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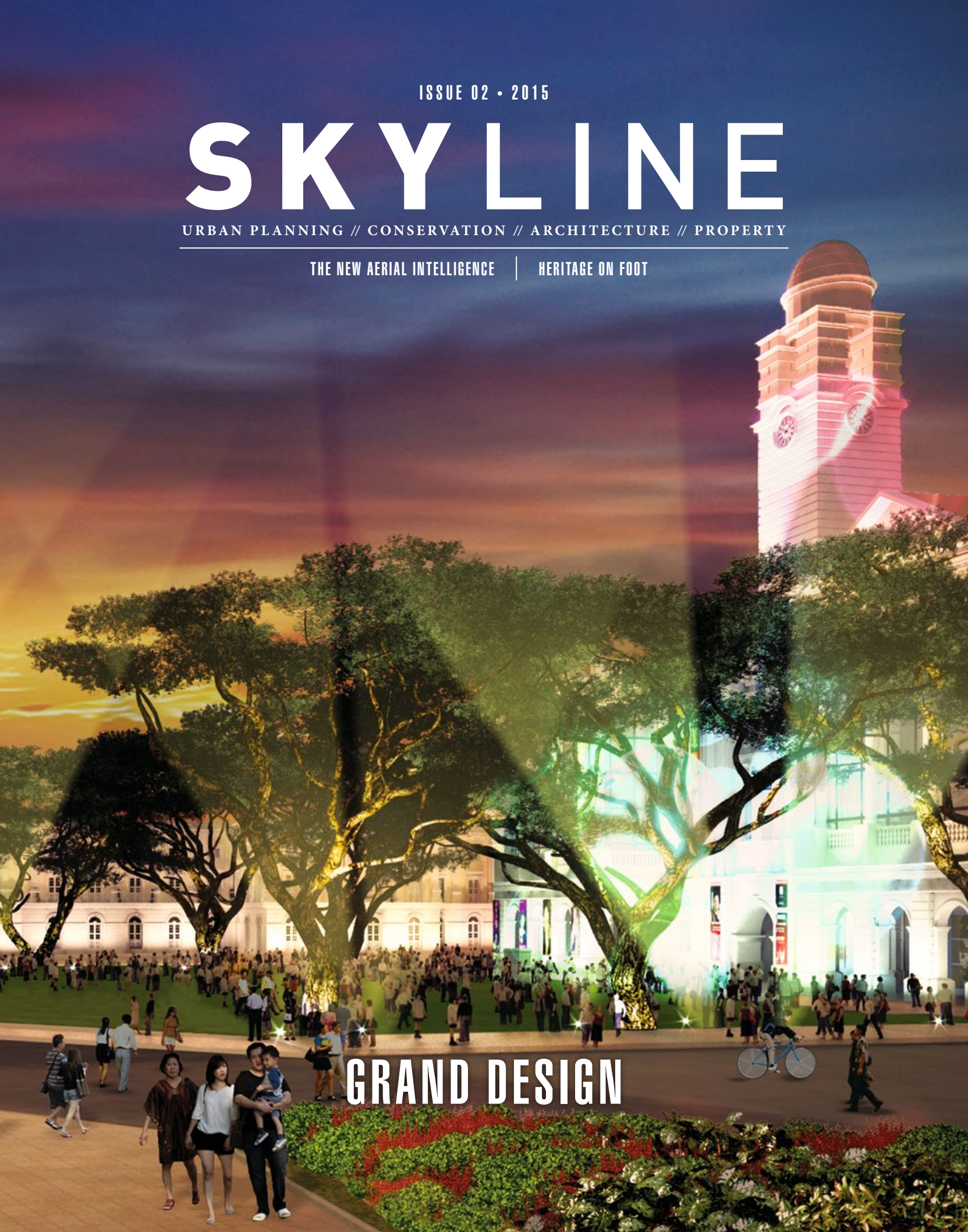
SKYLINE

URBAN PLANNING // CONSERVATION // ARCHITECTURE // PROPERTY

THE NEW AERIAL INTELLIGENCE

HERITAGE ON FOOT

GRAND DESIGN



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GRAND



DESIGN

Works at the iconic Civic District will reinforce its status as a premier arts, culture and lifestyle precinct.

FEATURE STORY

The Civic District is the historic birthplace of modern Singapore. Home to some of the city's most iconic landmarks, the district has showcased countless arts and cultural offerings, from concerts to exhibitions featuring local and international artists. Works are currently underway to ensure the district remains a welcoming and inviting place for all.

Plans for the Civic District enhancement works were exhibited to the public for feedback as part of the Draft Master Plan 2013 exhibition, and were well-received. The bulk of the work is set for completion this year, just in time for Singapore's 50th birthday.

Underpinning this project is a vision of an integrated arts, culture and lifestyle precinct around the Padang, lush with greenery and enhanced with pedestrian-friendly features.

Paving new paths for pedestrians

Empress Place, which currently runs between the Asian Civilisations Museum and the Victoria Theatre and Concert Hall, will be paved over to give priority to pedestrians. The surrounding buildings will be integrated into a seamless park environment.

Bernard Chan, URA's senior architect overseeing the works, said the idea was to frame the "first class arts and culture developments".

"So what we want to do is come in and create a nice lawn for these developments to sit within, so we have a garden setting with monuments nestled within it," he said.

More green and scenic walking routes will encourage visitors to explore the district by foot. "The other priority for us is to create an environment that is safe and comfortable for pedestrians."

By July 2015, a new spacious walkway will be introduced along St Andrew's Road in front of the National Gallery. One side of Anderson Bridge, which currently connects the financial district to City Hall, will be converted into a pedestrian footpath.

Works have also been carried out along Connaught Drive. Existing car and coach parking lots have been removed. The road has been paved and landscaped, providing more space for the public. The road will be converted into a two-way street and limited to buses and coaches. New bus stops, shelters and coach drop-off points will also be built, allowing visitors a convenient gateway point into the precinct.

Green, breezy and walkable

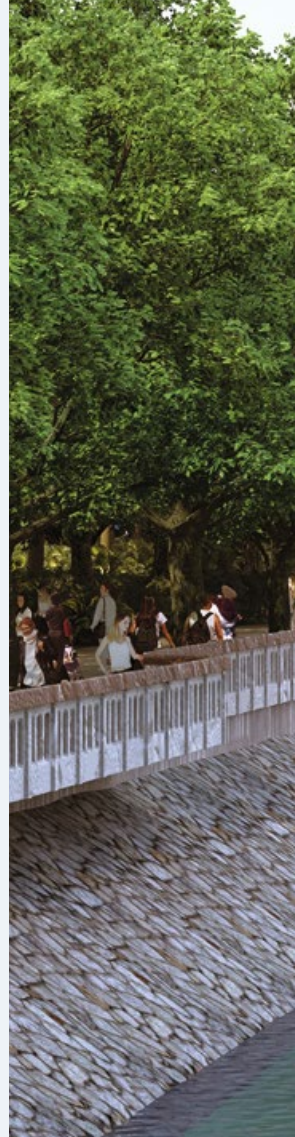
Green lungs and resting stops will allow pedestrians to take a breather and reconnect with their surroundings. Visitors to the Civic District will be able to find shade in front of the Victoria Theatre and Concert Hall, with the transplanting of eight mature rain trees.

Stepped plazas will also be introduced along the edge of the Singapore River at Queen Elizabeth Walk and in front of the Asian Civilisations Museum. Visitors will be able to sit by the water and feast their eyes on the scenic waterfront view.

