

# Aigantighe Art Gallery – Future Facility Requirements



# Contents

Introduction.....	3
Project Context .....	4
Site .....	4
Building Conditions .....	5
Building Elements.....	5
Exhibition Spaces .....	5
Gallery Spaces .....	6
Lighting .....	6
Electricity .....	6
Lift .....	6
Collection Storage .....	6
Collection .....	6
Movement.....	7
Shelving.....	7
Public and Technical Spaces.....	7
Workshop/Education Space .....	7
Reception, Shop and Information .....	7
Cafeteria .....	7
Toilets .....	7
Offices.....	8
Technical Spaces.....	8
Exterior .....	8
Schedule of Spaces .....	8
Environmental Control .....	10
Security.....	11
Fire Protection .....	11
Information Technology .....	11
Environmentally Sustainable Design .....	11
Building Materials .....	12
Appendix.....	12
Comparative Projects .....	12

## Introduction

Today the Aigantighe Art Gallery is a public art gallery that continues to collect, exhibit, preserve, research and educate visitors about local, national and international arts – it is a vibrant cultural landmark that inspires, engages and at times challenges the communities of the South Canterbury Region and its visitors.

The vision of the Gallery is:

*The Gallery is a responsive art museum that inspires, engages and challenges its diverse audiences through quality art experiences.*

The Gallery's objectives are as follows:

### *Excellence*

- Be recognised for excellence in its collection, exhibitions, educational programmes and other activities - through the professionalism and leadership demonstrated by Timaru District Council, staff, volunteers and stakeholders.

### *Accessibility*

- Ensure art and culture is accessible to all members of the community through its exhibitions, programmes, outreach, and other mission-driven activities.

### *Relevance*

- Communicate the relevance of art and culture to the community and be recognised as an irreplaceable part of cultural life of the South Canterbury region.

### *Collaboration*

- Build an organisational culture that embraces collaboration based on the belief that, together, we can become stronger, and achieve more.

### *Accountability*

- Be conscientious and prudent in the use of resources and demonstrate credibility by embracing transparency and accountability.

### *Responsiveness*

- Recognise the Art Gallery's role as a cultural resource to the South Canterbury region and be responsive to the needs of the community it serves within the framework of its vision.

### *Growth*

- Be proactive in developing, preserving and conserving its Collections. Develop staff, programmes, facilities, and the continual expansion of the Art Gallery's presence in the community.

## Project Context

Following the Building (Earthquake-prone Buildings) Amendment Act 2016 the Timaru District Council undertook a seismic assessment of the Aigantighe Art Gallery. The assessment found the Historic House Gallery structure was less than 34% of New Building Code or a grade E structure and is of very high seismic risk relative to a new building. The assessment identified the following critical structural weaknesses with the Historic House Gallery compared to a new build:

- Chimney unreinforced masonry with some cracking present, there is a possibility that the chimney could topple onto an egress route, in this case the emergency exit stairs.
- Unreinforced Masonry Walls double wythe with no ties. These walls are likely to collapse under face loads.
- Floor and roof diaphragms.
- Connections between walls and floors/ceilings have low strength and resilience (i.e. unrestrained floor beams)
- Gables unrestrained on upper level.
- Potential pounding of the east wall against the concrete extension, resulting in damage.

Following the outcomes of the seismic assessment the Timaru District Council made the decision to close the Historic House Gallery to ensure public and staff safety. All artworks displayed in the House Gallery were placed in storage.

In 2018, a detailed seismic assessment was completed by Structex to inform a detailed design. Also in 2018 through the Long Term Plan, process the Council allocated \$600k in the 2019/2020 financial year to complete the strengthening of the Historic House Gallery.

## Site

Aigantighe Art Gallery is located at 47-53 Wai-Iti Road, Timaru. The Site is owned by the Timaru District Council and has the following legal description Lots 1-3 DP1717 & Lot 31 Pt32 DP1493.

The site is zoned Recreation 2 and the land use is Established. It is comprised of two adjoined large buildings: the heritage building (a Historic Places Trust Category B listed home) was built in 1905. A 1978 wing with a foyer, main gallery and office was added to the historic building, further additions of an office and small art store were added in 1995.

