

OUR TOWN, KALLANG/ WHAMPOA

TOWN DESIGN GUIDE



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Preamble

This HDB Town Design Guide serves as a reference for consultants, town councils, and government agencies, to guide developments within our towns.

Each HDB town is distinctive, with unique history, natural features, built environment, characteristics and communities that provide a sense of identity and belonging for the residents.

Since the 2010s, HDB has planned and built new-generation public housing that is well-designed, community-centric, sustainable, and smart. To keep pace with new needs, HDB launched the Designing for Life roadmap in 2020, which is supported by 3 pillars – 'Live Well', 'Live Green', and 'Live Connected'. The roadmap will centre on the overall health and well-being of residents, to provide them with a better living environment at all stages of their lives. Careful planning backed by science and data will guide HDB's efforts in biophilic design and development of smart and sustainable solutions to help residents live more comfortably with greater convenience. HDB will also find more ways for people to foster social connections and a greater sense of place.

Today, many agencies and town councils make further enhancements and improvements to the towns. HDB wants to provide these partners with a good understanding of the vision and the development history for each town, so that they can further enhance the distinctiveness of the town, and maintain the town identity.

We have provided illustrations and ideas as a Guide to achieve this vision, and HDB welcomes creative ideas and solutions to strengthen the town identity.

Acknowledgements

We would like to thank the following organisations and government agencies for their valuable suggestions and input:

Jalan Besar Town Council
Jurong Town Corporation
Land Transport Authority
Marine Parade Town Council
National Archives of Singapore
National Environment Agency
National Heritage Board
National Parks Board
People's Association
Public Utilities Board
Sport Singapore
Tanjong Pagar Town Council
Urban Redevelopment Authority

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User Guide

The HDB Town Design Guide establishes the planning, urban and architectural design considerations for the town/ estate at 3 scales.

Town Scale Layers

1. Read to understand the overall theme, historical and physical context of the town

Town scale layers give the general context of the town so that the developments can be aligned with HDB's overall vision of the town.

Neighbourhood Scale Layers

2. Understand the sub-theme to apply relevant planning and design guidelines in your project

Neighbourhood scale layers set out distinctive sub-themes and concepts, to reinforce the town scale layers.

Precinct Scale Layers

3. Apply the design ideas and principles in your project

Precinct scale layers guide the detailed design of projects, allowing flexibility in the micro design elements for a unique precinct identity while aligning with the district themes.

The Guide* should be used for:

New HDB Developments

At design reviews with HDB, design consultants would need to demonstrate how their proposals have addressed the design layers.

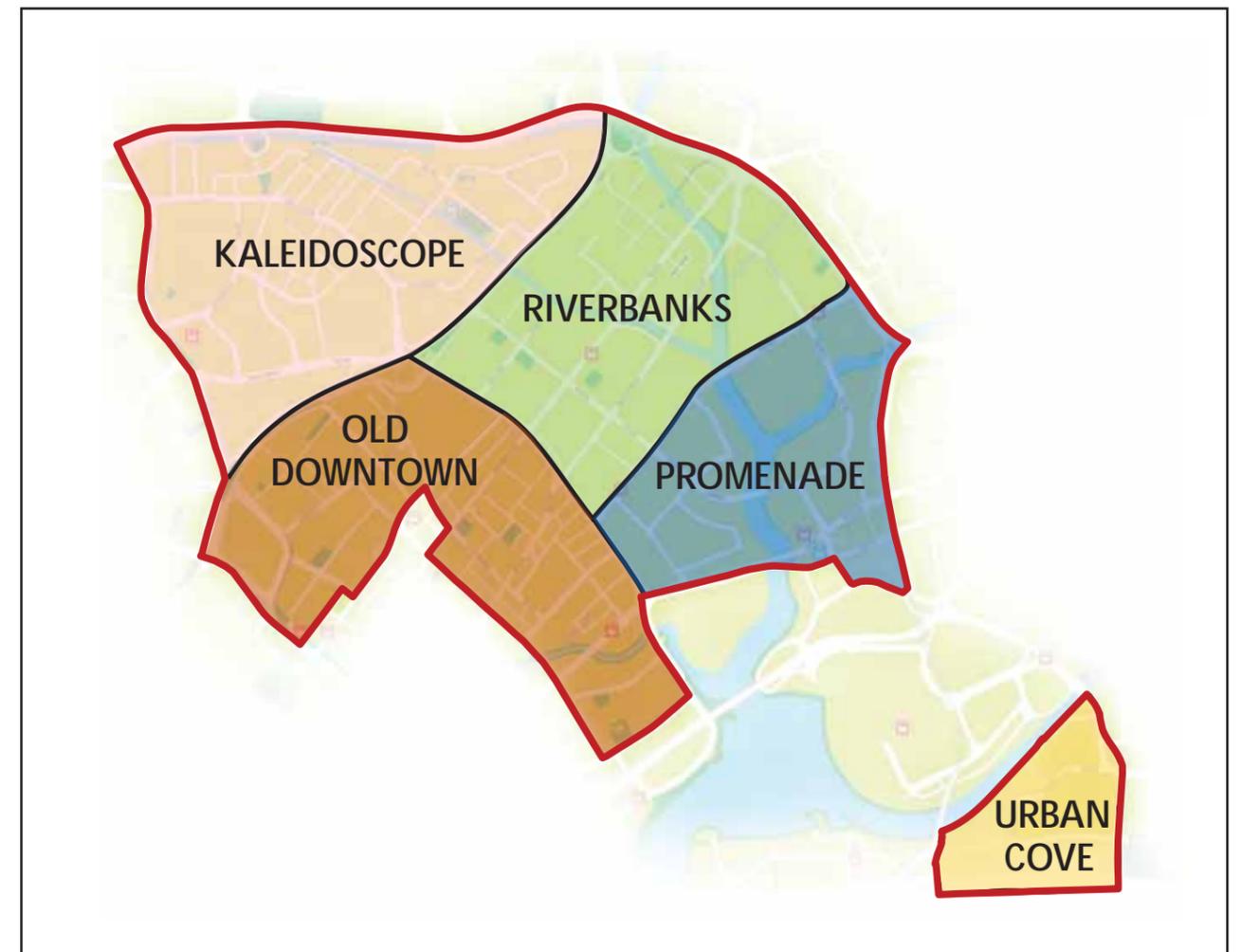
Upgrading and Improvement Projects by HDB or Town Councils

Similarly, design consultants would need to demonstrate how their proposals have responded to the design layers.

Developments by Government Agencies

Government agencies may also use the Guide as part of the design brief/ requirements for their design consultants.

**It is intended to accompany the detailed Urban Design Guidelines of specific developments, where applicable.*



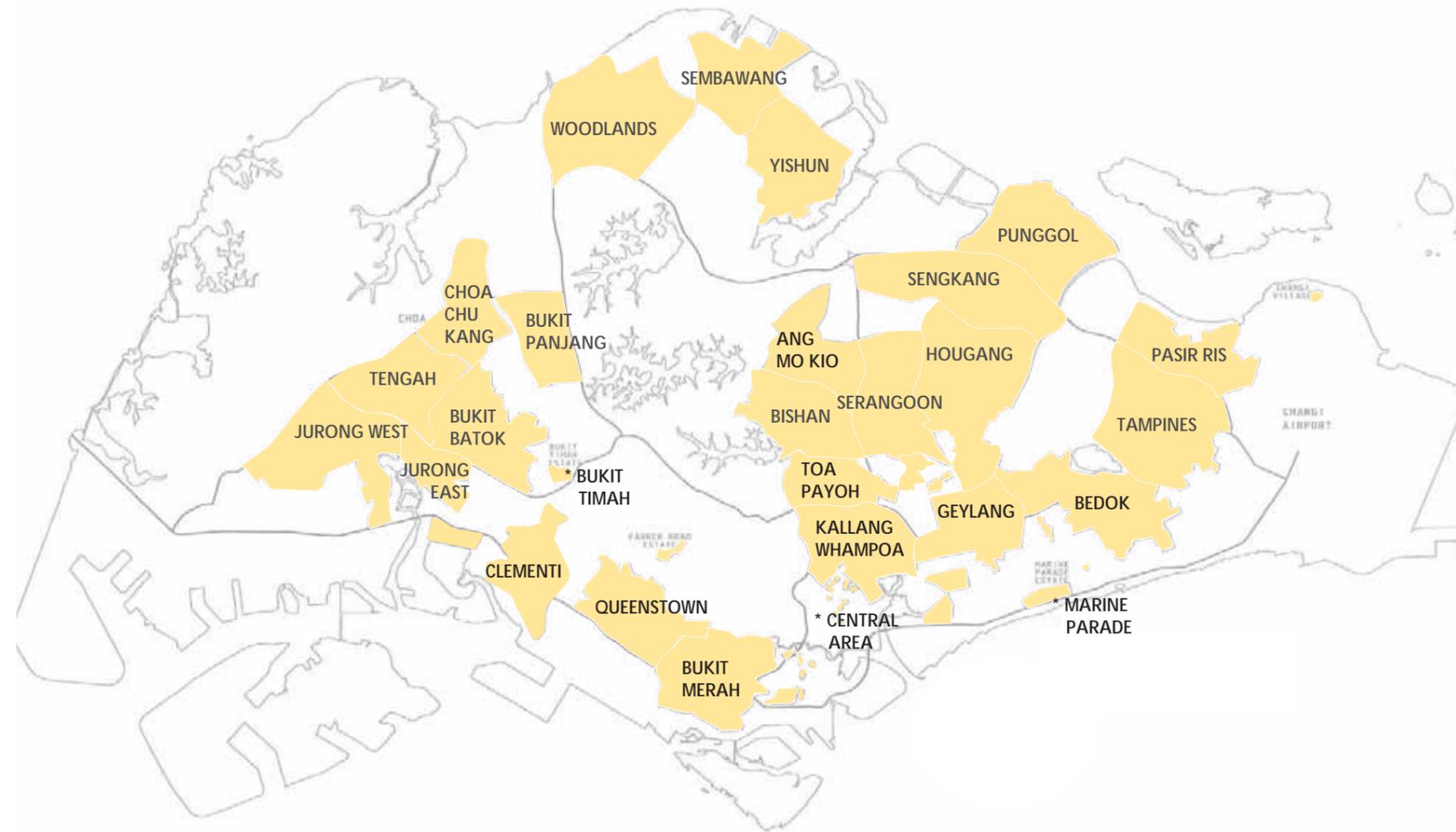
Sub-themes in Kallang/ Whampoa

Introduction

HDB Towns and Estates

HDB carries out comprehensive town planning and design for 24 towns and 3 estates*, and strives towards achieving a clear vision and unique identity for the communities.