Previous page, top photo:
Works are in progress to pave Empress Place over to give priority to pedestrians (artist's impression)

Top right:
Stepped plazas at the Queen Elizabeth Walk will allow visitors to enjoy great views of events happening by the waterfront (artist's impression)

Bottom right:
Connaught Drive will be paved or landscaped over to provide more space for the public (artist's impression)







Old meets new at Esplanade Park

Going back to its “roots”, the Esplanade Park will be home to five new Angsana trees. These are a callback to the original Angsana trees that used to occupy the same spot until the 1990s. Known as *Gor Zhan Chew Khar* (the spot under five trees), this was a popular rendezvous point among locals until the trees were removed due to a fungal disease.

In partnership with NParks, URA has looked into improving the landscaping in the area. In addition, street furniture such as benches with mobile phone charging points will be installed.

New way-finding signs and historic markers will offer directional and educational information about the significance of the district’s historic landmarks. Young families can also enjoy “fun under the sun” moments with their little ones at the new children’s playground within the park. Outdoor events at the park will be made more convenient with the addition of restrooms as well as power, lighting and water.

Connecting places and generations

Commemorating Singapore’s 50 years of nation building, a new eight km-long Jubilee Walk will connect key attractions within the Civic District and along the Marina Bay promenade. Trail markers will allow visitors to trace the journey of our little red dot from the past to the present and into the future.

Envisioned as an integral part of the Marina Bay waterfront promenade, the Jubilee Bridge complements the Civic District enhancements. Providing a barrier-free passage between Merlion Park and the waterfront promenade in front of the Esplanade – Theatres on the Bay, it completes the 3.5 km loop around Marina Bay.

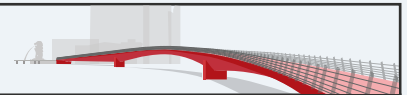
A gift to the nation, these enhancements are poised to strengthen the Civic District’s positioning as a premier arts and cultural hub. Green, walkable and intimately connected to its history, the new Civic District is poised to charm, educate and entertain many generations to come.



The men behind the Jubilee Bridge: (From left) Pak Chai, Bernard and Zhi Cong



BRIDGING A LEGACY



Arcing across the mouth of the Singapore River and running parallel to the Esplanade Bridge is a new, elegant addition that connects the Merlion Park and the Marina Promenade. Named the Jubilee Bridge, it was opened on 29 March 2015, a month ahead of schedule. This was to accommodate the masses during the week of the late Mr Lee Kuan Yew's passing. This was, on URA's part, a quiet tribute to Singapore's founding father.

Touted as Mr Lee's brainchild, the idea was born from a site visit Mr Lee had taken in 2004. Observing the narrow pedestrian walkway of the Esplanade Bridge, Mr Lee suggested having a more pedestrian-friendly connection between Merlion Park and Esplanade – Theatres on the Bay.

Building a bridge beside the heavily trafficked Esplanade Bridge did not come without its challenges, however. An engineering feat on its own merit, the bridge took a year to plan and 28 months to construct. Located in an environment where there was no land access but water to work on, the construction method adopted had to be carefully planned to overcome the site constraints and logistical issues and at the same time, make sure the water and land traffic were not disrupted.

One of URA's key engineers for the project, Khong Zhi Cong, fondly calls his project members the "Night Watchmen" because a portion of the bridge had to be constructed at night from 11pm to 7am. That way, water taxis could continue plying the waters during their normal operation hours.

Metal enclosures known as cofferdams were used to create a dry working space in the river for the foundation work where excavation had to be carried out deep into the riverbed. URA's Director of Project Management Loo Pak Chai elaborated: "In this project, we decided to put the pile caps underneath the river bed to allow a wider channel flow and to achieve a better slender column appearance, even though it added difficulty to the construction process."

The "balanced cantilever method" adopted to span the bridge across the river eliminated the need for scaffolding in conventional construction that would otherwise obstruct the water channel. Each segment of the bridge had been precast and tied back to balance each other on the bridge pier as it spans to cantilever out. This methodology involves engineering precision as the end-span of the bridge had to meet the abutment level within a tolerance of 25 mm taking into account that the bridge is also curving three dimensionally.

Three times wider than the pedestrian walkway of the Esplanade Bridge, the Jubilee Bridge has no steps, creating a barrier-free pathway. It can accommodate up to 2,000 persons, and uses energy-saving LED lights to minimise energy consumption.

The spacious and unimpeded stroll along the river provided by the bridge, gives pedestrians a chance to take in and contemplate their surroundings. As Minister for National Development Khaw Boon Wan said: "As we use this new pedestrian bridge to enjoy Marina Bay, let's reflect on the vision and the hard work of Mr Lee and our founding generation."

JUBILEE BRIDGE

LENGTH

220 metres

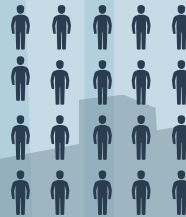


WEIGHT

3,000 tonnes
or 400 elephants



CAPACITY



2,000 people

WIDTH



6 metres

3x the width of the
Esplanade Bridge walkway

DESIGN & CONSTRUCTION



Features barrier-free design



Incorporates programmable
energy-saving LED lighting



Uses green materials and
construction methods to reduce
around 23% carbon footprint

