

## Fort Alice given a new lease on life



Rising from the ashes, Fort Alice sits majestically on a small hill.

LIKE a forgotten memory from a distant past, Fort Alice would have slipped into historical oblivion but for a major restoration that will ensure her 150-year-old legacy is passed on from one generation to the next as testimony of her existence and role in the chronicles of Sarawak.

Fort Alice whose restoration was completed last December, now stands tall against the backdrop of the Batang Lupar. Though a grand old dame, Alice is also new.

Built in 1864 during a turbulent period in the history of the state, Fort Alice witnessed many changes to the local socio-politico and economic landscapes and survived through the hard and tough times.

The elements may have ravaged her but she remains strong and alluring as a curious new object — thanks to her restorers who used belian or ironwood to re-construct her skeletal frame.

Fort Alice was forged from the bones of her predecessor, Fort James, which was relocated downstream from Skrang.

Fort James, built in 1849, was frequently flooded and a new settlement was sought.

The new settlement was built in 1864 and christened Fort Alice, after the consort of the second Rajah, Charles Brooke.

Abandoned for many years, Fort Alice had lost her lustre and become a relic, blotted out by the march of time and rotting away — her non-belian materials infested by termites.

She was only spared a dip into the dross of history by an earnest conservation effort that has given her a new lease on life.

For those who have never seen Fort Alice, she looks like a two-storey wooden bungalow. However, the deceptively strong wooden facade is a mere shell of her original sturdy frame.

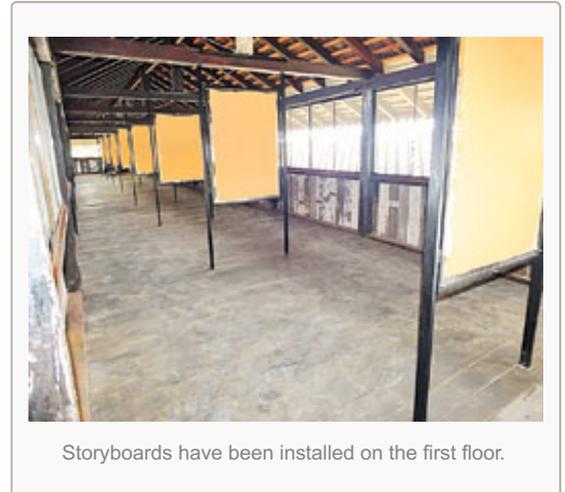
Historians have unearthed much evidence, pointing to Fort Alice being a wooden structure on stilts which was later walled up, as she passed through different hands, according to architect Mike Boon, consultant of the Restore Fort Alice project.

### **Involvement of local community**

Work started on May 28, 2013 to restore the fort to her former glory. The project began with the traditional miring ceremony seeking blessings for the smooth mending of the dilapidated citadel.

Boon said as a historically significant building in Sri Aman, it was only right that the local community was involved in the restoration process to enable the present generation to preserve the history of the fort for posterity.

As Fort Alice would serve as the platform to promote the preservation of historical sites, the restoration project involved six local school teachers as facilitators and over 30 students from Primary 5 to Form 6.



The plan was to dismantle the entire fort and rebuild her to her original form. Following the restoration, Fort Alice will be turned into a community heritage museum under the Sarawak Museum Department.

The students involved in the project can be trained as voluntary tour guides for visitors to the fort.

“The whole idea of basic conservation is do less is more as this equals minimum disturbance and prolongs the lifespan of the building.

“Although appointed for the restoration project 10 years ago, I was lucky it didn’t start back then because many mistakes would have been made as background information on the fort only surfaced in recent years,” Boon said.

### **Shared research**

At that time, a University of Melbourne PhD candidate, John Ting, who was researching the fort, began working with Boon and they exchanged and shared information.

Boon recently found an 1875 photo of the fort, taken by Alexander Hill Gray, and kept in Stonyhurst College in United Kingdom — the earliest photo known of Fort Alice.

From the photo, the original fort resembled a Malay house with a few rooms on the ground floor supported by stilts.

Later, the fort took the form of a two-storey building with the area around the stilts being walled up.

The irony was that the newer materials used for the restoration deteriorated faster than the original pieces.

Boon said the new parts fell off while the old parts remained intact, adding that the latter was able to weather the onslaught of time more efficiently because belian was used for the building’s entire structure system, which was hidden underground for a century and a half.

### **Rot-resistant myth debunked**

During the restoration, the structure was dismantled, each piece of timber recorded and labelled with codes, and the extent of timber damage such as through wet rot assessed.

At this stage, however, the myth that belian wood is resistant to rotting was debunked. Like all wood, ironwood too has to be protected from the elements.

“For example, all the columns planted in the ground were rotting away and very little was left intact. If we didn’t dig the columns out, it was only a matter of time before they collapsed.

“Furthermore, by dismantling the columns, we could also study the traditional carpentry work involved,” Boon noted.

The building of the Fort Alice of yore showed communities with different creeds and beliefs could unite to build ‘something extraordinary’.

It took the skills of three ethnic groups — Iban, Chinese and Malay — to get the job done.

The construction started with planting the columns Iban-style while techniques for the joineries came from southern China and the roof was of typical Malay design.

Though they spoke different languages, the three ethnic groups were able to pool their building skills to assemble the fort.

### Collective efforts recognised

Their collective efforts were given much recognition and representatives from the communities were invited by the Brooke government to plant the first timber columns for the Astana in 1931. The old Astana has since been demolished.

