifically including the gablet and Canterbury coat of arms). The Museum Conservation Plan recommends elements of secondary significance should be conserved, but a greater degree of change may be possible compared to elements of primary significance.
- Little/ No significance**

All 20th century structures unless otherwise noted. Including Centennial Wing and Roger Duff Wing behind their 'secondary significance' facades. Also included are the red tint to the rose window, and the 1870 roof fabric. All non original interior fabric has no heritage significance. The Museum Conservation Plan recommends change or removal of these elements is likely to be acceptable.
- Intrusive on heritage fabric**

The 1995 Garden Court building obstructs the original Mountfort building facades.

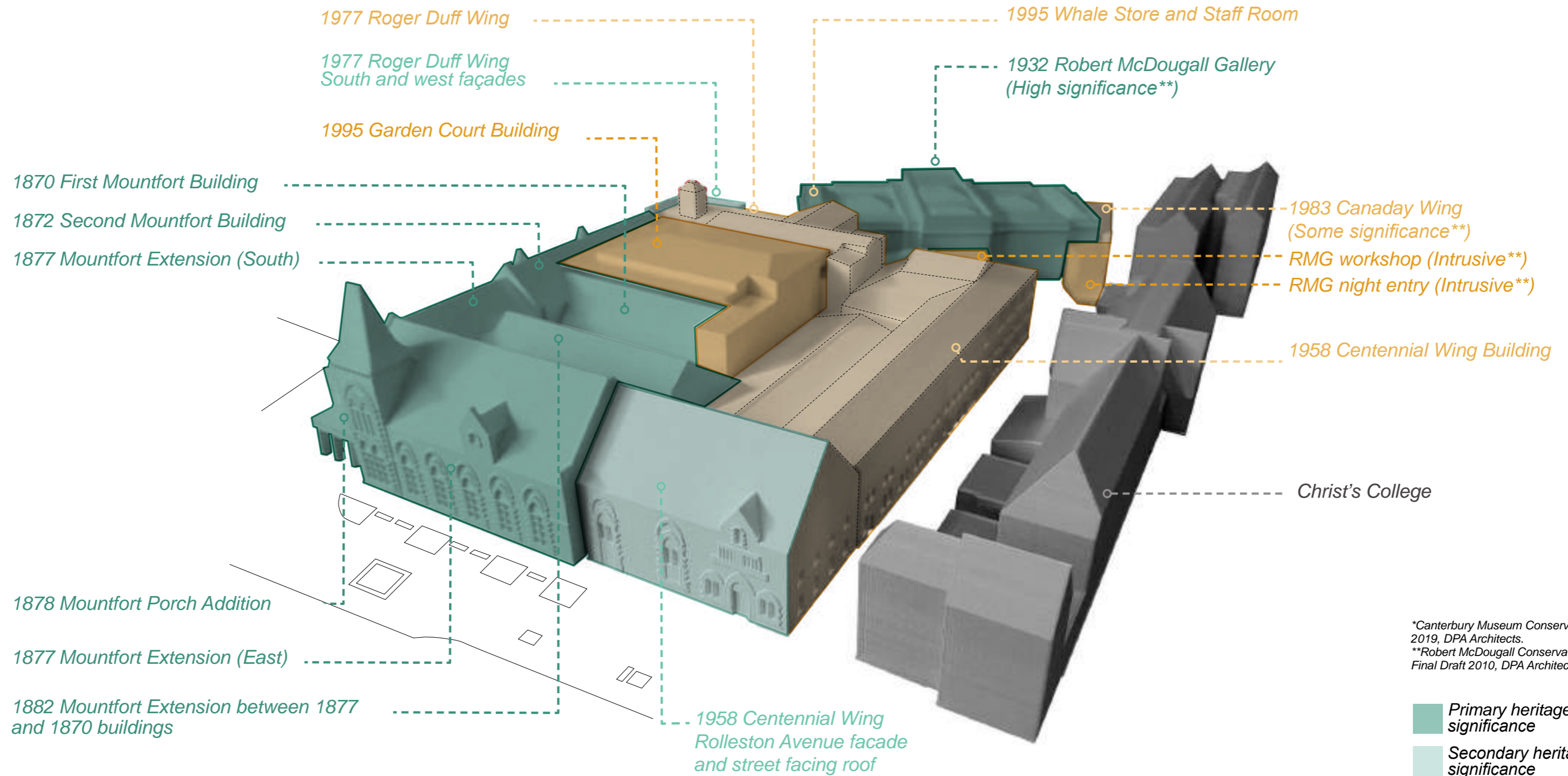
*Canterbury Museum Conservation Plan 2019, DPA Architects.
 **Robert McDougall Conservation Plan Final Draft 2010, DPA Architects.

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Museum complex viewed from North-East, Rolleston Avenue corner

*Canterbury Museum Conservation Plan 2019, DPA Architects.
 **Robert McDougall Conservation Plan Final Draft 2010, DPA Architects.