Consists of 61 large concrete segments,
each weighing an average of

40
tonnes

or **30**



mid-size sedan cars

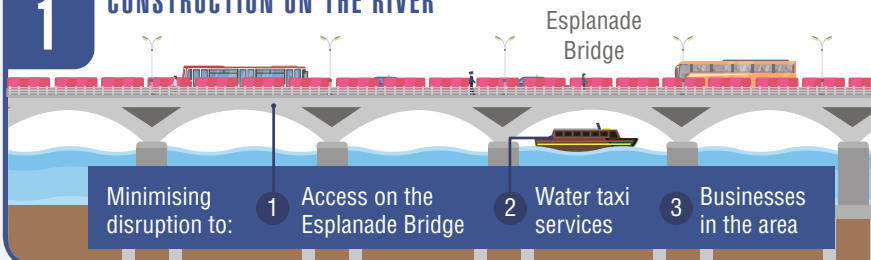
MAP



THE MAKING OF JUBILEE BRIDGE

1

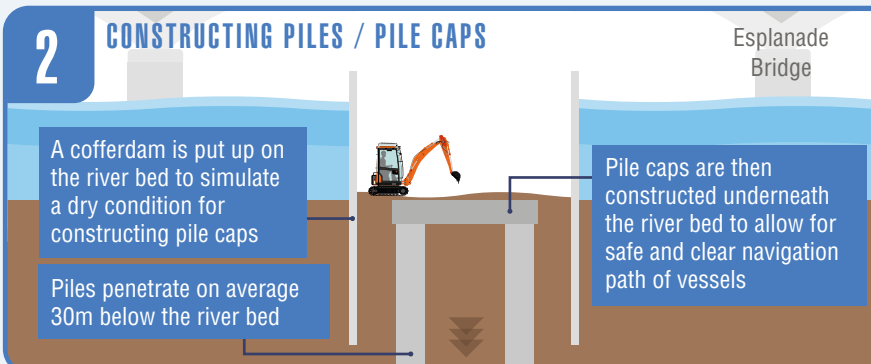
CONSTRUCTION ON THE RIVER



Working within an extremely tight space and without a firm foundation

2

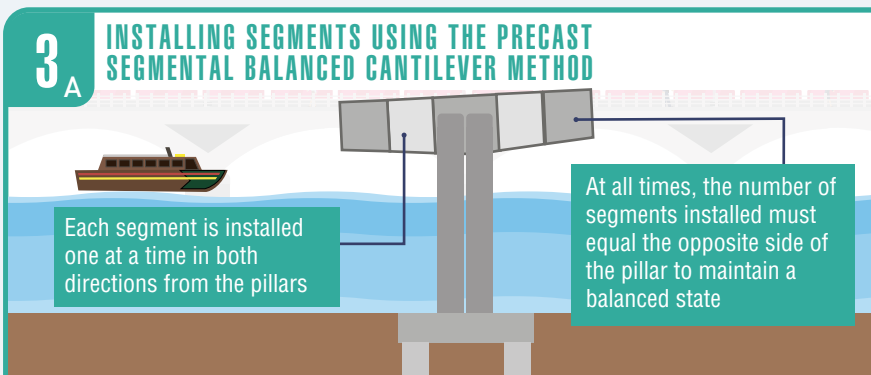
CONSTRUCTING PILES / PILE CAPS



Ensuring the safety of workers inside the cofferdam

3

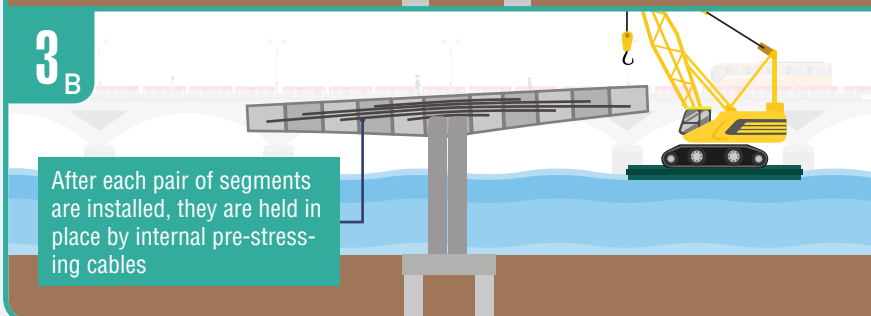
INSTALLING SEGMENTS USING THE PRECAST SEGMENTAL BALANCED CANTILEVER METHOD



Requiring extreme precision in the installation of pre-cast segments to ensure a perfect fit

3

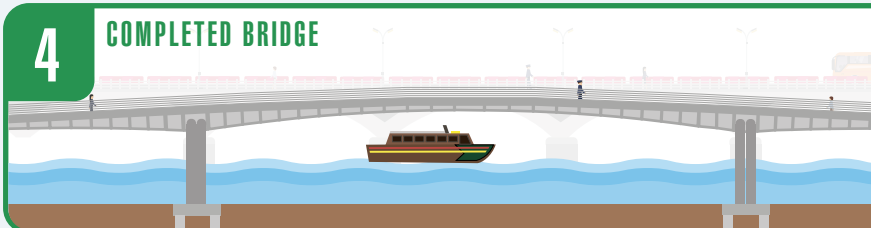
B



Complying with a tolerance level of +/- 2.5cm, or just half the length of a toothpick

4

COMPLETED BRIDGE



Only two main columns supporting the whole span of the bridge for an elegant and sleek finish



THEATRICAL REINVENTION

A new generation of movie and theatre-goers can now enjoy a restored and refurbished Capitol Theatre.

Capitol Theatre reopened its doors to the public in May 2015, more than a decade after bidding adieu to cinema patrons in the late 1990s. The building has been rejuvenated to become a multi-purpose venue for events, and will even see cinema and theatre-goers once more. It is part of a bigger redevelopment project called Capitol Singapore that also comprises two other conserved buildings, the Capitol Building and Stamford House.

Classic origins

Together with Capitol Building and Stamford House, the neo-classical style Capitol Theatre is a prominent landmark in the Civic District where many of Singapore's historic buildings are located.

Built in 1929 and conserved in 2007, Capitol Theatre and Capitol Building used to be known as the Namazies Building, owned by the Namazie family who were businessmen and lawyers of Persian origin. It was originally designed as a theatre to host live shows and featured popular local artistes like Sakura Teng and Rita Chao. In 1946, the Namazie family sold Capitol Theatre and Capitol Building to the Shaw Organisation and the theatre was converted to a 1,688-seat cinema.

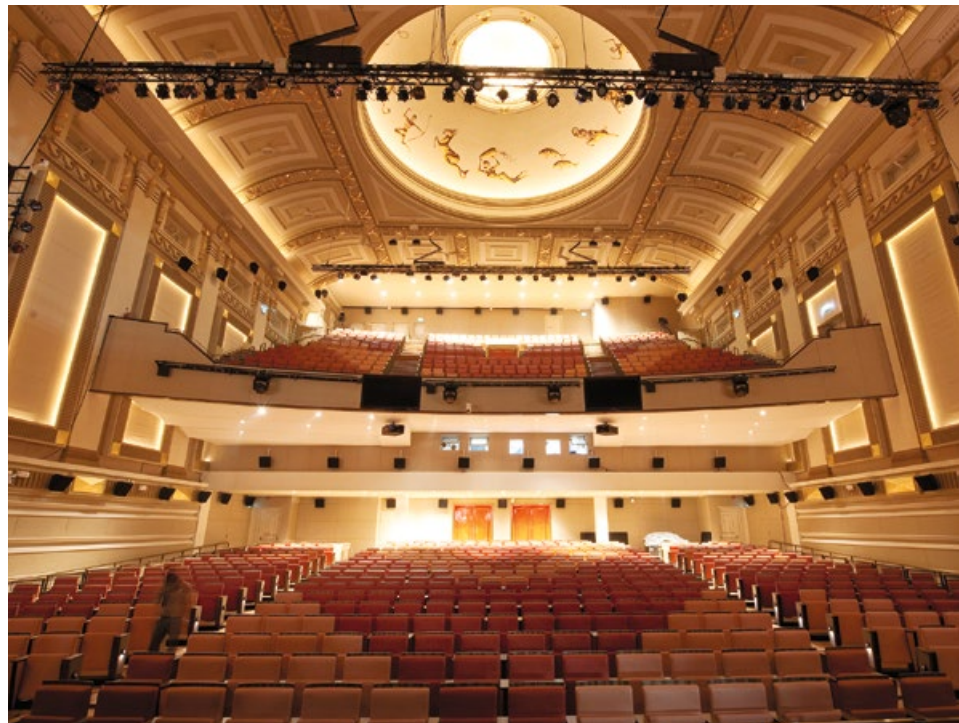
In fact, Capitol Theatre was one of Singapore's premier picture places in the 1950s and 1960s. Retiree John Ng, 73, remembers the theatre fondly as he would occasionally bring his then-girlfriend-and-now-wife for special dates. "In those days, there were not many places to 'paktor'. A trip to Capitol Theatre was a real treat!"

Significant features of the theatre include the vault roof with a circular dome embellished with the twelve zodiac signs, interior decorative elements such as a richly detailed plaster proscenium frame and sculptures of winged horses and their riders that flank both sides of the stage. These prominent features continue to imbue the theatre with classic charm.

Adaptive reuse for a grand dame

Despite Capitol Theatre's rich history and people's memories of the building, there was a need to modernise the space. Ms Tan Huey Jiun, URA's Director of Conservation Planning says: "Capitol Theatre is special to many people. We really wanted to keep it going but needed to have new uses for it to be sustainable as well. When looking at plans to rejuvenate the place, we wanted the developers to find a balance between preserving its rich history and updating it for today's audience."

The Capitol Theatre site, together with three adjacent ones, was put up for comprehensive redevelopment on the Reserve List under the Government Land Sales Programme in 2008. URA oversaw the tender that was launched in



2010 with the help of a Concept Evaluation Panel comprising representatives from the private sector and government agencies. The tender was awarded to the developer using a Concept and Price revenue tender system, which allows for competition on both concept and price, and for the Evaluation Panel to assess the quality of the proposed development as part of the tender evaluation process.

Top:
The Capitol Theatre's fittings have been refurbished and restored for a new era

To protect the theatre's heritage, we had mandated that Capitol Theatre be restored for use as an arts or entertainment-related performance facility such as a theatre or cinema. We also required the developer to facilitate pedestrian movement by constructing a direct underground pass to the adjacent City Hall MRT station.

