# reading building

BY YVONNE XU | PHOTOGRAPHY BY JOHANNA BILKEY

Waiheke Island is a beautiful, semi-rural retreat east of Auckland. Its new library pays tribute to the island's culture, climate, and environment by embedding art and intelligent, sustainable design in the very fabric of the building.



nland of its sand beaches and rocky foreshores, Waiheke Island's slopes and hills are landscaped with orchards, vineyards, and olive groves, pocketed among native forestry. Located in the Hauraki Gulf of New Zealand and just a 35-minute ferry ride from

downtown Auckland, the island has since the 1980s been a refuge for a community of artisans, artists, and farmers, and, popularly today, an escape for city dwellers.

Notwithstanding the pressure of increasing development demands, the island remains semi-rural and is still without reticulated sewage system or water supply other than rainwater tanks. Island residents understand that to preserve the idyll of their beloved land, there must be careful balance between the man-made and the natural. It is in this context of strong community spirit and a shared respect for the environment that the new Waiheke Community Library was opened in July this year.

Pacific Environments' Phillip Howard shares, 'Initial conversations expanded on the brief to provide an iconic Auckland Council building that reflected the unique Gulf Island location and represented the community's respect for the natural environment. This is largely what drove a timber clad building design which is unusual for a civic building of this scale in New Zealand.'



#### the concept

Inspired by the grove of pohutukawa trees that blossoms crimson at the corner of its site every year end, the library's sculptural form draws on the imagery of books arranged under a spreading canopy. An aim is to imbue the library with an overall sense of magic that will delight and excite especially children. Artwork is integrated as part of the library building and furnishings, intended to foster community connectedness and local sense of place. These concepts are supported by simple, low maintenance, and low energy design initiatives to provide a high quality and sustainable shared environment.



#### WAIHEKE COMMUNITY LIBRARY, WAIHEKE ISLAND, AUCKLAND

SITE AREA 3,500M<sup>2</sup> 400M<sup>2</sup> ARCHITECT PACIFIC ENVIRONMENTS NZ LTD ARCHITECT PACIFIC ENVIRONMENTS NZ LTD HILLIP HOWARD PROJECT TEAM ANTHONY GIBBS, SARAH EISING, APRIL GOODEY, ROWAN BAIRD, JULIA TOOMEY AND DR HUGH BYRD CASE ENGINEER JAWA SERVICES ENGINEER WSP CONTRACTOR GIBSON O'CONNOR



## the experience

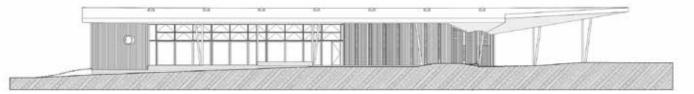
The library is entered through a landscaped courtyard along with other existing amenities such as a theatre, art gallery, cinema and restaurant. Timber battens sculptured in a wave-like texture line up as the building façade – modulated to look like a row of standing book spines. Appearing in and out of focus across this façade are the forty nine letters – '*lots of rain, lots of sun, lots of wind, lots of day, lots of night*' – hand carved into the battens by artist and local resident Kazu Nakagawa who had composed the line in tribute to the climate of Waiheke Island. The lettering continues along the façade's glass surfaces as ceramic frit letters.

'The art has added another layer of depth and beauty should anyone want to pause a little longer to experience that,' Howard shares. 'The building is better for it but would not be lesser without it if that makes sense. The architectural concept is a few rows of books sitting under a forest canopy. The artwork is like the sleeves or covers of those books.'

At the entrance, etched into the concrete floor are the Maori and English words 'whenua', 'land', 'hau' and 'wind'. In an overlapping calligraphic script, these words refer to ideas of movement and circulation – this is not only where people come and go, but also where the southerly wind passes through in winter.

Columns are round timber, erected at angles as a reference to tree trunks that reach to the ceiling as a canopy made of perforated leaf-shaped plywood panels. The colour of the ceiling is inspired by the underside colour of a pohutukawa leaf.

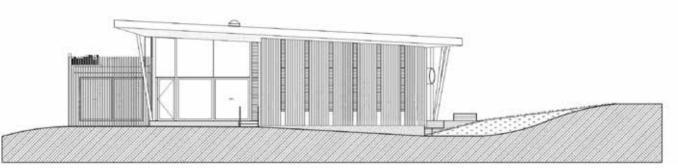
The library interiors is a simple layout of central book shelves are surrounded by a variety of seating, studying and meeting spaces – clearly organized and easily navigated. The library space is designed to be flexible and responsive to enable opportunity to create intimate or more open, group meeting spaces for performance and events. Large sliding doors open up the north side of the building, providing a seamless indoor-outdoor flow to the new courtyard and amphitheatre space where readings, music performances, or plays may be put up.