*Bukit Timah, Central Area and Marine Parade



Frameworks

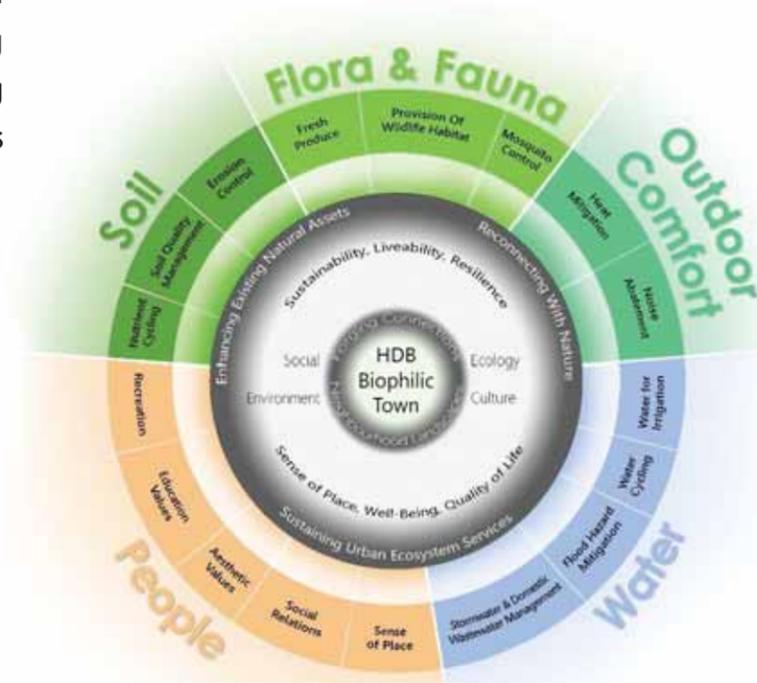
Over the years, HDB has also introduced several frameworks to continuously improve our towns. The principles within the frameworks underpin the planning and design of new public housing developments and the rejuvenation of existing estates. These frameworks have been guided by HDB's Roadmap to Better Living introduced in 2011, and HDB's new Designing for Life Roadmap which was launched in 2020.



2020 and beyond

Well-being Framework

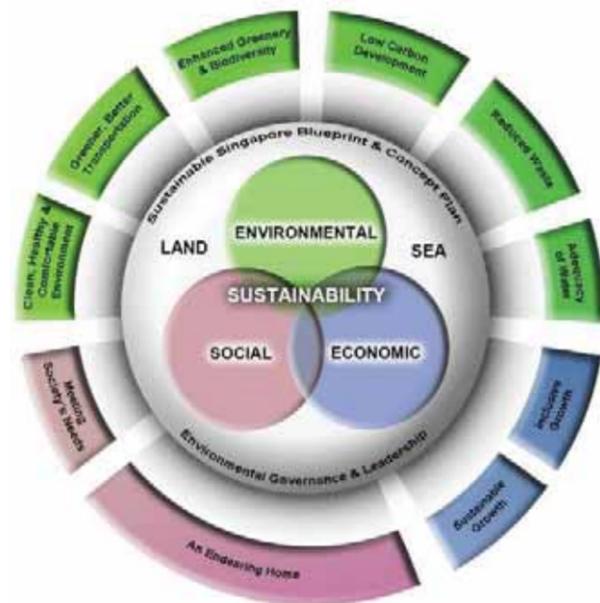
- Create 'Healthy Towns for All Ages'
- Meet holistic needs across different life cycle stages to enhance physical, mental and social well-being
- More choices for residents to lead healthy lifestyles, keep active minds and build community bonds



2018

Biophilic Town Framework

- Promote a greater sense of place, better well-being and enhanced quality of life for residents
- Create nature-centric neighbourhood landscapes that consider the aspects of soil, water, flora and fauna, outdoor comfort, and people



2011

Sustainable Development Framework

- Deploy sustainability initiatives focusing on 10 key desired outcomes across the dimensions of environmental, social and economic sustainability
- Create sustainable, liveable and more pleasant living environments for residents



2014

Smart Town Framework

- Deploy smart initiatives and technology across the dimensions of planning, environment, estate, living, and community
- Create more liveable, efficient, sustainable, safe, inclusive, empowering and resilient towns
- Supported by infrastructure and connectivity enablers including sensors, communications and a data hub

HDB Roadmap to Better Living (2011)



Designing FOR LIFE (2020)
THE FUTURE OF HDB LIVING

LIVE WELL LIVE GREEN LIVE CONNECTED

Content

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Neighbourhood Scale

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 - Colour Palette
 - Facade and Roofscape
 - Landscape Approach

Precinct Scale

- Precinct Facilities
- Playgrounds
- Street Furniture
- Wayfinding
- Covered Linkway Design

Context and History



Located right at the city fringe, Kallang/ Whampoa town transitions from an area of mixed uses and denser street network, to the more residential heartlands by the Kallang River and tributaries.

Due to its proximity to the city, early development began in the mid-1800s, with agricultural industries and settlers in the Balestier and Serangoon Road areas. As Singapore modernised, the town underwent further development with new housing and industries. The major reclamation of the Kallang Basin in the 1960s and 1970s enabled larger-scale development of consolidated HDB and industrial estates.

Over the years, Kallang/ Whampoa has transformed from an industrial hub into a vibrant town that offers a variety of commercial, community and recreational amenities for its residents. New public housing developments have also been introduced to rejuvenate the estates and provide opportunities for those seeking to live closer to the city and their families staying in the area.

With its rich heritage, proximity to the waterfront and exciting plans to revitalise Kallang River with new homes, work places and recreational spaces, Kallang/ Whampoa continues to be an attractive and diverse urban living environment for all ages.

Context and History



Kampungs at the Kallang River



From left: Prominent landmarks such as Serangoon Road Race Course (1843 – 1933) and Kallang Airport (1937 – 1955)

Historical Background

Kallang River was home to the *Orang Biduanda Kallang*, a community of *Orang Laut* or "Sea People" who led nomadic lives residing on boats in the swamps of the Kallang Basin.

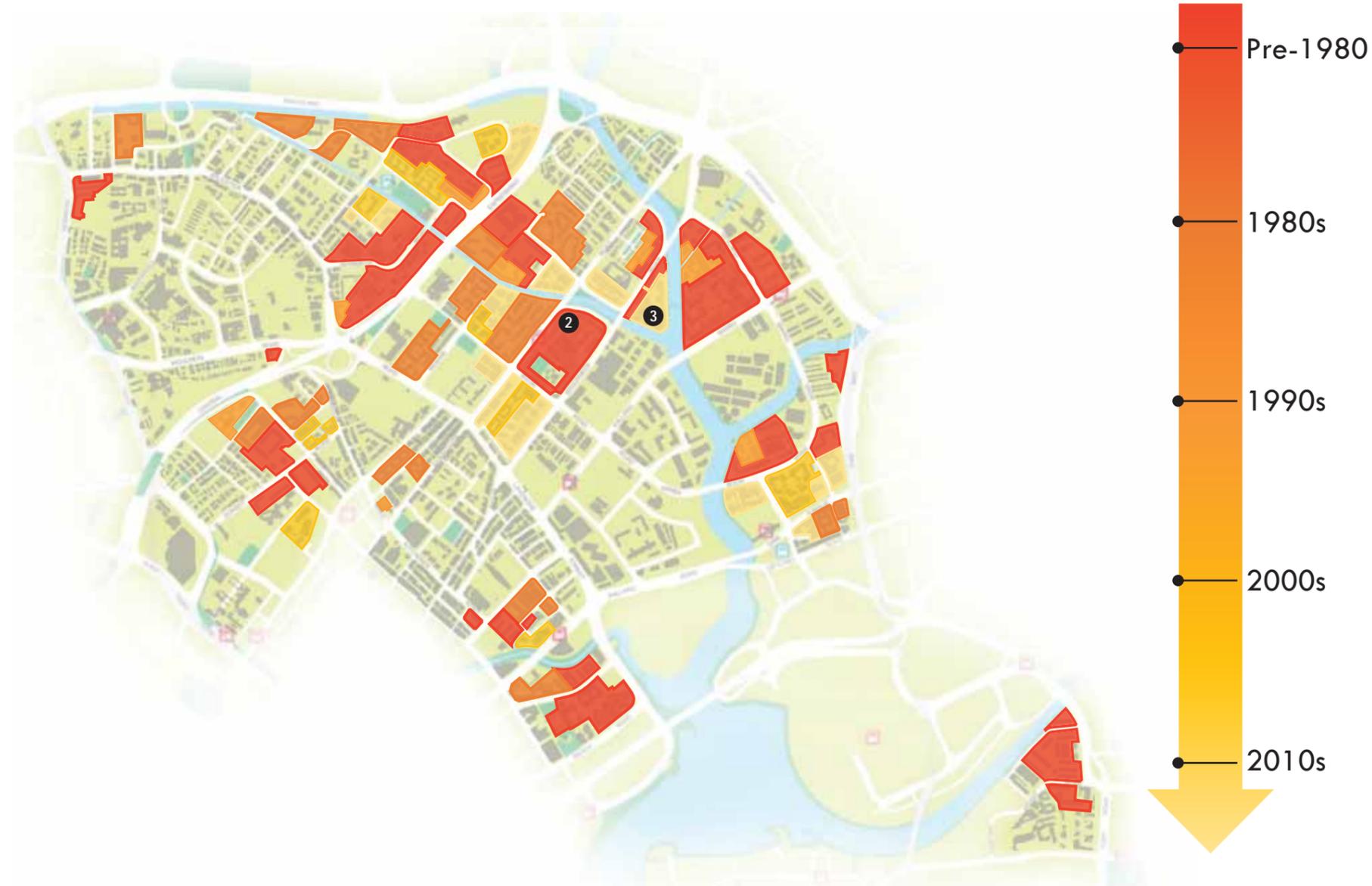
'Whampoa' was the nickname of Hoo Ah Kay, a prominent Chinese businessman in Singapore in the 19th century, who was known for running the food supply company Whampoa & Co. His grand Whampoa House with expansive gardens at Serangoon Rd was an icon in the area. After Hoo's death, the estate was purchased by Seah Liang Seah and renamed as Bendemeer House.