When the entire integrated development is open in the near future, our vision for the place will finally be realised — to build on the remarkable history of Capitol Theatre, transform it into a new lifestyle destination within the Civic District with a complementary mix of hotel, retail and dining uses, and strengthen the current arts and cultural positioning of the Bras Basah Bugis precinct.



Top:
Capitol Theatre in 1965





MAKING RIPPLES

With a makeover project in the works, the Boat Quay promenade may see a fresh wave of admirers.

Changes are afoot at the Boat Quay riverside promenade. Brimming with historical charm, the promenade's history stretches back to the 18th century, where it thrived as a commercial lifeline for trading merchants and coolies. In the decades that followed, the historic precinct evolved to accommodate more modern uses.

Boat Quay used to be a popular outdoor dining destination, boasting an eclectic mix of alfresco dining eateries, high-end restaurants, and laid-back cafes and bars. However, its lustre diminished subsequently, partly due to bad business practices, such as touting, as well as the deterioration of its physical environment.

Over the years, business operators set up bulky structures, partitions and menu boards which obstructed the views to and from the river. The different structures and canopies for the Outdoor Refreshment Areas (ORA) also added to the disorganised and cluttered look and feel of the place. Negative comments from some travel websites, news articles and visitors even labelled Boat Quay as a "tourist trap", leading to general boycott of the area.

It was clear that changes had to be made if the area hoped to retain the affection of its visitors.

Obstructed view of the conserved shophouses across the River

Sprucing up the Quay

Stepping up to the call was Singapore River One (SRO), a private sector-led partnership charged with the place management of the Singapore River precinct. SRO approached URA with a proposal to enhance existing ORAs after garnering support from businesses and landlords.

The proposed new ORA structures will sport a consistent look and flexible design. The canopy can be retracted during good weather and operators can also install their own vertical panels to shield diners from sweltering heat or heavy rain — a handy feature in Singapore’s tropical climate. The new timber-like floor decking will also allow for easy maintenance. Routing electrical cables underneath the pedestrian promenade and within the ORA structures meant that the existing cables dangling over the promenade can be removed to improve fire safety and the physical appearance of the area.

Far Right:
Underground wires will provide electricity to the new ORA structures, replacing the present overhanging wires

Below:
Bulky structures and tentage block the view of the River from the promenade



was one of the feedback received during the stakeholders’ engagement sessions. There are slots for operators to put in their own signage and menu boards manually, while additional beams will also be available for them to put in their own vertical panels, lights and fans.”

To be ready by end 2016, the refreshed riverfront promenade will also welcome the addition of three new open spaces that invite sightseers to sit by the river and soak in the view. These spaces will be situated in between the ORAs.

Collaborative solutions

These new enhancements are the fruits of ongoing dialogues between SRO, URA and the stakeholders of the Boat Quay precinct.

Open, seamless communication is maintained at every stage of the project and all parties involved. Between November 2014 and February 2015, SRO, URA and the consultant team from CESMA International met up with the stakeholders to seek feedback and support on the proposed enhancements and construction timeline.

Many responded to the project positively, after seeing the long-term benefits. “This initiative

could only proceed with the input from the Boat Quay stakeholders and we are heartened that a majority of them have put their faith in us by expressing their support for this project,” shares Wilson Tan, Chairman of SRO.

Mindful of the businesses’ bottom line, the project will be carried out in five phases by CESMA International to minimise disruption to business activities along the promenade. The staggered schedule will allow businesses to remain open while construction is ongoing.

Close relationship between SRO and the Boat Quay community will continue to be of vital importance after the completion of the project. A one-stop business centre is already being planned to facilitate the process of issuing permits and licenses to landlords and businesses. To keep the revamped promenade in good shape, SRO will also continue to reach out to businesses and produce guidelines to highlight good business practices and thoughtful use of outdoor dining spaces.

This collaborative and multi-participatory model will continue to define the future of Singapore’s urban planning and place management efforts. With the input of all stakeholders, the city can remain responsive to the needs of its community even as it ages and evolves with time.

STAKEHOLDERS’ VOICES

“URA has been very proactive and enthusiastic in initiating improvements within Boat Quay. The collaboration has always been transparent for all the stakeholders (landlord and tenants).

I look forward to the transformation and positive improvement of Boat Quay and the ORA structures. The transformation will have a positive impact on both locals and tourists, which will definitely increase the foot traffic to the area.” — Jason Pope, Managing Director of Dallas Restaurant and Bar

“There is a need to improve Boat Quay considering the fast developments in other precincts and the healthy competition arising as more entertainment and dining options are being created...a grander scale of consumer experiential improvements can subsequently be brought to Boat Quay – be it consolidated architectural works, or softer touches which include rules and regulations governing the way business owners operate. The end goal would be to differentiate Boat Quay as a place that has a unique character (in terms of theme, design or tenant mix), and a place that both locals and foreigners find compelling to visit.

The enhancement works is a small but important first step forward in improving the image of Boat Quay. A cleaner and more comfortable alfresco area should see more footfall in the area, increase the business of tenants and ultimately, improve the property values of the area.” — Arthur Chua, owner of four shophouse units at Boat Quay



Left:
Open spaces
along the
Boat Quay
promenade
(artist's
impression)

ALL ABOUT PLACE MANAGEMENT

Place management is a coordinated, multi-stakeholder approach to improve precincts and make them more attractive with each having their own unique characteristics.

Today, place management in Singapore is undertaken by stakeholders on a voluntary basis. In other cities, it is common to see precincts forming associations with the support of legislation – known as Business Improvement Districts – where all stakeholders in the precinct contribute to sustain place management efforts.

Place Making

- Prominent way-finding signage
- Interesting street furniture
- Pedestrian-friendly streets



How businesses benefit:

- Increased attractiveness of precinct
- Increased footfall and visitor spending
- Increased appeal to tenants

How visitors benefit:

- Enhanced offerings and programmes
- Improved facilities and amenities
- Improved service level
- Enhanced overall visitor experience

Place Marketing

- Concerted efforts in branding and marketing
- Exciting line-up of events, activities and programmes

Place Maintenance

- Enhanced public safety
- Enhanced cleanliness
- Improved public access



Public-private partnership

GOVERNMENT ↔

- Chinatown Business Association
- Club Street Association
- Little India Shopkeepers & Heritage Association
- Marina Bay Business Association
- One Kampong Gelam
- Orchard Road Business Association
- Sentosa Harbourfront Business Association
- Singapore River One



MAKING PLACES BETTER



with Lin Yanling,
Senior Place Manager

She is one of Singapore River's main "caregivers" and has been a place manager with URA for almost eight years now. She started off in the pioneering place management team for Marina Bay, working hard to make the precinct inviting and vibrant for the local community and visitors.

Marina Bay has come a long way, and so has the concept of place management in Singapore. Even though it is widely recognised as a career choice today, people still do a double take and ask her what a 'place manager' is when she tells them her occupation.

Meet Lin Yanling, URA's Senior Place Manager for Singapore River.

What do place managers do?

We walk the ground frequently to understand the stakeholders' needs and priorities for the precinct, work closely with the stakeholders and Government agencies to review ways to improve the precinct, and be at the forefront in trying new ways of doing things and challenge boundaries. It is not a job for the faint-hearted. This is what makes our job as place managers exciting!

What role does place management play in URA's work?

Being a small, land-scarce country with no natural resources, one of the ways to continue to sustain the growth of the city is through place management, to create distinctive, attractive and safe destinations for people to live-work-play-invest in.

For place management and in fact, the city to be successful, the involvement of stakeholders who have an interest in the precinct is critical as they are on the ground most of the time and know what works best for the precinct.