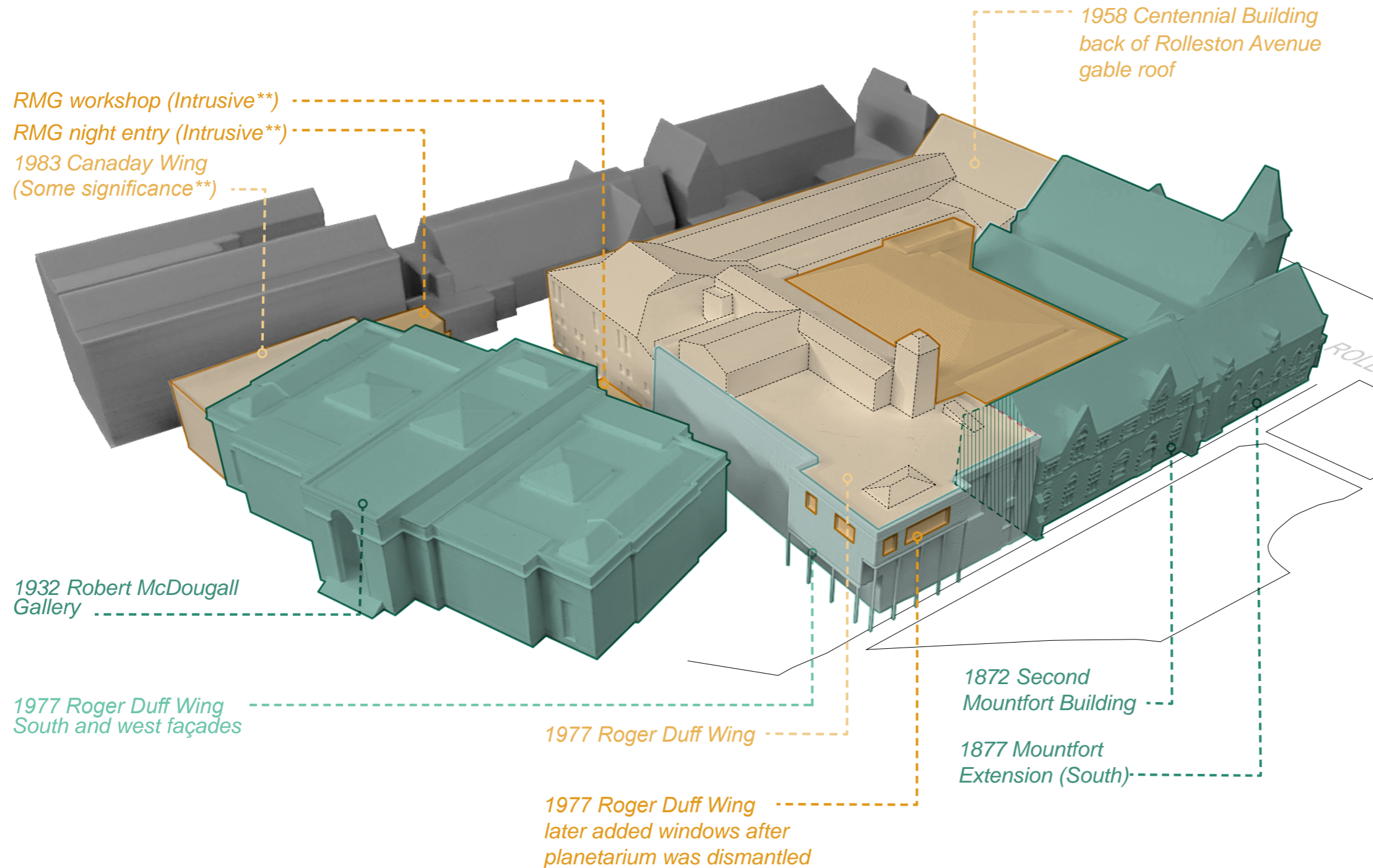
- Primary heritage significance
- Secondary heritage significance
- Little/ No significance
- Intrusive on heritage fabric

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Museum complex viewed from North-East, Rolleston Avenue corner

- Primary heritage significance**

The Robert McDougall Gallery and all 1800s structures (Mountfort buildings). The Museum Conservation Plan recommends all fabric of primary significance should be retained. And where possible original fabric revealed and missing elements restored or reconstructed.*
- Secondary heritage significance**

1977 Roger Duff wing south and west facade fabric. However, some of the panels are not intact due to the openings which have been formed for the café windows and the walls have the potential to be returned to their earlier form.*
- Little/ No significance**

Back of Rolleston Avenue gable roof of Centennial Wing. All fabric behind south and west facade of Roger Duff Wing.*
- Some Significance**

The RMG Conservation Plan recommends, Consideration should be given to the removal of the Canaday Wing. Although the building is relatively unobtrusive it does not appear to be necessary to the continuing function of the Robert McDougall Gallery.**
- Intrusive on heritage fabric**

The RMG Conservation Plan recommends, consideration should also be given to removing items that detract from the building's heritage values as a way of recovering its significance. Intrusive items include later services such as air-conditioning ducts, later linings, Night entry and workshop.**

The later added windows on the 1977 Roger Duff wing. The Museum Conservation Plan recommends, "Removal of intrusive elements should be encouraged, particularly where this may lead to elements of the place that are of primary or secondary significance being revealed..."**

*Canterbury Museum Conservation Plan 2019, DPA Architects.
 **Robert McDougall Conservation Plan Final Draft 2010, DPA Architects.