Since the early 20th century, Serangoon and Balestier Road areas saw more villages to house the growing population who engaged in agricultural trades. The area also became a place for the wealthy to build large bungalows away from the city. Closer to the mouth of Kallang River, brickeries, shipbuilding and sawmilling factories sprawled around its swamps.

Some prominent landmarks in the Kallang/ Whampoa area include the Serangoon Road Race Course (1843-1933), Kallang Gasworks (1862-1998), and Kallang Airport (1937-1955).

Context and History

Evolution of Kallang/ Whampoa



1. Riverine settlements



2. Bendemeer Ville (1970/ 1971)



3. The River Vista @ Kallang (2010)

Pre-1960s

Presence of riverine settlements, with boats ferrying timber and rubber to factories and sawmills along the banks.

1960s onwards

The Kallang Basin underwent reclamation in the 1960s and major clean up operations in 1977 with the launch of the Clean Rivers Project.

The earliest existing public housing in the town dates back to the 1960s. Many HDB developments in the town reference the river in their blue colour scheme and the use of riverine motifs like swirls and curves in facade details.

Kallang/ Whampoa has been revitalised with new residences and leisure amenities. There continues to be a diversity of land uses, activities and heritage elements in the town.

Context and History



Former Sun Yat Sen Villa (Sun Yat Sen Nanyang Memorial Hall)



Kwong Wai Shiu Hospital



Art Deco Shophouse



Masjid Hajjah Fatimah

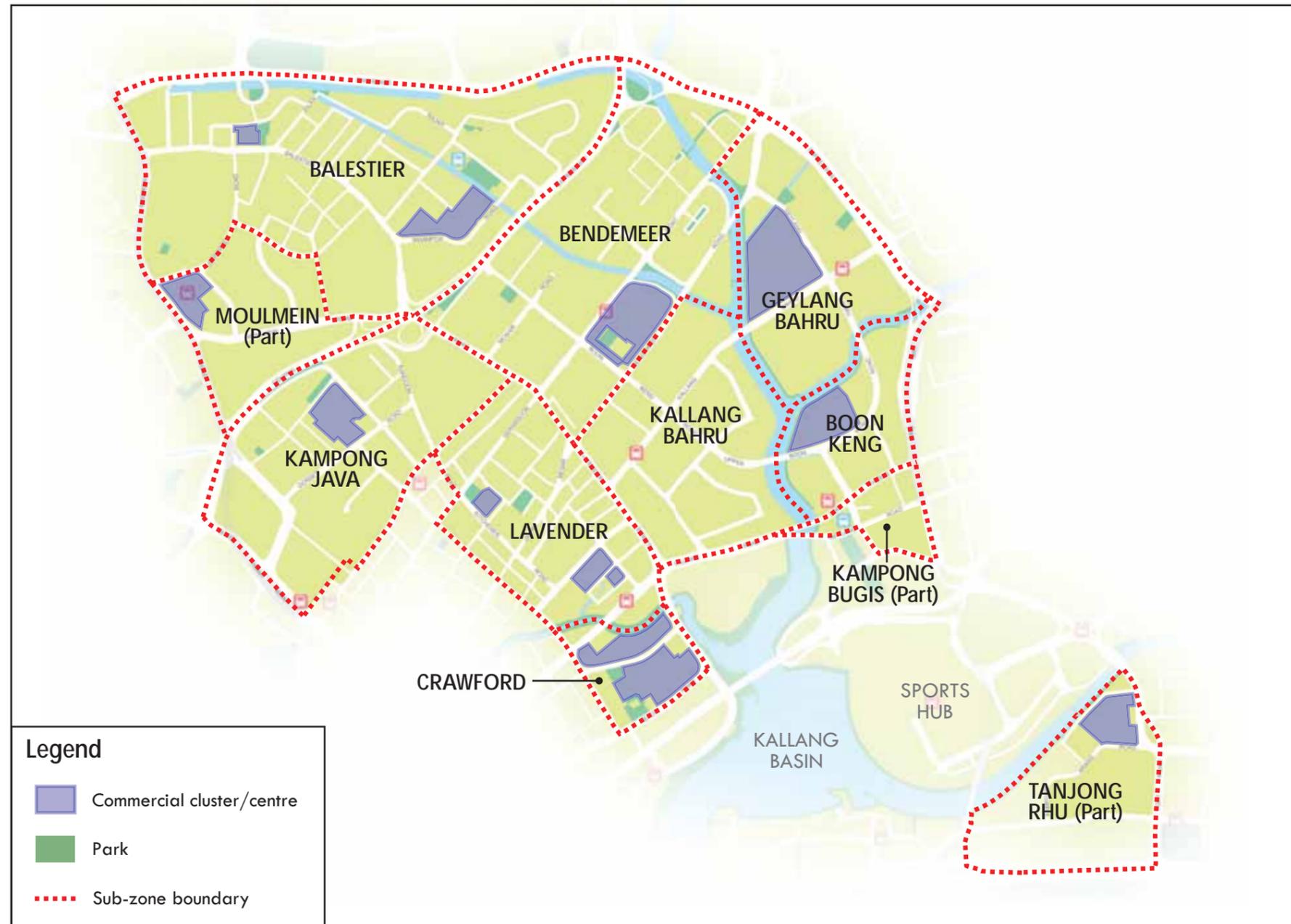
Heritage and Identity

Our heritage connects us to our past, enriching our sense of place, belonging and identity. The stories from Kallang/ Whampoa's rich history are told today through a variety of heritage trails, conserved buildings, and other heritage elements.

Some of the key heritage elements that strengthen the identity of Kallang/ Whampoa Town are:

- Gazetted conservation areas such as Balestier Road and Jalan Besar
- Gazetted national monuments such as the Former Sun Yat Sen Villa (Sun Yat Sen Nanyang Memorial Hall) and Masjid Hajjah Fatimah
- Two Heritage Trails by the National Heritage Board (NHB) that comprise of information boards placed at sites of historical significance. The Balestier heritage trail introduces historical sites such as the Sun Yat Sen Nanyang Memorial Hall, and Art Deco shophouses. The Jalan Besar heritage trail comprises of sites such as Kwong Wai Shiu Hospital and New World Gateway.

Planning Principles

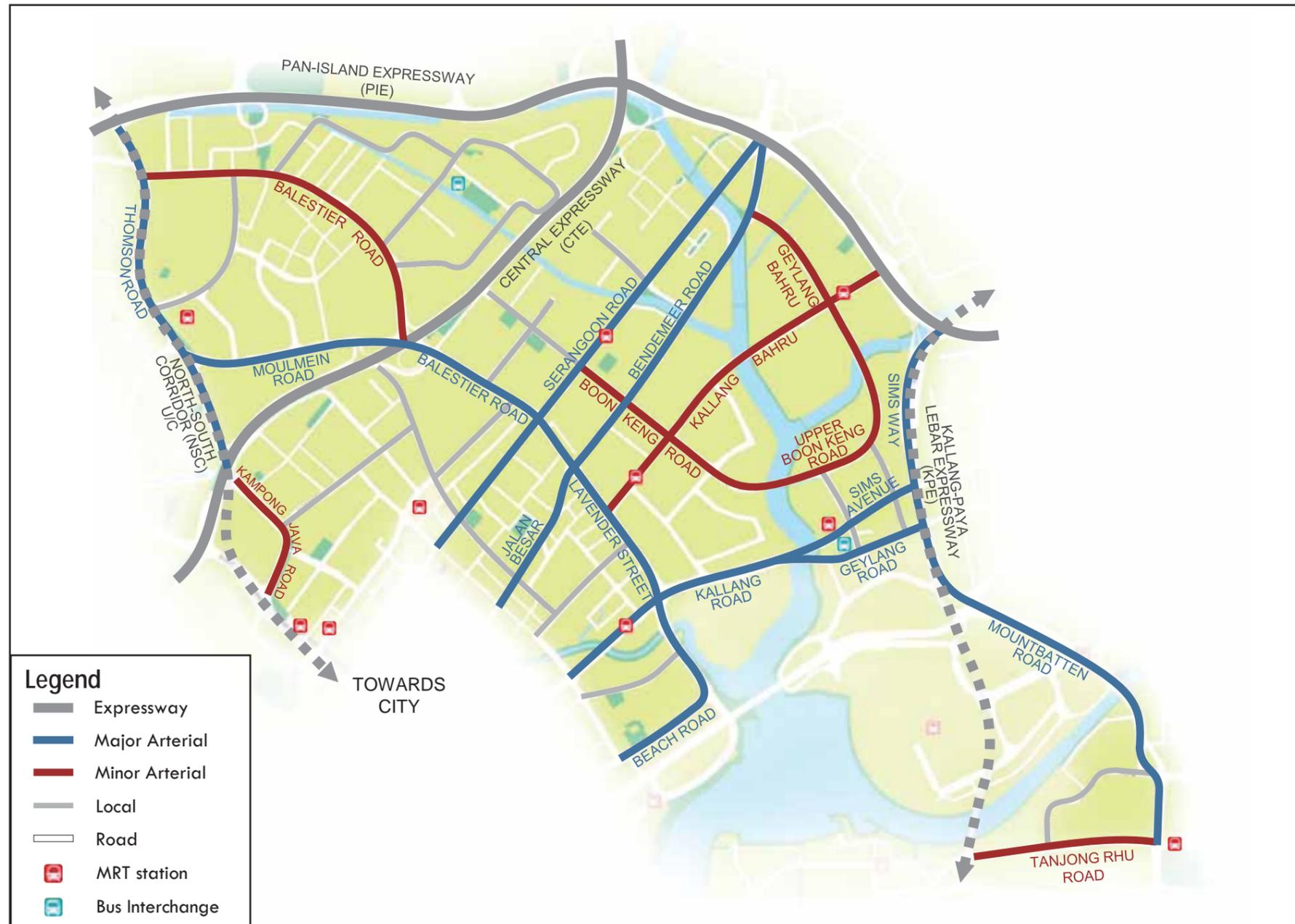


Amalgamation of Estates

Kallang/ Whampoa consists of smaller housing estates that were originally developed as and when land was available. These estates include Ah Hood Road, Saint Michael's, Whampoa, Balestier, Saint George's, Towner Road, Kallang Basin, Tanjong Rhu, etc. These nearby housing estates were later amalgamated to form Kallang/ Whampoa.