URA's partnership with Singapore River One (SRO) in the place management of Singapore River has been very encouraging. Since its launch in August 2012, SRO has been instrumental in bringing more stakeholders together to join them in the realisation of the five-year business plan to turn the precinct into a historic waterfront destination for locals and tourists alike.

In a short time span of three years, they have introduced fabulous initiatives such as the car-free zone at Circular Road and artworks at underpasses along Singapore River just to name a few. These initiatives have helped to bring Singapore River into the limelight and generated positive outcomes for the precinct.

Much of your work involves working with the community and stakeholders. What is your relationship like with them?

Over the years, we have built up good relationships with a group of stakeholders who would often give us useful feedback on the precinct. They sometimes even show their concern for us on a personal basis.

I recall that when I was walking along Boat Quay for site visits at an advanced stage of my pregnancy, stakeholders would often stop me to ask how I am and advise me to rest. Some of them even assured me that they would take good care of my other baby, Singapore River when I am on maternity leave. These are the best forms of acknowledgement of my effort as a place manager.

What are you and the Place Management team working on?

To support place management in the longer term, our team is also developing policies that will help to seed more interesting precincts in Singapore through place management. We are leading the building of capabilities of place managers in the public and private sectors through various forums such as the annual Place Management Seminar that we organise jointly with other government agencies.

We hear that you often walk the ground with your family. How do they view your work?

My family is supportive of my work as a place manager and I am very grateful for that. They are happy that what I do makes a positive change to a place and are often amazed to see my projects in the news.

My husband would take walks along Singapore River with me almost every weekend when I first started working on the precinct to understand the ground better. Sometimes, my work requires me to visit the precinct at night (and sometimes past midnight) for issues such as alcohol consumption along the waterfront promenade and bridges at Robertson Quay. My husband would accompany me to make sure that I am safe.

My two boys, Ollie and Oscar, were often made to visit these two precincts to allow Mama to visit the sites while they enjoy the public spaces. I hope I am inculcating in them, the meaning of good place management and how important it is in building Singapore. Who knows, they may choose to become place managers too when they grow up!



What do you like about place management and what are you most proud of?

I like the dynamic work scope that allows me to constantly develop new ideas to attract more people to the precinct. I am lucky to have like-minded team mates and passionate stakeholders who are willing to chart new grounds with me.

What made me most proud of my role as a place manager was to witness the launch of SRO when stakeholders who did not know each other came together to start the place management of Singapore River.

It was a long journey and a lot of hard work behind the scenes before the launch of SRO. URA initiated the place management of

Singapore River through an 18-month long consultancy. The objective? To create a five-year business plan for Singapore River and a place management organisation to implement it. I was given the privilege [or challenge] to lead the consultancy.

Over the 18-month period, I met a diverse group of stakeholders, as well as government agencies colleagues to hear their views on how to enhance the Singapore River precinct.

We gathered numerous ideas on how Singapore River could capitalise on its unique character and assets (history, water and diverse range of offerings) to attract more people to visit the precinct. But some of them were of the view that we needed to first tackle teething issues that tarnished the image of Singapore River.

In November 2011, after months of preparation with a few stakeholders, government agencies and organisations such as CASE, a stakeholder-led “A Better Singapore River Campaign” was launched to eliminate touting and overcharging at Boat Quay. The image of Boat Quay has improved since the launch of the campaign and the area has seen more new businesses moving in. I was glad to be part of the team working on this campaign.

The success of the campaign and a few other “quick-wins” have helped strengthen the public-private partnership in Singapore River and build confidence and trust between the public and private sectors. This was the foundation to the formation of SRO. I felt very proud to be a witness of a new phase of Singapore River in place management after the river clean-up was completed in early 1990s.

There were many lessons that I learnt from the consultancy that were important for my role as a place manager and these are to always listen to stakeholders with an open mind, be genuine in achieving a “win-win” situation for both the public and private sector, and never give up on an idea that you believe would work even if it has never been done before.



HERITAGE ON FOOT

Tours of clans around Chinatown keep rich personal histories alive.

Past the yellow art deco façade of the shophouse, is a cool long hall lined with framed calligraphy and black and white photographs.

Just beside the entrance, a stack of leaflets informs visitors that the Kwong Wai Siew Li Si She Shut Association (or Li clan), has been here since 1954. This main hall is true to its original 1960s character, when the building was last renovated.

The association, founded in the late 19th century and offering the public a step back in time, has

been a regular feature on the National Heritage Board's HeritageFest roster over the past four years.

During its open house, the Cantonese clan, known as a "literary studio" for its promotion of education and culture, offers talks and demonstrations on calligraphy.

Through such opportunities, a rich historical aspect of the Chinatown conservation area is retained. But the road to reinvention has been a gradual process.



Top:
Yan Chang acting as guide
for the URA Clan Tour at
Ying Fo Fui Kun

Keeping relevant

Executive Architect Lee Yan Chang, from the URA's Conservation department, remembers when the Li clan, and other associations, needed a little nudge to open themselves to the public, especially Singaporeans.

"Most of the clans were active, but were not actively promoting their activities," he recalled. "Some did not have internet access, and use of social media was rare."

The Conservation department was keen to see these associations – founded as welfare organisations for the early immigrants, now mainly guardians of cultural traditions – stay in Chinatown.

"[The clans] add to the story of the history [of Chinatown]. We always talk about Ann Siang Hill and Bukit Pasoh Road as being a 'street of clans'," said Yan Chang.

From 2010, he and his colleagues began knocking on doors to suggest the clans take part in a guided tour that would allow the public to peek at what they were about.

The clans responded, encouraging participation through word of mouth and passing on contacts to the URA officers. The following year, a few clans were highlighted by Yan Chang as part of a guided tour.

In 2012, six clans came onboard for the tour as part of HeritageFest. The participating clans have since doubled, and additionally developed their own open houses. Most have also produced leaflets on their histories and characteristics with Yan Chang's assistance.

Such open houses have given the associations a chance to showcase their arts and culture to new visitors. Mr Lai Weng Pew, of the Singapore Poon Yue Association, said taking part in HeritageFest had given more exposure to his clan's traditions.

"Most of [the visitors] had not seen this kind of Taoist performance before, especially the foreign visitors," he said.

The Poon Yue Association has since also launched a theatre drama on the Cantonese diaspora culture.



**THE CLAN ASSOCIATIONS' OPENING
DOORS PROVIDE A GLIMPSE OF A
NATION'S PERSONAL HISTORIES, AND
TRADITIONS THAT STAY ALIVE TODAY.**



Volunteers about town

Besides the clans, the Conservation department has begun working with other volunteers to conduct tours of Chinatown and other conservation areas.

Last year, the docents from Friends of the Museums (FOM) led their first free outdoor tour, around the Bukit Pasoh area. Developed with the URA, they have since gone on to develop two other free tours, of Telok Ayer and Kreta Ayer. They have also planned a “children’s tour” that involves activities and quizzes.

The aim is to build up such sustainable volunteer schemes for tours of conservation areas, said Yan Chang. The FOM tour could become a regular one in the future, where the expertise of the docents can help in presenting the historic associations to the Singaporean public.

Through clans’ eyes

Yan Chang, who has since joined the Li clan himself, speculates that his father might have been a member as he had worked with the clan’s storyteller, Lee Dai Soh.

He feels that the younger generation can trace its roots, as well as learn more about the hardships that brought its forefathers here and their subsequent progress, through visiting the clans.

The clan associations’ opening doors provide a glimpse of a nation’s personal histories, and traditions that stay alive today.

Look out for future tours at the conservation page on URA’s website, or get the walking map of clans at www.ura.gov.sg/uol/publications/lifestyle-reads/walking-maps-trails/central/chinatown-clans.aspx



THE NEW AERIAL INTELLIGENCE



Drone intelligence can digitally preserve precious relics and even help plan cities of the future.