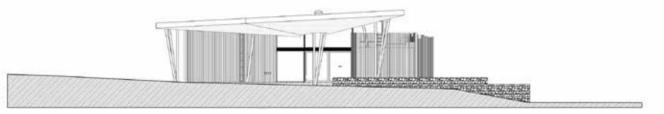
NORTH ELEVATION



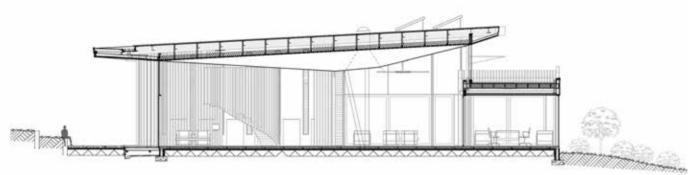
SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION



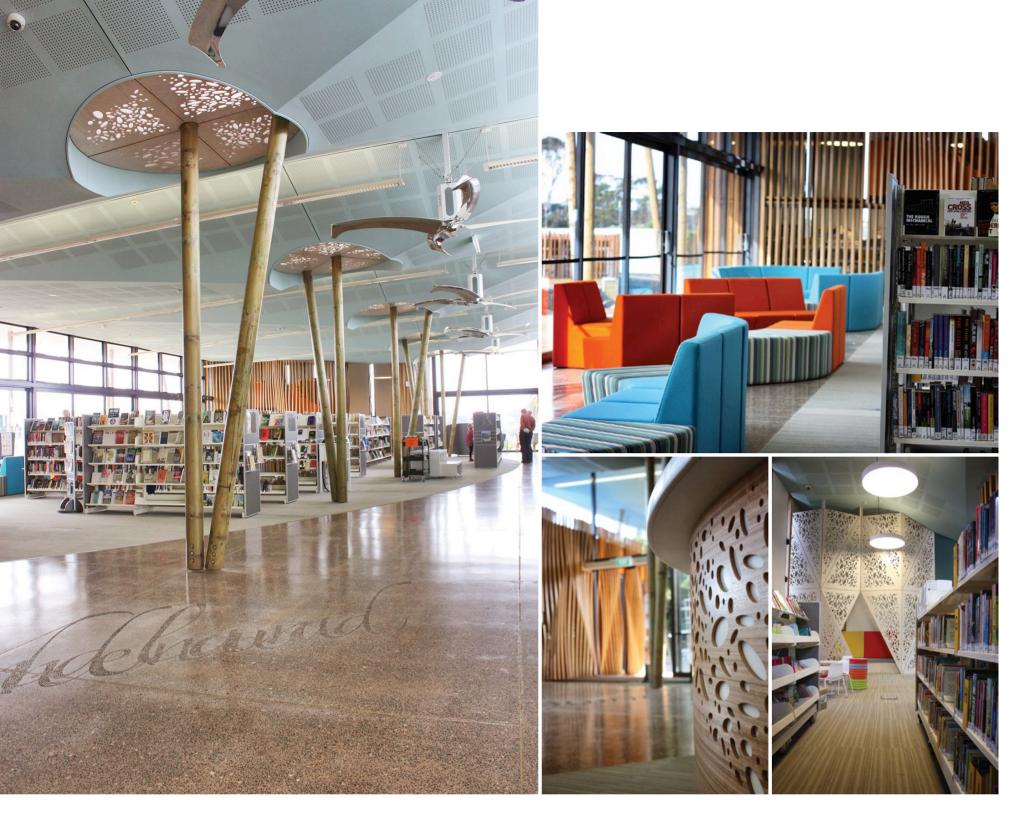
SECTION

## comfort and sustainability

Orientation of the library has been considered to provide maximum sunlight into the building in winter, with carefully proportioned roof overhangs to provide shade in summer. The height and depth of the building have also been optimised to provide the best possible natural daylight and ventilation.

The building is predominantly naturally ventilated and cooled through a combination of low and high level opening windows. Windows are all automatically controlled by carbon dioxide sensors to ensure the library is provided with sufficient fresh air particularly in winter when there is a tendency to keep windows closed. The windows can still be adjusted to suit individual comfort levels. Large slow-moving fans assist airflow on still days and heat pumps are used to cool smaller enclosed rooms during peak occupancy.







Low thermal mass decking is located outside north facing glazing to mitigate outside heat being radiated back into the building during hotter months of the year. Polished concrete floors provide thermal mass in front of north facing windows. In-floor heating supplements solar heating during winter month. All windows are double glazed, roofs and walls highly insulated and an array of photovoltaic panels provide all the energy required to run the building during summer.

As indicated by Nakagawa's 'forty nine letters', the island receives plenty of rain. A perforated plywood ceiling that lets in additional natural daylight in the middle of the building also provides acoustic absorption to mitigate excessive reverberation. Rain impact noise is dampened with 18mm plywood under the metal roofing.

The library also harvests rainwater by storing water collected off the roof in three, twenty-two thousand-litre tanks buried below the grassed amphitheatre embankment behind the library. The volume of tank storage was calculated based on rainfall data from the last twenty years, the available roof area and an assumed amount of water use per person. Based on researched data, this system is estimated to supply 99% the water needed for the building, including a reservoir for firefighting.