Kallang/ Whampoa falls within two of URA's planning areas – Kallang and Novena. Within the town, there are 11 subzones. Apart from residential developments, land is also planned and developed for a full range of complementary developments. This includes commercial, educational, recreational, institutional and industrial developments.

Planning Principles



Transport Network

Kallang/ Whampoa town is well served by the North-South, North-East, Downtown and East-West MRT lines and 2 Bus Interchanges, which allows residents to stay well connected to the surrounding areas.

Kallang/ Whampoa is bounded by the Pan Island Expressway (PIE), Kallang-Paya Lebar Expressway (KPE) and the Central Expressway (CTE), which divides the Kallang and Novena regions.

The street names within Kallang/ Whampoa reflect the diversity of the communities who settled in the town. Road names in west Balestier reference locations in Myanmar (e.g. Bassein, Irrawaddy, Mandalay), while those in east Balestier have Malay origins (e.g. Ampas, Bahagia, Tenteram). The street names in Kampong Java reference English cities and towns (e.g. Bristol, Cambridge, Essex), while roads in Lavender reference key personalities and battle sites of World War I (e.g. Marne, Allenby, Hamilton). Within Bendemeer, a cluster of streets reference various Catholic saints (e.g. Francis, George, Michael).

Town Theme and Concept



View of Geylang Bahru Ville, with the Kallang River in the foreground

Given Kallang/ Whampoa's unique city-fringe location, residents can enjoy an urban living experience in an area rich in history.

Kallang/ Whampoa is also defined by the Kallang River and its tributaries, as it flows through the town and connects the town's distinct estates together.

Town Theme:

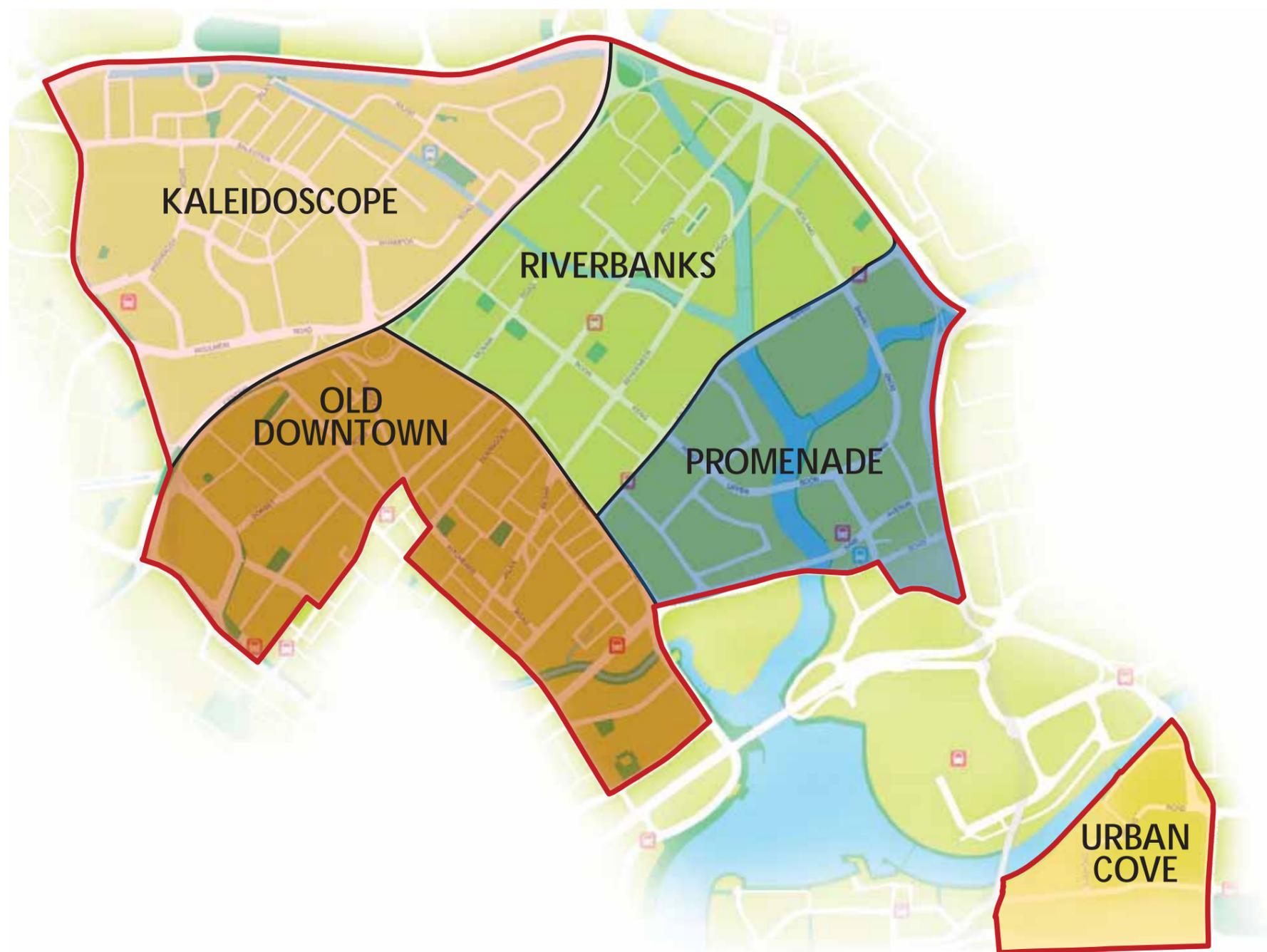
City-fringe Living by the River

Concept and design considerations to be inspired by *heritage elements* and *the river*.



Riverine details and blue tones are found in various developments, such as Whampoa Dew

Town Theme and Concept



Sub-themes by Area

Kallang/ Whampoa is divided into 5 different areas and their sub-themes are identified based on existing context, such as social and physical features, that are prevalent within the different areas.

Novena/ Whampoa – Kaleidoscope

- Draws reference from the area's eclectic character and rich heritage that interweaves a mix of uses. Design elements inspired by local nodes and Sungei Whampoa are found and proposed in the area.

Kampong Java/ Jalan Besar – Old Downtown

- Close to the city and gazetted heritage districts, existing developments exude an urban character & streetscape, and epitomises city living with a myriad of uses in the vicinity of a housing estate.

Kallang Basin – Riverbanks

- Riverine elements, such as swirls, ripples and blue shades, feature prominently in existing public spaces and housing developments. Edges along the rivers also have a naturalistic and lush landscaping response to the waterway.

Upper Boon Keng – Promenade

- In response to the grander scale of the river, the area has a more urban riverfront experience.

Tanjong Rhu – Urban Cove

- Inspired by the intimate scale and cosy character of public housing developments by the river akin to a 'cove', with glimpses towards the city

Pedestrian and Cycling Connectivity



A comprehensive network of park connectors and cycling paths has been planned.

This map provides a useful reference when planning pedestrian connectivity and accessibility to local key nodes such as commercial centres and transport facilities.

Future developments should consider how to respond to the planned network and opportunistically address gaps in pedestrian and cycling connectivity.

Parks and Waterbodies

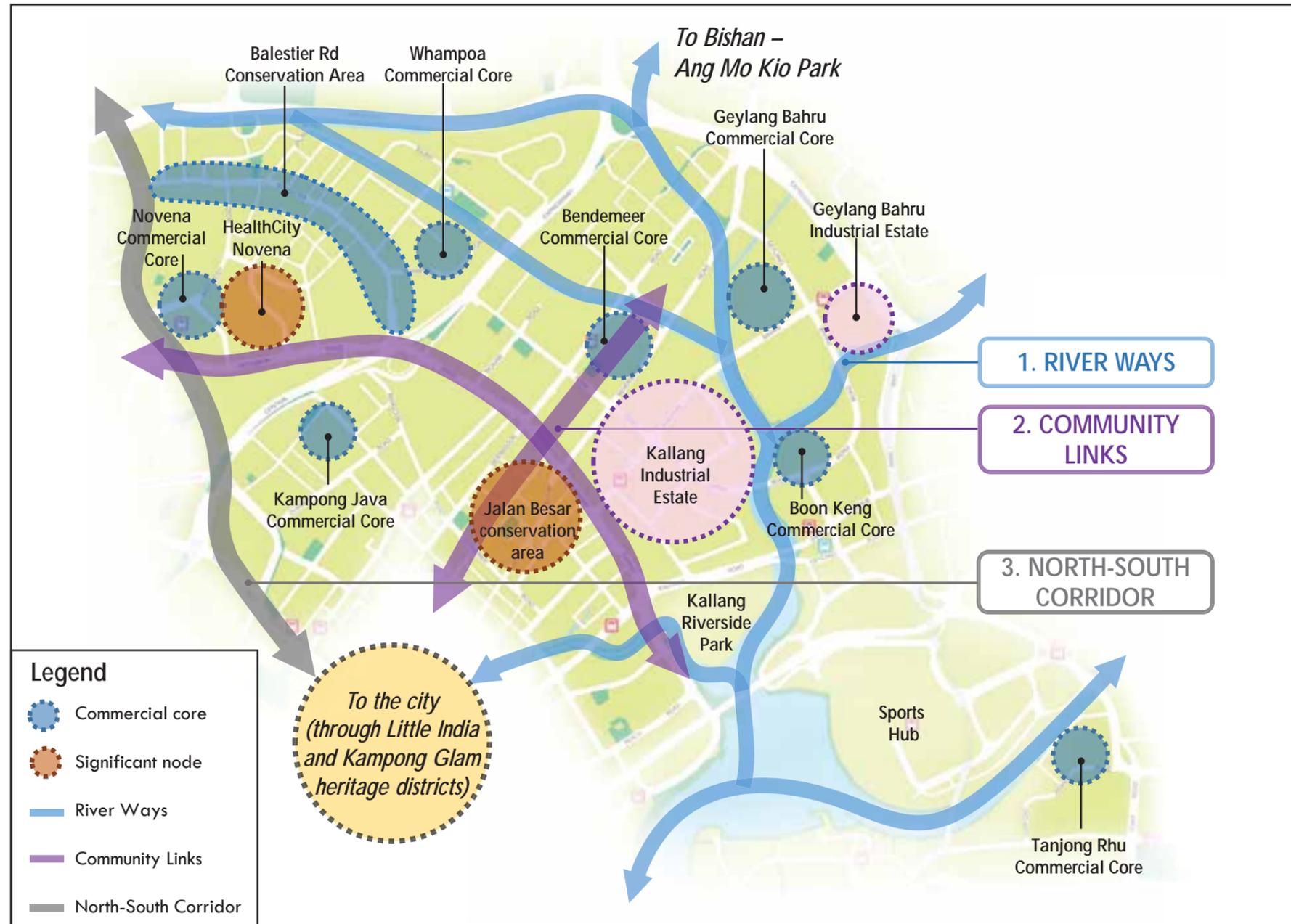


Kallang/ Whampoa has several existing parks, including Zhongshan Park, North Bridge Garden and Kampong Glam Park. Kallang River is a strong natural element within the town.