Controlled by a pilot on the ground, drones surpass our physical limitations and take to the skies to capture what we cannot see, offering us multiple, eye-opening perspectives of our city.

This emerging technology has opened up new possibilities for our planning work. URA planners now use aerial images and videos to better map and document changes in our urban areas such as the Rail Corridor and Marina Bay.

In the latest development, URA is also tapping on these flying machines to create 3D digital models of our built heritage and city areas.

Digital heritage preservation

A prime example showcasing this function can be seen in our collaboration with local company Avetics and the NUS Baba House to create a 3D digital model of the ornate Straits-Chinese residential terrace.

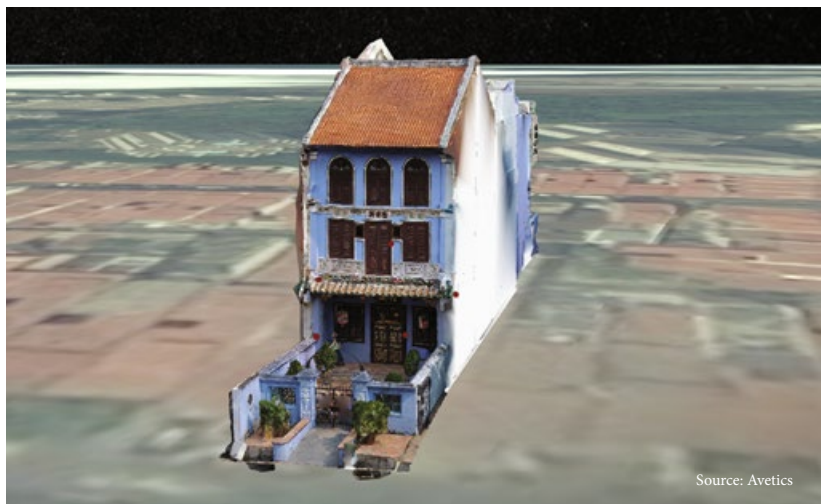
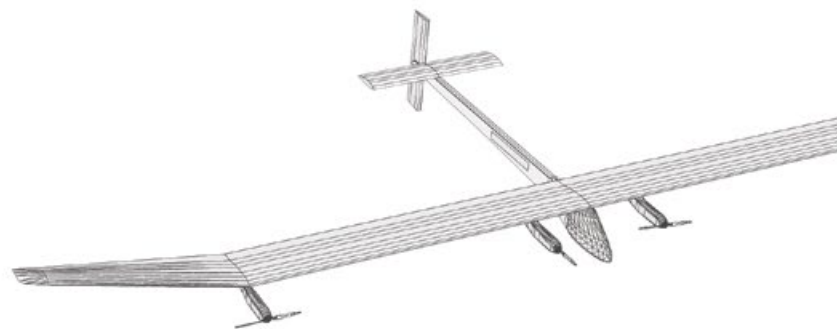
Built in the late 1890s, the conserved shophouse had previously been restored between 2006 and 2008. But in the seven years that have gone by, a closer look was needed. A drone was able to note any insidious damage to the structure, such as invading plants, weeds in pipes or even birds trying to make a home for themselves.

To create a fine-grained digital 3D model, Avetics utilised a technique known as photogrammetry during the drone's 15-minute flight. This involves snapping over 300 aerial images from different angles to stitch the digital 3D model of the heritage building together. The final images produced were able to capture the finest of details, down to the protruding wing of the tiled phoenix motif on the building's ornate façade.

"It's a very scalable way of [looking at] how buildings can be captured," sums up Zhang Weiliang, CEO and Founder of Avetics. "All these are digital memories of Singapore that we ought to keep. Our future generation deserves to have that kind of archive, and to know what life and buildings were like back then."

URA's conservation planners can use these digital models to plan and carry out research, guide restoration, as well as monitor and manage the state of our conserved buildings in a more effective way. They can easily "see" rooftops and other aspects of conserved buildings, such as architectural motifs, without having to physically climb the buildings.

Now, the public can explore this 3D model when they look for the NUS Baba House on URA's "My Conservation Portal".



Source: Avetics

Virtual reality tours

Properly curated, the information collected by drones can also be used for knowledge acquisition for people today, especially with 3D modelling.

"3D scanning creates an outcome where you can push it to the community for education," suggests URA's Director of Conservation Management Kelvin Ang. "For the outdoors in particular, perhaps this is a way for heritage to enter the classroom, so people can do armchair visits, or a preamble to a site visit."

This may encourage people on the ground to be more active as well. Bringing sites and sights directly to people makes it easier for them to understand issues on the ground – the beauty of an old neighbourhood, the way an old building affects an entire zone – resulting in a higher likelihood of passionate yet objective public engagement as well as a sense of ownership.

Top:
3D digital model of
the NUS Baba House

Up close with drones

To involve the community in discovering more about drones, URA also held its second Urban Lab exhibition on the advancement of drone intelligence, “Drones: Changing the way we see the world”, in June 2015.

It focused on three aspects of drone application – aerial imaging, 3D digital modelling as well as environmental and infrastructure monitoring.

Visitors discovered details on the diverse applications of drones to improve the way we live, work and play, ranging from emergency operations, research, to urban planning and design.

Planners’ toolkit

URA’s Chief Executive Officer Ng Lang encourages planners to make good use of drone technology in their work. “The current rapid advancement in disruptive technology offers exciting opportunities to explore new ways to plan, develop, and manage the city. Drone technology is one example. It allows us to conveniently capture and generate high-quality, precise 3D digital models of buildings that we used to take weeks to do, and at a lower cost. It is among the range of tools we are experimenting

with now that will transform the way we plan for Singapore.”

With more knowledge collected about urban landscapes and heritage sites, these eyes in the sky have the potential to reshape future urban planning. As the population grows and residential developments pop up in older estates, drones will be an increasingly popular tool to get a better feel of the ground. In addition, drone imagery picks up experiential observations, such as the buzz and patterns of community activities happening in real time.

This can give URA planners more insights into conserved buildings and their surroundings. They also complement our traditional forms of resources, such as 2D maps, and help in our engagement with residents and stakeholders to better visualise and appreciate how new developments will improve their urban environment.

Armed with this information, URA planners can then plan ahead for a more versatile city; one that mingles the old with the new.

A version of this article, written by Vicki Yang, was first published in Going Places Singapore, an online magazine about appreciating our city. Visit www.goingplacessingapore.sg for more stories.



Source: Ministry of National Development (MND)

Right:
Gardens by the Bay uses
aerial drones to monitor and
track changes in the Gardens



Top:
URA has been using aerial images to simulate future developments in the planning of Jurong Lake District

DRONES ALL OVER THE WORLD

Places that once demanded tremendous physical effort and time to reach have become easy to explore with drones.
Countries all over the world have turned to the flying machines for a range of activities that can be found below.

RESCUE MISSIONS

CANADA

Saving lives in dangerous mountain terrain

WEATHER

UNITED STATES

Tracking and studying hurricanes to improve weather forecasting

OIL SPILLS

GULF

Managing oil spills, such as the 2010 Deepwater Horizon oil spill in the Gulf of Mexico

Locating the Titanic

NORTH ATLANTIC OCEAN

Locating and photographing the sunken Titanic ship



AGRICULTURE

JAPAN

Monitoring the condition and growth of crops and spraying pesticides



NUCLEAR PLANTS

JAPAN

Inspecting the damaged Fukushima nuclear power plant



HEALTHCARE

BHUTAN

Sharing information and resources in rural mountain communities between hospitals and healthcare units



DEFORESTATION

INDONESIA

Studying the impact of habitat threats, such as deforestation and forest fires



NEWSROOMS

AFRICA

Contributing to more insightful, impactful stories on flooding, wildlife



MEMORIES CAPTURED, FUTURE IMAGINED

Students experience conservation and urban planning firsthand.