## Building Conditions

The 2 Level 1905 Heritage Building is constructed using a double brick cavity wall construction. The external walls are clad with a smooth plaster render patterned with incisions and false window surrounds to imitate stone blocks. The internal walls are presumed to be single skin masonry. The foundations are mostly of concrete with some masonry members, and the floors are timber joists with floorboards. The roof is clad in Marseilles clay tiles (without sarking). The 1978 extension is constructed using concrete pad foundations and block work walls. The roof construction is a mix of timber trusses with a concrete tile and butynol roofing. The 1995 extension is constructed using a polystyrene construction systems with an exterior rockcote render.

The existing mix of buildings is not constructed to a level that will support the proposed function of the facility without some significant alterations. In the Heritage Building there is limited access into the building and the second level; no temperature and humidity control; lack of fire protection; limited ability to display artworks for exhibitions; the Marseilles clay roof tiles have reached the end of their life; existing heritage features of the building require conservation. In the 1978 extension there is a lack of work areas for the care of the collection; restrictive access into the building; an inadequate loading bay; no dedicated workshop for exhibition development; butynol roofing in need of replacing; no disability bathrooms; the existing block work is poorly insulated, and the current environmental systems provide minimal control of both temperature and humidity. In the 1995 extension, the collection store is at full capacity and the polystyrene construction systems is not ideal for collection storage.

## Building Elements

The Heritage Building has a currently floor area of 228.49m<sup>2</sup> (119.4m<sup>2</sup> ground and 109.09m<sup>2</sup> upstairs). The 1978 and 1995 extensions has a total floor area of 487m<sup>2</sup> (289.27m<sup>2</sup> exhibition space, 90.7m<sup>2</sup> storage, 107.03 office and utility space)

The facility currently has a total area of 715.49m<sup>2</sup>. It is envisaged the Gallery will require a future gross building area of 1200 - 1300m<sup>2</sup> to meet the increase needs of the community and the growing collection. Approximately 440m<sup>2</sup> of space would be required for exhibitions, 250m<sup>2</sup> of space required for collection storage and the remaining 542m<sup>2</sup> of public and technical spaces.

In the Schedule of Spaces is a summary of the current spaces with a comparison of the future needs for the Aigantighe Art Gallery.

## Exhibition Spaces

## **Gallery Spaces**

Future exhibition spaces will need to be multi-purpose and flexible spaces to accommodate semi-permanent exhibitions, including national tour exhibitions, in-house curated exhibitions and community exhibitions.

Gallery walls will need to be flexible and have the ability to be easily repaired and replaced. In the Heritage Building it is envisaged temporary walls will be fixed to the interior walls to protect the heritage of the building and provide flexibility.

## **Lighting**

The lighting systems in the exhibition spaces should be low energy LED or other contemporary technologies that have minimal power draw and maintenance, with spare parts readily available.

## **Electricity**

The exhibition spaces would require an in-ceiling and an in-floor electrical grid with both two-phase and three-phase power.

## **Lift**

Any design will need to consider goods/materials and people movements throughout the facility and determine the requirements for lifts particularly heavy and/or large exhibits.

## **Collection Storage**

### **Collection**

The Aigantighe Art Gallery Collection comprises of a diverse range of collection items, including glazed and unglazed artworks, works on paper, photographs, sculptures in a range of materials and social history items associated with the Heritage Building.

Currently 1299 (76% of the collection) collection items are stored in Storeroom A; 212 (11.7% of the collection) collection items are stored in Storeroom B; and 223 (12.3% of the collection) collection items are stored offsite.

On average the collection has grown by 2% per annum over the last twelve years. However it is forecast this percentage will increase, with an additional 278 artworks (or an additional 15%) expected in the near future and the annual means to purchase works increases.

The facility needs to be able to store the diverse collection to international standards and have the ability to accommodate exponential growth of the collection in the future.

## **Movement**

The facility should provide suitable movement of collection items to assist in mitigating risks. This will include the layout of storage areas and design features, such as double doors.

## **Shelving**

The storage of the collection requires a combination of static and mechanical-assisted shelving and large map draws.