The park connector networks along the river link the town to various green spaces such as Marina Promenade, Kallang Riverside Park and East Coast Park. These networks provide seamless links and enhance accessibility for pedestrians and cyclists within the central region.

These spaces are valuable green assets of the town and future developments are encouraged to respond in a sensitive manner.

Key Corridors



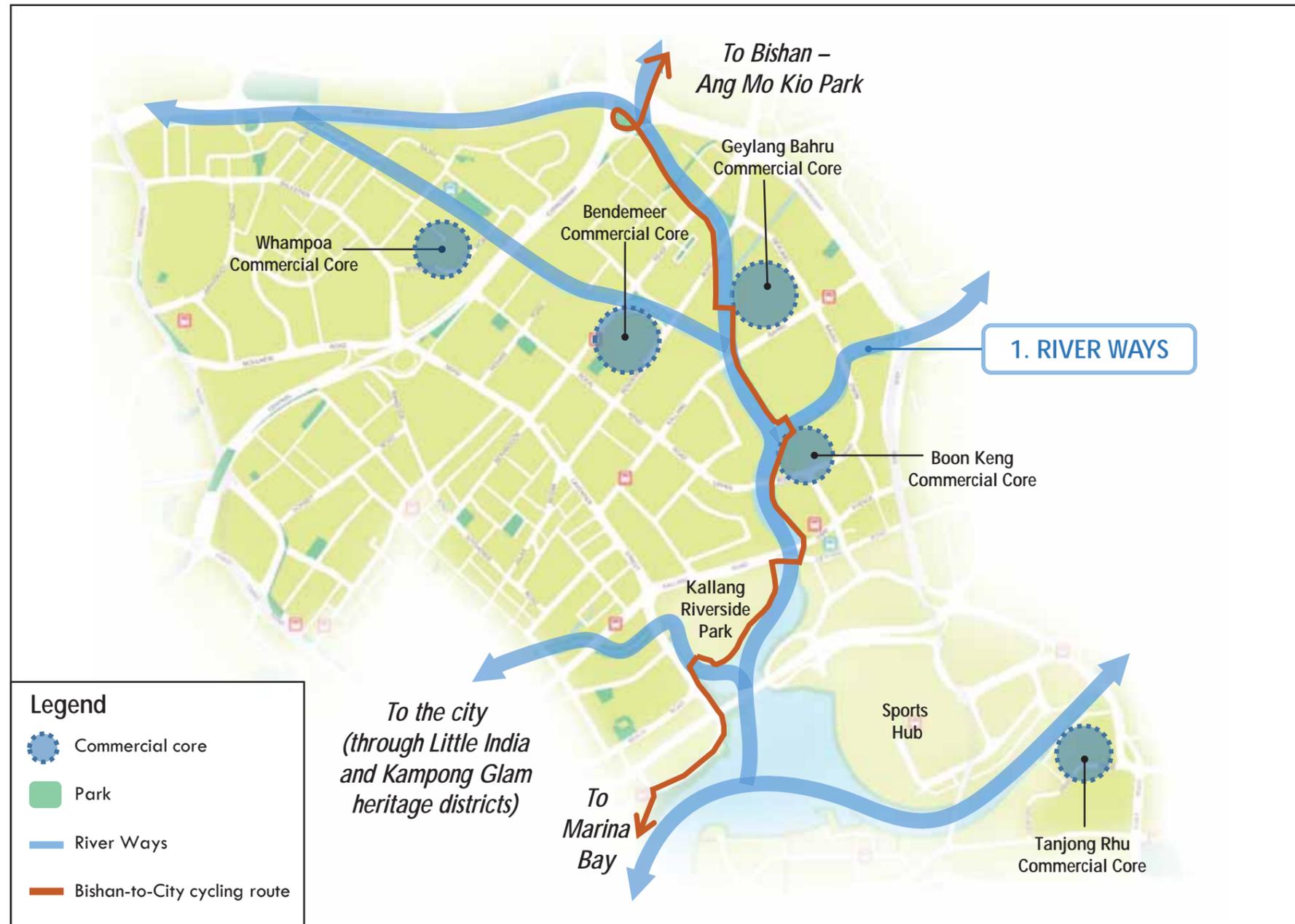
This map depicts the following key corridors in the town:

- River Ways** along Kallang River and its tributaries structure the town and tie the diverse estates within the town together;
- Community Links** to link heritage areas to the waterfront will be introduced; the Inner Ring Identity Corridor along Moulmein Rd, Balestier Rd and Lavender Street will connect the different city fringe districts and neighbourhoods;
- North-South Corridor** connects surrounding communities to nearby amenities (e.g. Novena) and the city

Key Corridors are distinctive corridors that contribute to way-finding, orientation and imageable identity for the town. They typically serve vehicular circulation, encourage active mobility and have high walkability, as part of the ongoing move towards being car-lite.

Adjacent developments can consider using design strategies to respond, connect or engage with the key corridors, to strengthen the corridor's character and enhance connectivity in the town.

Key Corridor: River Ways



The Kallang River and its tributaries form corridors called River Ways. These corridors structure and unify the different estates within the town. The River Ways connect key commercial cores within the town, and also connect to key recreational spaces outside of the town, such as Bishan - Ang Mo Kio Park to the North and Kallang Riverside Park and Sports Hub to the South.

Sections of the River Ways have been enlivened with NParks' Park Connector Network (PCN) and improvement works under PUB's Active Beautiful Water (ABC) programme. The corridor will also be complemented by the Bishan-to-City cycling route that would enhance the cycling experience along the watercourses.

New facilities, landscape features or water sensitive urban design strategies, such as ABC Waters design features could be introduced along the River Ways.

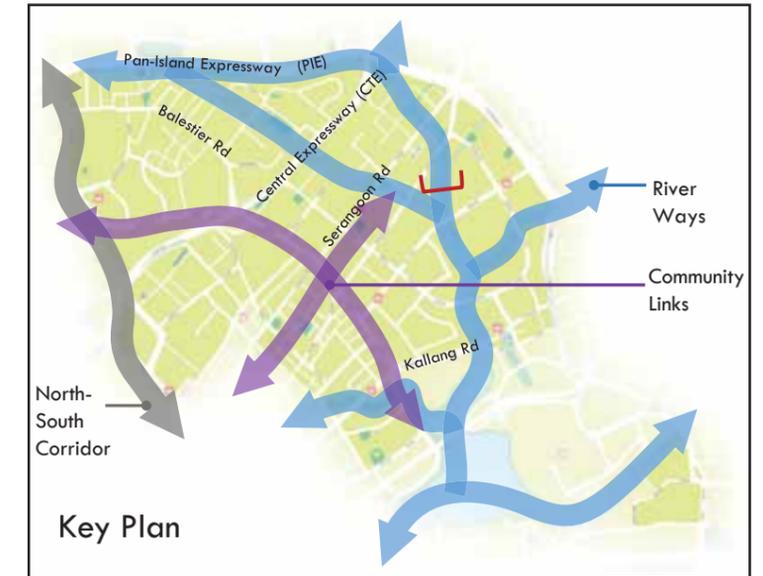
Key Corridor: River Ways



Interactive water features such as the Archimedes Screw and a floating deck



Schematic section across Kallang River



Developments adjacent to Kallang River shall be sensitively designed to the natural environment. Lush, naturalized riverbank planting should also be adopted upriver, when the river is at a more cosy scale.

A variety of public spaces could be introduced along Kallang River e.g. amenities/ activity-generating uses, etc. with soft street edges treated with organic structures, lush riverbank planting and ABC Waters design features such as swales or rain gardens where feasible.