Top:
Architecture student
Jonathan Chin's designs
for Pulau Ubin mimic the
behaviour of mangroves

When student filmmaker Chloe Chan searched for “The Lucky Bookstore” online, she could barely find any information.

Apart from its URA Architectural Heritage Awards (AHA) citation, little existed online on the 1920s shophouse in Joo Chiat. Once the neighbourhood bookstore, it had since been restored into a family home.

“It’s almost like this place was going to be forgotten,” said Chloe, 22.

But the first time she and her group-mates saw the contrast between its weathered exterior and rustic yet beautiful interior, they knew it was the building they wanted to film.

Their film eventually clinched joint first prize in May for the AHA Short Film Fest along with

a documentary on CHIJMES, for its thoughtful portrayal of the contrast between old and new.

Student participation in workshops and competitions held by the URA, has surfaced fresh points of view across a range of planning issues.

Storied pasts

The inaugural installation of the AHA Film Fest saw teams from NTU’s Wee Kim Wee School of Communication and Information produce short films on the URA Architectural Heritage Awards winners and other conserved buildings. This followed in the footsteps of similar collaborations with the Nanyang Academy of Fine Arts and the School of the Arts.

Other top-ranked entries included videos on the Hajjah Fatimah Mosque and Seaview Bungalow

at 43 Amber Road. All 16 films can be viewed at <http://ura.sg/AHAfilms>.

The team behind the Lucky Bookstore film interviewed the shophouse's owner and architect, as well as the owner of Fei Fei Wanton Mee – a longtime Joo Chiat resident.

Chloe said the experience showed her the value of updating heritage buildings while keeping true to their spirit.

“It managed to retain its original atmosphere yet not compromise on other aspects; you can still have a nice modern experience at the same time,” she said.

Builders of tomorrow

Students' efforts to plan for the Pearl's Hill district and Pulau Ubin, likewise lent them an alternative perspective on their everyday environment. Teams from 14 pre-tertiary institutes produced design proposals to turn Pearl's Hill into a sustainable residential precinct, as part of the sixth edition of the Challenge for the Urban and Built Environment (CUBE) Workshop and Competition. Teams from Hwa Chong Institution, River Valley High School and Victoria Junior College took the top prizes in May.

Merit award winner Nuha Amani Binte Misbahuddin, 19, from Jurong Junior College, said the four-day workshop was a flurry of activities that gave a broad exposure to planning work. Other participants mentioned that the site visit also gave them an idea of the opportunities and constraints that URA planners faced on a day-to-day basis.

Planning and design ideas to preserve and improve distinctive traits of Ubin, as mooted by NUS Architecture students, were also recently on show in the URA Atrium after a year-long study.

Jonathan Chin, 24, proposed facilities that simulate and incorporate mangroves. They grow to meet the needs of users and can be returned to nature when no longer needed.

The fourth-year student, who holds fond memories of the island having conquered cycling trails and “adventured” there as a child, said he hoped that the island would continue to be a test bed for sustainable and ecological friendly systems. But this would have to be done carefully.

“It is important to retain the rustic quality of Ubin while moving forward. It is what makes Ubin so endearing and special to everyone,” he said.



Top:
A still from student filmmaker Chloe Chan's "The Lucky Bookstore"

Bottom:
A student team producing design proposals for the CUBE Workshop and Competition

DESIGN-LED, PEOPLE-CENTRED CITIES



Source: Images courtesy of Ali Grehan

Dublin's City Architect spills on its buzz.

Top:
The Parnell Square
Cultural Quarter
(artist's impression)

Dublin City Architect Ali Grehan is taking her city places, literally. Involved in procuring Dublin's first Light Rail system in the mid-nineties, her projects in the public and private sector since have spanned urban regeneration, housing, infrastructure and transport. Under her charge, PIVOT Dublin, the Dublin City Council's

design promotion platform, has aroused a resurgence of international interest in Irish design. Fresh from a recent trip to Singapore, she chats with *Skyline* about the role of design in cities and what she feels is the toughest challenge for planners.



with Ali Grehan,
Dublin City Architect

What is good design to you and what does that mean for cities?

Good design works for people, bad design works for itself – this is the most direct statement I can make about design. The distinction affects everything, but is manifested most intensively in cities, where there is a high degree of interdependency between people.

The design of cities is about our approach to place making; our governance systems and strategies. Design in cities is about how this approach is manifested in the quality of the built environment.

Cities hold the key to solving problems of our age – climate change, peak oil, inequitable distribution of resources. Managing urban growth is the development issue of our age. We need to see urbanisation as an opportunity, not a threat. We will all benefit – urban and rural communities – if we manage this growth by design. Ultimately, design connects cities and connected cities are more humane, attractive and competitive.

What does a liveable and memorable city look like to you?

A great city for me is one that achieves excellence in the ordinary. Most places and buildings must work quietly and collectively as a backdrop or foil, providing a setting for those buildings that have legitimate call to be distinctive. My iconic and memorable city experiences are usually drawn from the routine. I think this is true for many people; we are rethinking the meaning of “iconic” in place-making.

Share with us some of the interesting projects you are working on.

Dublin is emerging very successfully from the economic crisis and development is happening again. The projects we are working on now were

devised during the downturn, when we had to pause and look for new ways of funding and delivering critical infrastructure.

One such project is the Parnell Square Cultural Quarter, which is being philanthropically funded by US real estate investors Kennedy Wilson. Parnell Square is the oldest and finest of Dublin’s Georgian Squares, dating from 1757 and is the northern tip of what we call Dublin’s historic Civic Spine. The area around Parnell Square is also one of the most densely populated and culturally diverse parts of the city; however, it has fallen into decline and dereliction over recent decades. This intervention captures Parnell Square’s potential to be a catalyst for renewal within the historic city centre. The project is at detail design and consultation stage and has been embraced by the government as a flagship project to mark the centenary of Ireland’s independence.

A larger project which is enormously significant for the city is the development of Dublin’s Docklands. Development here had stalled in 2008 but has been re-invigorated through the new Docklands Strategic Development Zone (SDZ) Planning scheme launched in May 2014. The SDZ covers an area of 22 hectares and provides for 2,600 new homes and 366,000 square metres of commercial space. It has already facilitated the fast tracking of development proposals – currently at the design stage – in excess of one billion euro in value.

Below:
Ali Grehan speaking at
TEDxDublin





What are some of the crucial ingredients for creating people-friendly cities?

People-friendly cities are clear, generous, appropriately scaled, positive to context and well made. This statement describes place making criteria I devised for Dublin City Council's Development Plan. An important criterion that we are anxious to promote is "generosity"; particularly generosity in the design of functional requirements thereby creating opportunities for enjoyment in use.

People-friendly cities are also inclusive places. Inclusivity and Universal Design principles should inform how we make our urban environment. Universal Design goes far beyond issues of physical access alone. In Dublin, the inclusiveness of the built environment is now enshrined in the thinking driving policy, new development and regeneration. For example, Dublin is the first capital city in the world to adopt a city-wide approach to becoming age-friendly and is implementing a five year plan to 2019 in collaboration with agencies representing the needs of older people.

Making cities diverse and people-friendly yields social and economic benefits; a city that includes everyone is more vibrant and innovative, because innovation comes from difference.

How do you balance people choosing what they want, with planning for needs?

This must be the most difficult challenge facing City representatives and managers. It is very hard to reconcile short term demands with long term planning goals. Planning has to proceed on the basis of mutual trust and respect, which only develops if everyone believes that the issue is being described truthfully.