Static shelving is required for glazed art works and fragile collection items that are affected by movement.

Mechanical-assisted shelving is required for heavy loading collections. This type of shelving also provides the most economical use of space and has been shown to be the most effective in seismic events.

All existing shelving currently used in the Gallery should be assessed and considered for future use.

## **Public and Technical Spaces**

### **Workshop/Education Space**

A flexible workshop/education space for public programs, community events and educational programmes is required. Will require a small kitchenette and storage for furniture and materials.

### **Reception, Shop and Information**

A multi-purpose area is imagined, providing a welcoming space to the building with provision for visitor information, visitor lockers, a small retail area and the ability to hold events and public programmes

### **Cafeteria**

Provision should be made for services of a small cafeteria, however the initial design will only require a space for plating of pre-prepared food for functions and events. A full business case is required.

### **Toilets**

Public toilets will be required, with disability access, incorporating a 'parent's room' and a space for first aid facilities. It is envisaged that staff will have separate toilets with a shower.

## Offices

An open-planned office with a small kitchenette is required, with separate staff access.

## Technical Spaces

A workspace space for cataloguing, packing and conservation of the collection is required. A separate area without windows or external light is required for digitisation.

## Exterior

Any future designs will need to utilise and integrate the existing car parking spaces, building entrances, landscaping and other outdoor areas. Also there will be a need for some cover at the entrance points to protect arriving visitors, particularly school groups from the weather.

## Schedule of Spaces

	Space	Current m2	Future Needs m2	Notes
<b>Public Spaces</b>	Public Entry/Foyer/Reception/Circulation/Retail	117	70	Currently a shared exhibition/foyer/circulation space/include lockers
	Education Space/Community Space	0	70	78m2 the average room size as per the School Property Guide (SPG) for Years 1 to 8. Seating for 24pax with access to the exterior gardens and a kitchen
	Function Space	8.48	120	Multi-purpose foyer and function space
	Kitchen		12	Basic kitchen to service functions. Kitchen could be linked to the Café and community space
	Collection Viewing/Research Library /Meeting Room	0	30	The library was previously in the House Gallery
	Toilets	12.6	20	As per building code
	Public Lift	0	5	As per building code
	Café	0	5	Basic hole in the wall (business case required)
	Circulation	0	0	
	<b>Sub Total</b>	<b>138.08</b>	<b>332</b>	



<b>Staff Spaces</b>	Contained staff room and kitchen	8.48	10	Currently shared staff and public kitchen. Separate exhibition and public space
	Toilets with shower	0	10	
	Staff Offices and Resource Area	30	35	Currently 4 full time FTE's and three part-time Front of House staff
	Circulation	0	0	
	<b>Sub Total</b>	<b>38.48</b>	<b>55</b>	
<b>Technical Spaces</b>	Loading Dock	14	40	Require large storage area with a roller door for access into the building
	Inward/Outward Goods Store			
	Quarantine Area	0	10	
	Workshop/Dirty Space/Materials Store	0	30	Storage of exhibition materials and tools. Require ventilation and dirty sink
	Workshop/Clean Space/Matting Room	7	30	Storage of packing materials
	Storage/Exhibition Furniture	8	20	Temporary walls, plinths, standard frames and lighting
	Goods Lift	0	15	As per building code. Required for Upper Gallery and large crates
	Plant Room(s)		10	HVAC, Electrical, Services, etc
	Circulation	0	0	
	<b>Sub Total</b>	<b>29</b>	<b>155</b>	
<b>Collection Storage</b>	Sculpture and Large Collection Objects	19	80	Require a storeroom with 16c and 30% humidity for metal works
	Works on Paper/Archives	71	130	Require an environment with 18c and 55% humidity
	Glazed works			
	Unglazed works			
	Cool Store	0	0	Freezer for fumigation of works
	Collection Workrooms		30	For the packing and processing of collection artworks
	Circulation	0	0	
	<b>Sub Total</b>	<b>90</b>	<b>240</b>	

<b>Exhibition Space</b>	Large Exhibition Space	171	180	
	Medium Exhibition Space	117	120	
	House Gallery	140	140	
	Circulation	0	0	
	<b>Sub Total</b>	<b>428</b>	<b>440</b>	
<b>Total</b>		<b>723.56</b>	<b>1222</b>	

## Environmental Control

The facility should provide a suitable environment for long-term preservation of the existing collections, requiring two interior environmental conditions with a combination of passive and non-passive temperature and humidity control.