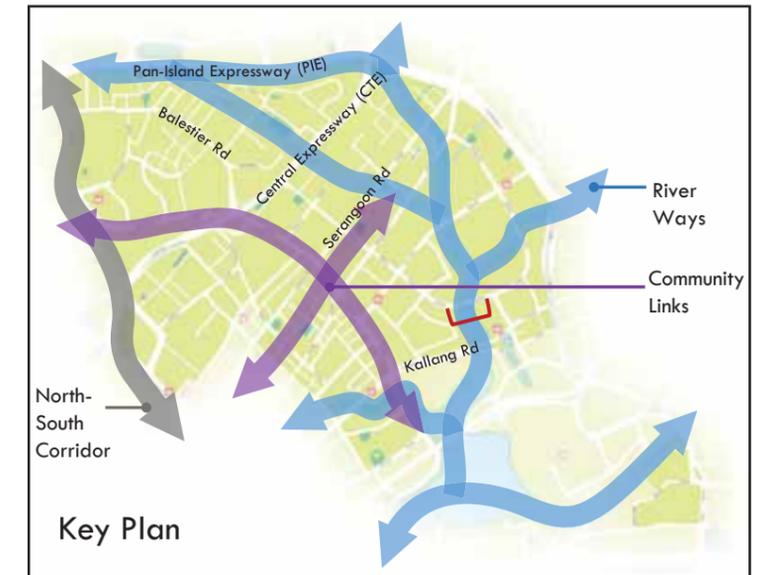
Key Corridor: River Ways



Promenade deck along Kallang River



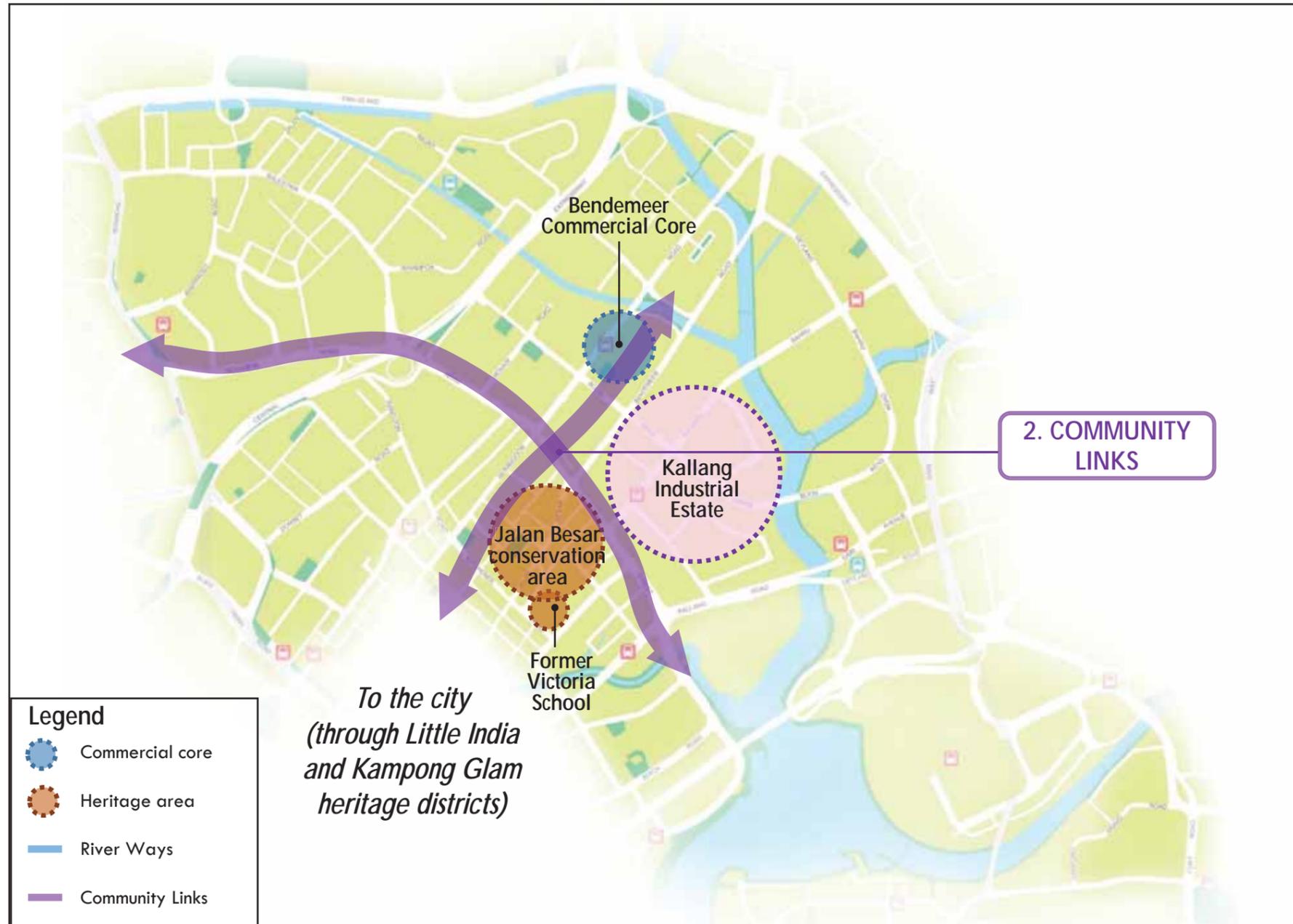
Schematic section across Kallang River



As Kallang River flows southwards, the scale and character of the river changes; the river edge treatment transitions from cosy, naturalized slopes upriver, to a more urban promenade down river when the river is wider and grander.

As part of agencies' plans for the Kallang River Identity Corridor, Kallang River will have improved accessibility, enhanced landscaping to restore habitats, and promenade spaces for recreation.

Key Corridor: Community Links



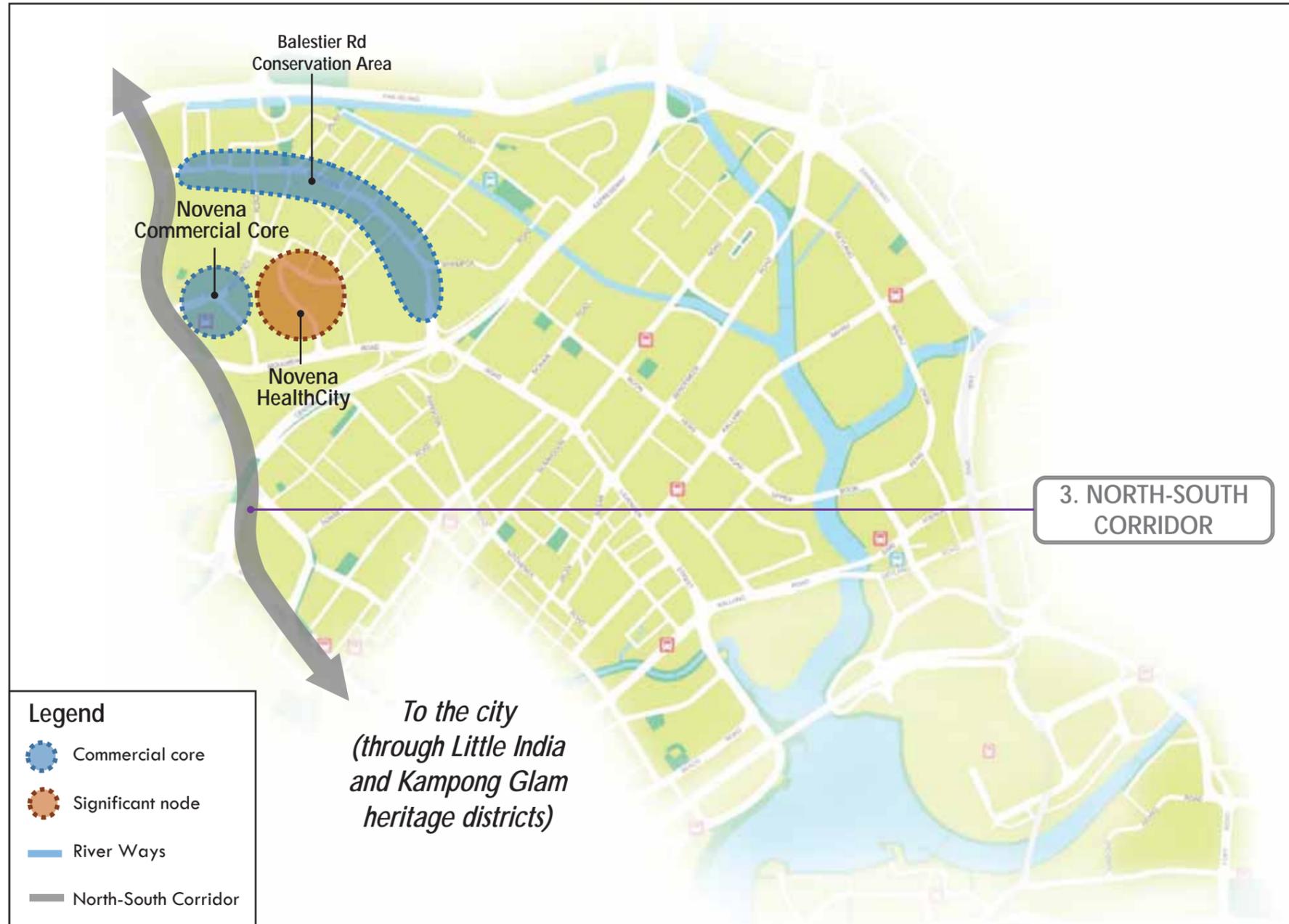
The Community Links are key corridors that complement the River Ways.

They will help to draw residents and visitors to the commercial and recreational facilities at the riverfront.

They will also connect the different city fringe neighbourhoods, encouraging residents to explore the different characters of Kallang/ Whampoa; one such example would be the Inner Ring Identity Corridor along Moulmein Rd, Balestier Rd and Lavender Street.

Developments adjacent to the Community Links are encouraged to activate the adjacent edges. This could be done by placing community facilities or public spaces along the Community Links.

Key Corridor: North-South Corridor



The North-South Corridor runs along Thomson Road and Kampong Java Road at the edge of the town. It will facilitate smoother bus rides and enhanced cycling/ walking connectivity to commercial amenities and health & medical facilities at Novena, Balestier Road conservation area, and even further beyond to Toa Payoh or Central Area.