Boon said according to the Sarawak Gazette, when a timber Astana was planned for Simanggang in 1930, the first column was planted by an Iban and three Malays in recognition of their forefathers’ building skills.

The second column was planted by a Chinese towkay (businessman) to acknowledge his efforts in the development of Simanggang, he added.

For the restoration of Fort Alice, the original timber components were taken apart and stacked away. Those still usable were kept while the rotten and termite-invested ones removed.

Belian and traditional carpentry were used with all the details recorded to ensure the refurbished fort is very close to the original.

Replacement of damaged timber was funded by the state government. By December 2013, the whole fort had been dismantled.

The frame sat on a new reinforced concrete pad footing and some of the buried lower parts of the columns which had decayed, were replaced with new belian spliced on the existing wood.

### Cut bit by bit



Boon shows how the locking mechanism works when the wooden key is inserted.



Fort Alice comes complete with cannons.

“The columns had varying connection details because when the original timber was coated with modern acrylic paints or bitumen, they weren’t permeable (the timber couldn’t breathe) and started rotting on the inside, moving upwards. That’s why we replaced the bottom parts of the columns.

“The rotted parts were cut away bit by bit until the solid sections were reached. Then we made new timber slabs and slotted them in like jigsaw pieces.

“We also reconstructed a couple of adzes traditionally used by the locals to curve timber or hollow out a log to make boats.

“We used them to recreate the wood-finishing. If we used machines, the finishing would look industrially manufactured. Also, there would be no distinctive marks if it was not hand-worked,” Boon explained.

In the original structure, very basic tools were used to recreate the mortise and tenon joineries which were secured with a dowel. Back then, nails were used sparingly as they were very expensive.

The roof rafters were held together by nails of different sizes and lengths. These nails were sent to Australia to determine their manufacture and confirmed to be hand-forged in the mid to late 19th century.

As much as the wish was to do everything the traditional way, one item had to be compromised — belian shingles

It was neither practical nor sustainable to reproduce hand-split shingles as the wood used today is not old and seasoned enough, and the wood grain is not refined either. Thus, mechanically made shingles had to be used instead.

To protect the wood from the elements, thick oil was rubbed on to give it waterproof durability.

“Modern synthetic paint is not a good idea because it creates a film which seals the surfaces, limiting breathability. When cracked, layers painted over repeatedly allow water to seep in and cause bubbles on the surface of the wood and affect the timber,” Boon explained.

## Restoration completed

Last December, restoration of Fort Alice was completed with only the interior left to be fitted out.

A wooden flagpole has been planted at the exact same spot as back in 1875 — together with a lightning arrestor which doubles as a vent pipe for the septic tank.

To make it accessible to everyone, a disabled-friendly wheelchair ramp has also been added.

The historical fencing configuration was reinterpreted in steel around the fort, based on historical photographic evidence, functionality and security considerations.

An 1875 photograph shows fencing of small wooden elements close to the building.

A photograph taken later in 1901 showed an outer layer of simple ranch-fencing extended to enclose the grounds of the Taman Panorama Benak for the grazing of livestock.



In support of the photographic evidence, fences of similar typologies and styles were also found in the other forts around Sarawak.

The steel fencing serves as a security barrier without sacrificing ventilation and visibility.

Installing it close to building (like the original) allows the public to approach and appreciate the conserved fort at close range even when the museum is closed.

This also opens up most of the grounds to connect Taman Panorama Benak with the town's waterfront and return the open greenery to the community.

"The modern interpretations of the fencing were expected to be controversial. Offering itself (fencing) as a catalyst for further discussion, it allows for greater understanding of heritage conservation principles," Boon said.

Visitors have the opportunity to perceive the differences between the old and the new Fort Alice and its fence and question the relationships involved.

This, in turn, generates an educational experience on the principle of the best practice in architectural conservation with references made to the Australian Burra Charter.

### **Modern toilets**

Unlike the days where people relieved themselves at an outhouse, modern toilets are provided. Moreover, three boats are on display — a Dayak war boat, a Malay sampan and a Chinese trading boat.

Two wooden staircases lead to the first floor. The upper floor consists of a courtroom, recreated based on the one found at Fort Sylvia and Baram Fort; a small office separated by waist-height baluster; the officer's bedroom with 19th century reconstructed furniture and two bedrooms for visitors behind the court.

Along the long corridor, story panels on Fort Alice and the settlement history of Sri Aman have been set up for visitors.

Small hinge-windows are located at the bottom of the walls for the cannons to protect the fort from attacks. Strangely enough though, even at the height of tribal warfare, the fort was never attacked.

Fort Alice's uniqueness, which is hardly seen today, is the traditional wooden locking system brought back to life by 42-year-old Mohd Johari Kona, who learned it from his grandfather.

"To lock the door, a wooden key is inserted into a keyhole and twisted like a modern-day key and lock. I remember watching my grandfather making it and I observed how it was done very closely.

"Technically, he didn't teach me how to do it but I did from memory. I remember using the window-lock too as an imaginary shotgun while playing cowboys and Indians when I was still a boy.

"I feel proud and honoured to have a hand in restoring this fine piece of architecture," he said.

Johari, who is from Spaoh, has 20 years' experience in woodworking. He was also responsible for the first staircase's improvised locking system from the inside and the drawn-up stairs.

So far, the restoration has cost RM5 million over a span of more than two years. The Fort Museum is expected to open to the public after Chinese New Year.

All the processes and procedures on the work done on Fort Alice can be found at [friendoffortalice@blogspot.com](mailto:friendoffortalice@blogspot.com) and [johntingarchitect.blogspot.com](http://johntingarchitect.blogspot.com).