The public areas and staff areas should meet user comfort. Storage areas and spaces where collection items may be worked on or viewed by the public should meet more stringent environmental criteria. The storage areas should provide close control of both temperature and humidity to accepted museum/gallery standards. These are generally recognised as:

- 21 Degrees Celsius with a 1 degree variation
- 55% Relative Humidity with a 5% variation

Specific collections such as the photographic and sculpture collections have more specific storage requirements with lower temperature and humidity levels.

Some allowance for small seasonal variation is acceptable to reduce operating costs. Avoiding significant short term variation in temperature or humidity is the most important consideration in avoiding rapid degradation of collection items.

Storage spaces are effectively closed spaces. Close environmental control over storage conditions can be more easily achieved with careful attention to the building fabric, and instituting procedures that limit access by staff to storage areas.

To achieve the Environmental Control conditions for the storage of the collection, the following approaches should be considered:

- The completed storage areas should be highly insulated, with vapour control and some thermal mass evident to assist with temperature stability.
- Close control of temperature is most easily achieved, and control of temperature goes some way to controlling humidity within the exhibition environment.
- Close control of humidity is complex and expensive to achieve. The question of what humidity conditions are acceptable and which collection items require closely controlled humidity requires careful consideration at the earliest stages of the design process.

## Security

In addition to an alarm system, there will be a need for security, CCTV cameras throughout, Cardex control to staff and collection areas and safety lighting both inside and outside the facility.

## Fire Protection

Fire protection should be provided throughout the facility through an extensive sprinkler systems and sensors

## Information Technology

Fibre-optic cable will be required throughout the facility, including in the ceiling and roof grids. The office and meeting rooms will need to be networked and the building will need to have wireless capability with the provision for public WiFi.

## Environmentally Sustainable Design

Any future project to the facility should incorporate as many environmentally sustainable design features as practicable within the fabric of the facility. This approach to design and construction can significantly reduce the life-cycle costs of any redevelopment and enhance the quality of its internal environment. Design approaches may extend to material selections and approaches to waste management and recycling during construction. Consideration should be given to:

- Incorporation of thermal mass

- Incorporation of double glazing and high insulation values
- Extensive natural lighting and ventilation
- Reduced energy use for lighting, heating and ventilation

## Building Materials

Building materials incorporated in the design of the future facility should be robust, hard wearing, sustainable, low maintenance and have low emission levels in all areas, including walls and flooring.

Consideration should also be given to acoustic properties in relevant areas of the facility.

Particular attention should be given to low maintenance materials, sensible weather-tight design, and the use of true flashings, rather than exposed sealants.

## Appendix

### Comparative Projects

Project	Year	Area	Cost
Blenheim Library and Art Gallery	2020	Exhibition Space 199m <sup>2</sup>	
		Collection Storage 121m <sup>2</sup>	
		Reception 74m <sup>2</sup>	
		Event Space 156m <sup>2</sup>	
		Multi Purpose Space 54m <sup>2</sup>	
		Workshop 34m <sup>2</sup>	

		Loading Bay 47m2	
		Transit Store / Packing Room 48m2	
		Staff office 28m2	
		761 m2 total	\$20m
Suter Art Gallery	2016	1700m2	\$12m (2016)
Tauranga Art Gallery	2007	1300m2 (700m2 exhibitions)	\$7.5m
MTG (Napier)	2013		\$18m
Govett Brewster Art Gallery	2015	Govett Brewster Art Gallery 2,128m2 Len Lye Centre 1,758m2 Total 3,886m2	\$17.5 million last two years, including \$6 million to renovate and quake-proof the Govett-Brewster
Ashburton Art Gallery	2015	1100m2 (Art Gallery only ) Total building 2700m2	\$9.7m