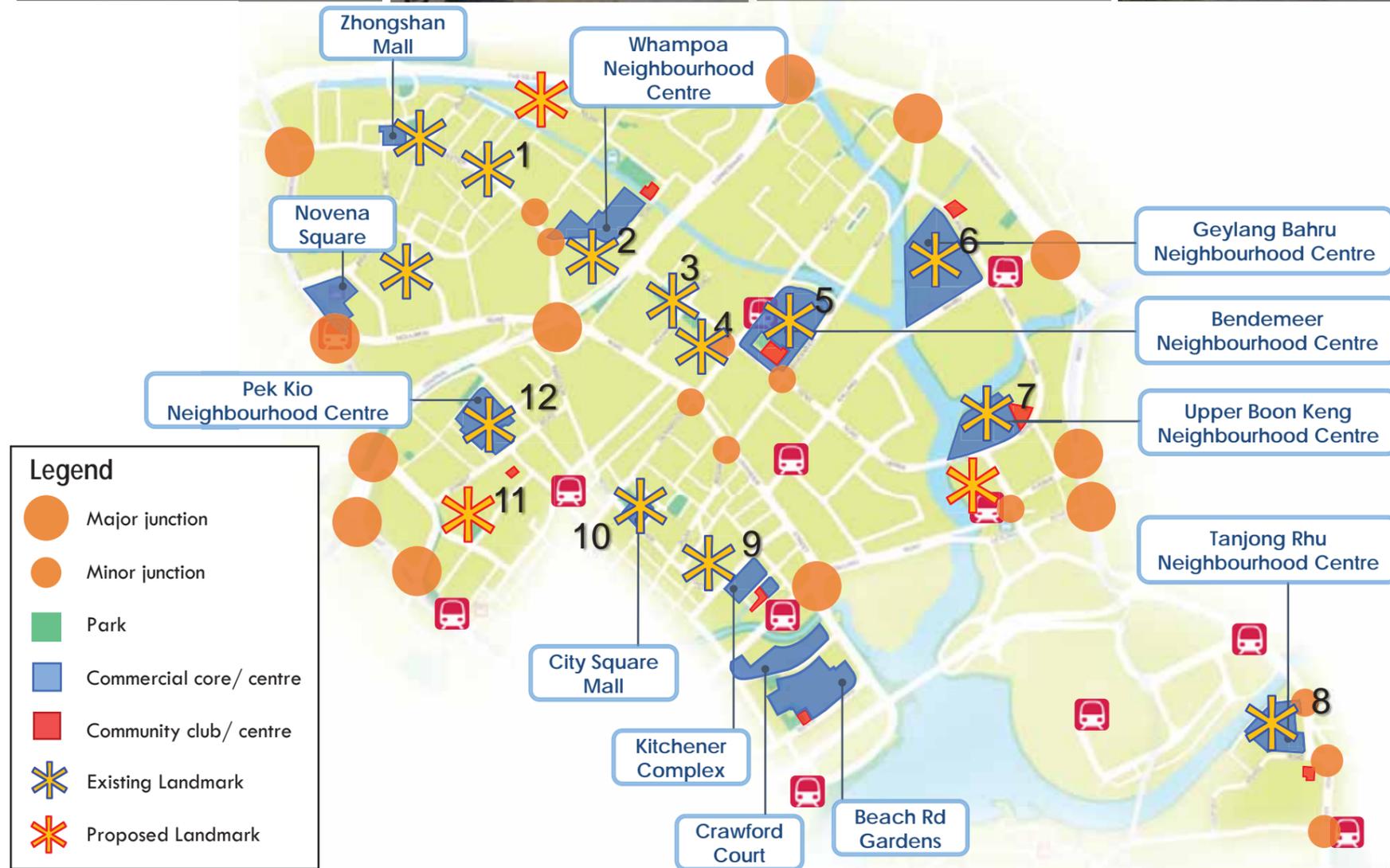
Along the North-South Corridor, a series of linear public spaces with placemaking initiatives are planned where road spaces are reclaimed. Residents can utilise this corridor for recreational use and to connect to adjacent areas.

Developments adjacent to the North-South Corridor are encouraged to treat the edge towards the corridor. This could be done by enhancing greenery and placing public spaces or recreational facilities along the corridor.

More information on the North-South Corridor can be found on LTA's website:

https://www.lta.gov.sg/content/ltagov/en/upcoming_projects/road_commuter_facilities/north_south_corridor.html

Key Nodes and Junctions



Key nodes are areas that have community-related spaces and/ or commercial facilities that attract users, such as parks, commercial centres and community centres.

Some key nodes are also landmarks that residents feel strongly represent Kallang/ Whampoa, such as Whampoa Makan Place, City Square Mall and Geylang Bahru Market/ Food Centre. These spaces contribute to a sense of town identity and new developments should respond to these nodes through strategies such as visual and pedestrian connectivity and architectural approach etc.

Key junctions mark major navigational points and gateways between neighbourhoods and near key nodes. Adjacent developments can adopt corner treatments to further define these junctions as visual reference points in the town.



Heritage Elements



Mural at Block 805 French Rd, featuring bullock carts and scenes from the defunct New World Amusement Park that used to be in Jalan Besar



Mural in St George's Towers, depicting Kallang/ Whampoa's history



URA's 'Do It Right Guide for Heritage Interpretation'

Heritage Interpretation

Heritage interpretation is a means through which the unique history of the site can be communicated and brought alive for different audiences.

These elements should be designed with the following considerations:

- Visually delightful and engaging, giving new life to historical narratives
- Well integrated within the development and prominently located along key pedestrian routes, nodal spaces or within the precinct green.
- Easily appreciated by different age groups
- Accompanied by short text descriptors or captions to explain the historical inspiration

Examples of heritage interpretation elements could include, but are not limited to:

- Murals
- Photo walls
- Thematic playgrounds
- Street furniture
- Wayfinding elements
- Architectural design of the building form, facade or interior spaces.

Refer to [URA's 'Do It Right Guide for Heritage Interpretation'](#) for more examples.

Art Elements



Mural of a filming scene at 471 Balestier Rd, referencing the former Shaw Brothers' Malay Film Studios located nearby at 8 Jalan Ampas



Built in the 1970s, the Whampoa Dragon Fountain is now a landmark in the area

Art elements add delight and help to foster a sense of belonging. To strengthen the identity and memorability of the town, art elements can take reference from the context of the town and site, e.g. history, environment and town/ sub-themes, where applicable and consider engaging residents and local artists to create the artworks.



Community mural at 69 Boon Keng Road, capturing impressions of Singapore's evolving hawker culture



Mural at 471 Balestier Rd, featuring vendors selling produce and goods, and past trades that took place a stone's throw away at Balestier Market

Broad Landscape Theme



Kallang/ Whampoa is located within close proximity to the Central Catchment Area, Istana, Kallang Riverside Park, and Bidadari Park, and includes a substantial stretch of Kallang River and its tributaries. With its close proximity to the river mouth and city area, it is one of the earlier towns developed with small and limited patches of greenery.

The broad landscape theme aims to strengthen ecological connectivity and linkages by making the most of every green patch to function as 'stepping stones' that contribute to ecosystem services. There could be higher development greenery within new and redevelopment sites, and greater effort to conserve larger and more mature trees which are important sources of biodiversity and ecosystem services.

Most of the town could adopt the natural habitat of riverine planting, responding to the river and its tributaries as it changes across the town – for example, sites along the Kallang River could adopt continuous riverbank planting while sites that are more inland could have higher greenery density or species richness to mimic the natural environment.

A continuation of NParks' theme of an Urban Garden Landscape along the North-South Corridor could be extended into the Old Downtown and Novena area. Reference to NParks' existing/ proposed Nature Ways and PUB's River Ways planting are to be considered to enhance and interconnect green linkages.

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- Planning Principles
- Town Theme and Concept
- Pedestrian and Cycling Connectivity
- Parks and Waterbodies
- Key Corridors
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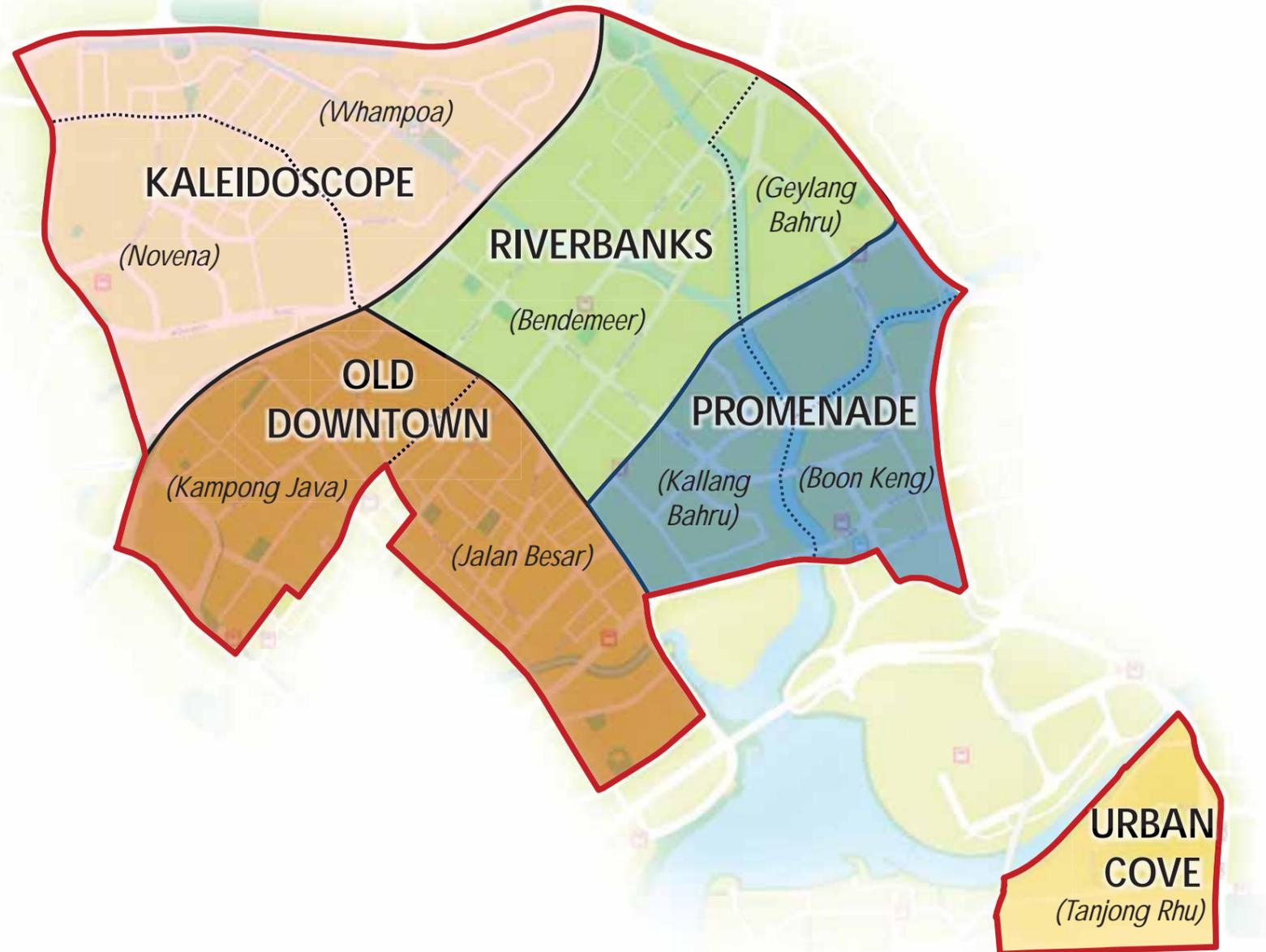
Neighbourhood Scale

- Sub-themes and Concepts
 - Form and Massing
 - Public Spaces
 - Streetscape and Urban Edge
 - Colour Palette
 - Facade and Roofscape
 - Landscape Approach

Precinct Scale

- Precinct Facilities
- Playgrounds
- Street Furniture
- Wayfinding
- Covered Linkway Design

Sub-themes and Concepts



Sub-themes are based on existing context, such as social and physical features, that are prevalent within the different areas.