All photos courtesy Kazu Nakagawa

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n 1986, Japanese artist KAZU NAKAGAWA came to New Zealand on a working holiday visa with a view to travel and create art through the island country for a year or two. He had hoped to find a place with a studio in Auckland but property in the city was unaffordable. By necessity, Nakagawa moved to Waiheke Island, a subtropical island

east of Auckland. For the artist who had always lived in Tokyo, island life was a completely new experience but proved to be agreeable enough for Nakagawa to eventually call the island home. For the Waiheke Community Library, Nakagawa composed 'forty nine letters' – lots of rain, lots of sun, lots of wind, lots of day, lots of night – describing life on the paradisiacal island. Spanning the library building southern wave-battened facade, the lettering moves in and out of focus with the island's ever-shifting light conditions. (Interview by Yvonne Xu)

# Tell us about 'forty nine letters'. Did you pen it specifically for the library building?

I developed this concept for the library project, after exploring and experimenting with other formats at the earlier stages. It's a project about integrating art into the local building on Waiheke island, where I've spent half of my life until now. The words are from the environment I live with everyday, which I had almost hardly come across or noticed for the other half of my life, before, in Tokyo. I saw people, cars, and buildings there, and that's what I had lived with.

## I understand that the lettering was hand carved. Can you describe your process?

I started by placing templates on battens, each letter across seven to nine battens, and traced the outline, standing back to see how the segment lines look and then redrawing the lines until they felt right. And I set them to carve with a chisel, standing back often to see how the segment cut-outs looked as a whole picture. My plan was to do one letter a day, but it didn't work out that way. I started carving just before last Christmas in 2013 and completed them in July 2014. I spent at least four months up on the scaffolding along the façade through winter. So the people saw that the carved letters were not the only ones that exist.

## What do you mean?

What I wanted to say is that someone's hands were also there. For calligraphy, in general, when you see the brush stroke on paper, you also see the movement of a person's hand or body, before the word in ink. It's because you know how it's done. I wanted to reflect this process on to my calligraphy 'forty nine letters'. I wanted people to see that someone's hands [were there] to carve. It was of course nothing like the beautiful dancing, of movement of hand or body with brush, but perching on the scaffold with chisel and hammer in the rain, sun and wind through winter. This was inseparable from the letters, that you now only see as shadow and light.



Waiheke Library entrance engraved text 'wind land hau whenua'

## The idea of calligraphy manifesting as shadow and light is just beautiful. You mentioned in an interview with The New Zealand Herald that with calligraphy you feel the need to carve into something solid. Could you explain this?

I loved calligraphy by ink on paper in my youth. I thought that it was like dancing, a certain restricted movement of your body. The letters in calligraphy seem to be the primary reasons for you to perform. But I've never stayed doing that with ink and paper, as I was carried away with something else at that time. I also have an interest in language. Though I am not quite good at writing, I often use words as part of my works, mostly as a concept or structure. In 2010, when I started the library project, it was a time that I recalled my [interest in] calligraphy and felt a need to actually make it tangible. My hands don't work with brush on paper but they can do it with chisel on timber. They aren't black ink and white paper but shadow and light instead.

Those shadows and light make these letters 'depart' from the words into something else. They sometimes seem to look like ripples and waves in the water.



Wave patterned battens and handcarved 'forty nine letters'



Waiheke Library southern window glass treatment 'forty nine letters'



Waiheke Library facade mock-up at Nakagawa's studio in 2012

#### What about the lettering on the floor?

There was an area where the wind constantly gets through, particularly southerly cold wind coming from the mainland in winter. That area became the entrance of the new building as well as the courtyard of the existing complex, for which I had built a wind mitigation screen up to the mock-up stage but unfortunately that was not [developed] further. So I used some words referring to this wind from the mainland and made them as a tracing pattern, a natural flow that people also would follow too. The words I used are wind and land in both English and Maori language, based on this country's bilingual nature, and the shaped into two arc forms and they gradually come into almost one.

## Can you tell us about the idea behind the overlapping script? 'forty nine letters' seem to be 'joined' as well.

I used these words as starting points and then kept working until they became something else. They are still what they were but also some patterns and pictures now. They are not necessarily to be read. I'm not a writer.

Can you share your thoughts on working at the intersection of art and architecture? I don't mean to simplify the work, but if we were to look upon this as calligraphy in three dimension or as building, there are some interesting things to wonder at. This is a 'building' – a process, as you identified, and this also more immediately a building, as in a structure. I wonder if you've thought about ideas of representation, scale, time, and these in terms of permanence and impermanence.

We are so often captivated by things in front of us, and believe materials and words as they exist. We see them almost blindly as what we think they are. They are so called facts, essential tools when we communicate with one another. When I worked with the library project team, architects, and people from the council, I needed to cling to this part that resides in half of my brain. But when I work alone, I fall into another half, which always makes things blur, so boundaries have less meaning. An architecture becomes a piece of paper or a piece of paper becomes an architecture. Several months of carving becomes a 'blink' of brush stroke. A moment becomes endless. It is actually a process of simplifying what I see, and in this way it is utterly uncommunicable unless putting in an art form. Yes, architectures are buildings everywhere in nature, including what we humans build or write. They are the structure of what we believe is this universe. +