The designer has a very important role to play here in that designers can visualise and communicate issues and possible solutions in ways that are understood by all. It is remarkable how people will accept a solution once it is developed through meaningful consultation and explained clearly. We have had many experiences where controversial issues were accepted by the local community. A recent example is a flood defence project along Dublin Bay, which was initially rejected by the community but which is now progressing well after being redesigned in collaboration with local community members.

Dublin is ranked the 9th most bike-friendly city in the world. What are some of the key strategies that have worked well?

Dublin's high ranking as a bike-friendly city is largely due to the success of the Dublin Bikes scheme. This is a free public bike rental scheme introduced by Dublin City Council in 2009. The genesis of the programme was design led in that the first stations were located close to homes and work, not tourist destinations. This meant that the bikes were immediately useful for ordinary Dubliners and quickly became embedded in the life of the city.

Eight million trips have been taken to date; the scheme is so popular that it is expanding rapidly and has spawned independent apps to help people find available bikes and docking stations. We do have much more to do as a city in making the streets more cycle and pedestrian-friendly but the success of the Dublin Bikes scheme has transformed people's attitudes to cycling in Dublin.

How do we get everyone to understand and use shared spaces well? How do we develop a “successful public realm”?

Public space is the glue that holds the city together; it’s where the city and citizens meet. It can be a hotly contested space!

A rule of thumb in developing a successful public realm is an understanding that all municipal departments have a contribution to make. This isn’t usually the case; the design and management of the public realm is often seen as a singular issue, primarily to do with roads and traffic or paving and landscaping. However, the quality of the buildings edging the public realm is just as important. In order to achieve a high quality public realm we must “consider places before buildings” and we must adopt an interdisciplinary approach throughout.

There is a growing culture of participation and innovation in architecture and urban design for Dublin. How do you get people involved?

Dublin City Council has a strong tradition of public consultation in developing policy and capital programmes, for example, communities are actively involved in designing Housing Regeneration projects. In recent years, the city has established participatory platforms through which we engage with people and test new ideas.

Initiatives such as PIVOT Dublin, Designing Dublin, BETA and the Studio have helped us experiment and innovate; inspired interdisciplinary collaboration across all sectors; created strong networks; offered opportunities to celebrate design impact and translated idea to action through projects.

Do you have any interesting impressions of Singapore that may be relevant to Dublin?
Singapore is green! This was my first and very favourable impression of Singapore. Extensive and innovative urban greening is a huge advantage to a city as it helps make higher density living acceptable and more attractive. This is an important lesson for Dublin and other cities. I was also very impressed with the design of apartment buildings and the high standard of building maintenance.

What are the costly mistakes cities make when they ignore design?

City issues are dynamic and interdependent – a factor of scale and complexity and context. Design can help us understand complexity, find appropriate solutions and avoid costly mistakes.

Our mistakes range from badly connected transport infrastructure to inadequate management systems for the huge number of apartment complexes built in the last few decades. These mistakes have one thing in common; they are borne out of decisions taken in isolation and for a single purpose. The fundamental value of design is that it is collaborative, holistic and based on evidence and understanding. You could say it is simply “joined-up” thinking, much sought after but often absent.



**PUBLIC SPACE IS THE GLUE THAT HOLDS THE CITY
TOGETHER; IT’S WHERE THE CITY AND CITIZENS MEET.**



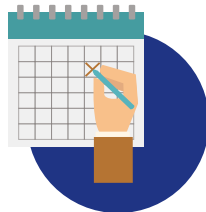
Top:
The Public Realm Plan for historic town, Birr, demonstrates how streets and public spaces can be greatly improved to raise the quality of life for residents

TOWARDS A MORE TRANSPARENT PROPERTY MARKET

Prospective purchasers of private residential properties to gain from more information and protection.

URA has made legislative amendments to the Housing Developers (Control and Licensing) Act to improve safeguards and provide more comprehensive and timelier information for buyers of private residential properties. To be implemented from May 2015, the amendments were approved by Parliament in April 2013 and finalised through a series of public and industry consultations.

Here are some of the key changes that will benefit home buyers like you:



Weekly transaction data

Members of the public can now access weekly developer sales information on URA's website. Detailed information such as the transacted prices of individual units sold by developers, as well as the value of any benefits extended to buyers has been made available to provide more comprehensive and timely property market information.

More comprehensive information in transaction documents

The standard Option to Purchase and Sale & Purchase Agreement will be amended to enhance the safeguards for buyers of private residential properties.

For example, developers must indicate the value of any benefits offered to buyers.



Ensuring the accuracy of show units

We have put in place a new set of Housing Developers (Show Unit) Rules to ensure that all show units provided by developers are accurate depictions of housing units offered for sale.

For example, one rule requires the floor area of the show unit to be the same as that of the actual housing unit. Another rule requires all external and structural walls that will be built in the actual unit to be depicted in the show unit so that home buyers can see exactly what they are buying.

Existing show units which have been erected, set up and made available for viewing before 20 July 2015 will be exempted from the new show unit requirements. However, the developer must inform purchasers of the differences between the existing show unit and the actual unit as shown in the approved building plan by prominently displaying a detailed list and description of the differences at the entrance of the show unit. They also have to give purchasers a copy of the detailed list and description of the differences.





Jurong East location for High-Speed Rail Terminus

The Singapore Government announced on 11 May that the Kuala Lumpur-Singapore High-Speed Rail (HSR) terminus will be located at the current site of the Jurong Country Club in Jurong East. The site will also be comprehensively redeveloped for new mixed-use developments and community facilities to serve Jurong residents, HSR passengers and visitors.

Heritage buildings from a “bird’s eye” view

“Looking at Heritage Buildings”, a picture book on 75 newly conserved buildings, was launched on 25 April at the conserved Queenstown Public Library’s 45th anniversary. Billie the Hornbill introduces young readers to Singapore’s built heritage in a colourful and light-hearted way. Visit <http://ura.sg/billie> to download the eBook.



More residential and commercial sites

On 11 June, the Government announced the second half 2015 (2H2015) Government Land Sales (GLS) Programme, which comprises four Confirmed List sites and 13 Reserve List sites. These sites can yield up to 7,825 private residential units, including 1,340 Executive Condominium (EC) units, and 277,580 sqm gross floor area of commercial space.

The supply of private housing and commercial space from the GLS Programme, together with supply from projects in the pipeline, is intended to meet the demand for private housing and commercial space over the next few years.

Memories upheld at conserved Seletar camp

A heritage storyboard commemorating the oldest Royal Air Force (RAF) base in the Far East and the home of Singapore’s first and longest serving air defence unit, the 160 Squadron, was unveiled in May. It is the first under a new scheme by URA to seek proposals by the community to produce storyboards on conserved buildings, which focus on their stories, surrounding areas’ history and their value to the community. At the launch, Mr Chan Chun Sing, Minister in the Prime Minister’s Office, lightheartedly shared that thanks to the squadron, we are more likely to be hit by birds’ “bombs” rather than actual ones.



City leaders take pledge

Mayors and leaders from 64 cities have pledged to promote equitable, liveable, and sustainable urban environments. They issued a declaration at the end of the World Cities Summit Mayors Forum, co-organised by the Centre for Liveable Cities and URA, on 10 June, held in New York. It is the first time they have done so in the history of the event, which is now into its sixth edition.



ENLIVENING GREEN SPACES AT THE ISTANA

When the Istana grounds were opened to the public on 1 May 2015, in celebration of Labour Day, visitors were able to see and enjoy a collection of benches made from timber planks recycled from the former National Stadium. These benches were a part of URA's PubliCity project "Pick a bench, Pick a place" to commemorate the national icon and to provide the community with interesting resting places in public spaces. The designs for these benches were selected from a public design competition as well as submissions by local designers from various fields. Currently, the largest collection of these benches is in the Istana grounds and the rest of the benches will next be installed island-wide.