5 Distinct Areas

Based on the prevalent characteristics, the 5 areas are given specific sub-themes which also relate to the overall Kallang/ Whampoa town theme of 'City Fringe Living by the River'.

Developments in each area can take reference from both the Kallang/Whampoa town theme and the corresponding sub-theme in their concept and design. This will help to strengthen the identity of each area:

- **Kaleidoscope:** Novena and Whampoa
- **Old Downtown:** Kampong Java and Jalan Besar
- **Riverbanks:** Kallang Basin (Geylang Bahru, Bendemeer)
- **Promenade:** Boon Keng, Kallang Bahru
- **Urban Cove:** Tanjong Rhu

Neighbourhood Scale Layers

Each of the neighbourhood scale layers should take into consideration the respective sub-themes, in order to create a strong and coherent identity for each area.

Form and Massing

Form and massing can be designed based on the sub-themes and site context to create urban landscapes and landmarks.

Streetscape and Urban Edge

Paying careful attention to the design and treatment of the streetscape can enhance the experience of the users moving along a street or through a space.

Examples of streetscape treatment:

- Forms that front the street
- Street level activities
- Landscaping and shelters
- Pocket spaces along the street
- Pedestrian-friendly connections

Facade and Roofscape

The facade and roofscape of a development are distinct elements of its architectural design. When different developments in an area take reference from the sub-theme, it can contribute to the identity of the area.

Public Spaces

To encourage social interaction and community bonding, public spaces can be designed to be welcoming and vibrant. Such spaces include community plazas, and areas with facilities.

Landscape Approach

The use of plants, as defined by planting concepts and strategies, strengthens the identity of a precinct and neighbourhood. The shape, form and colour of plants can also assist in defining a space through repetition and scale.

As each thematic area is made up of varying extents of vacant land and existing developments, the Neighbourhood Scale Layers will be customised to suit the needs of each area.

Where there are sizeable areas with the opportunity for development, all the neighbourhood scale layers will apply.

Where areas are predominantly made up of existing developments, the emphasis can be in the design of public spaces.

Neighbourhood Scale Layers

Colour Palette

Colours can greatly enhance identity. Used consistently across precincts, colour palettes can help to reinforce the identity of an area. The suggested colour palette for each area in a town draws reference from its sub-theme. It consists of:

- **Primary Colours**
Unify the identity of the town, and form the main base of the colour scheme (55–70% of painted area)
- **Secondary Colours**
Complement the primary colours (20–30% of painted area)
- **Accent Colours**
Highlight certain architectural features on facades (such as fins, ledges, canopies, spandrels, selected parts of gable end walls, etc.) and precinct facilities (10–15% of painted area)

Application of Colour Palettes

For the colour scheme of each development, it is recommended to use:

- Building Facades: 2 primary colours, 1 or more secondary colour(s), and 1 or more accent colour(s)
- Precinct Facilities: 1 or more accent colour(s)

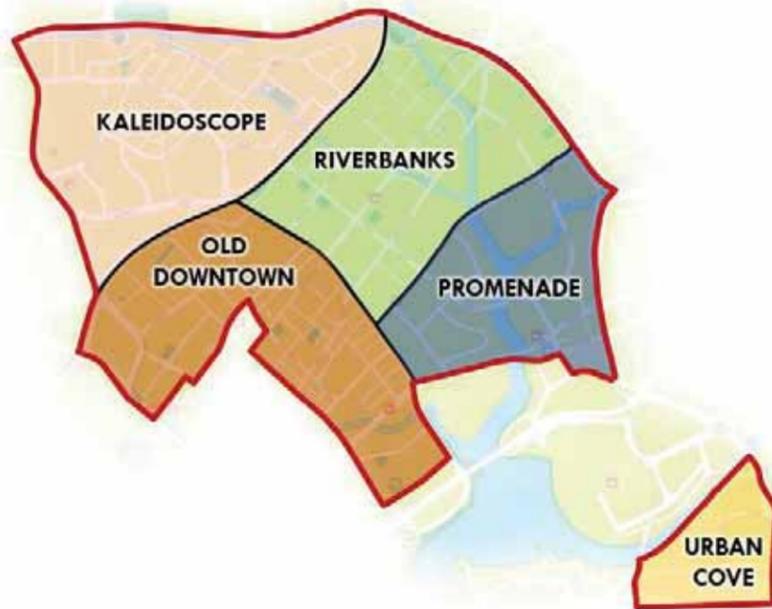


Examples of the application of colour palettes on facades

Neighbourhood Scale Layers

Summary of Colour Palettes for Kallang/ Whampoa

Based on the ‘City-fringe Living by the River’ town theme, the suggested colour palettes of the 5 distinct areas in Kallang/ Whampoa are inspired by the Kallang River and its tributaries, as well as the heritage of the old downtown. Please refer to each area for the details of its suggested colour palette.



Novena/ Whampoa
Kaleidoscope

Primary Colours



Secondary Colours



Accent Colours



Kampong Java/ Jalan Besar
Old Downtown



KAMPONG JAVA



JALAN BESAR



CRAWFORD



Kallang Basin
Riverbanks



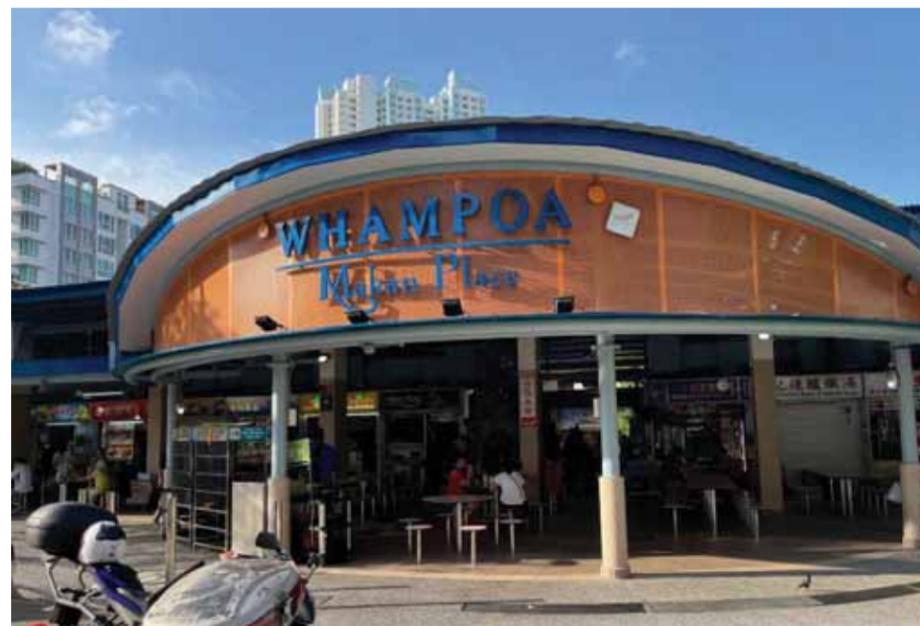
Upper Boon Keng
Promenade



Tanjong Rhu
Urban Cove



Novena/ Whampoa – Kaleidoscope



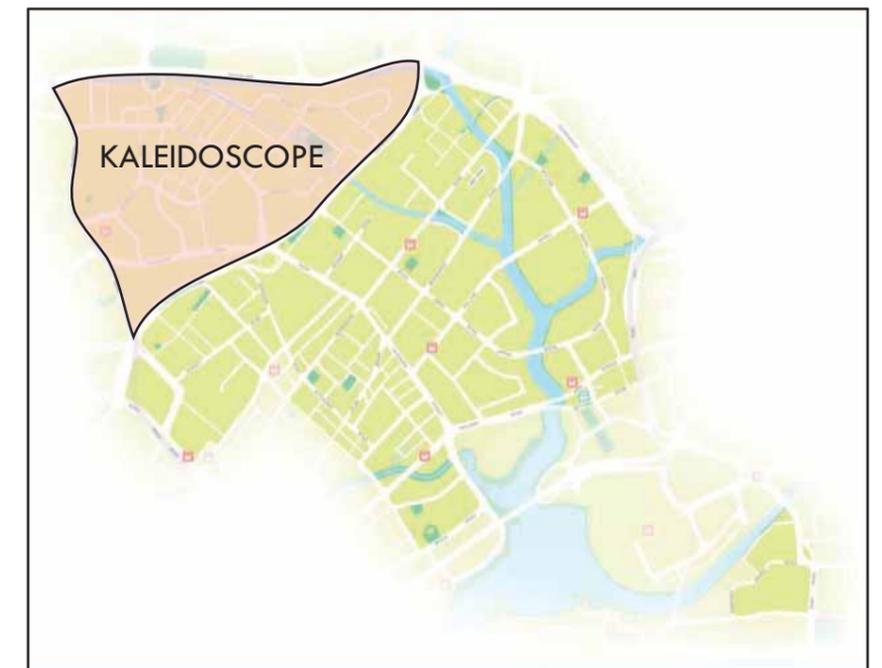
Top: Balestier Rd

Bottom left: Masjid Hajjah Rahimabi Kebun Limau with HDB developments in the background

Bottom right: Whampoa Makan Place

Sub-theme and Concept

This area is an eclectic mix of commercial buzz, institutions, private developments, shophouses and public housing, with the Balestier Road heritage belt weaving through. Public housing is mainly clustered north of Sungei Whampoa with Whampoa Neighbourhood Centre serving as the main link to Balestier Road.



Novena/ Whampoa – Kaleidoscope



Sub-theme and Concept

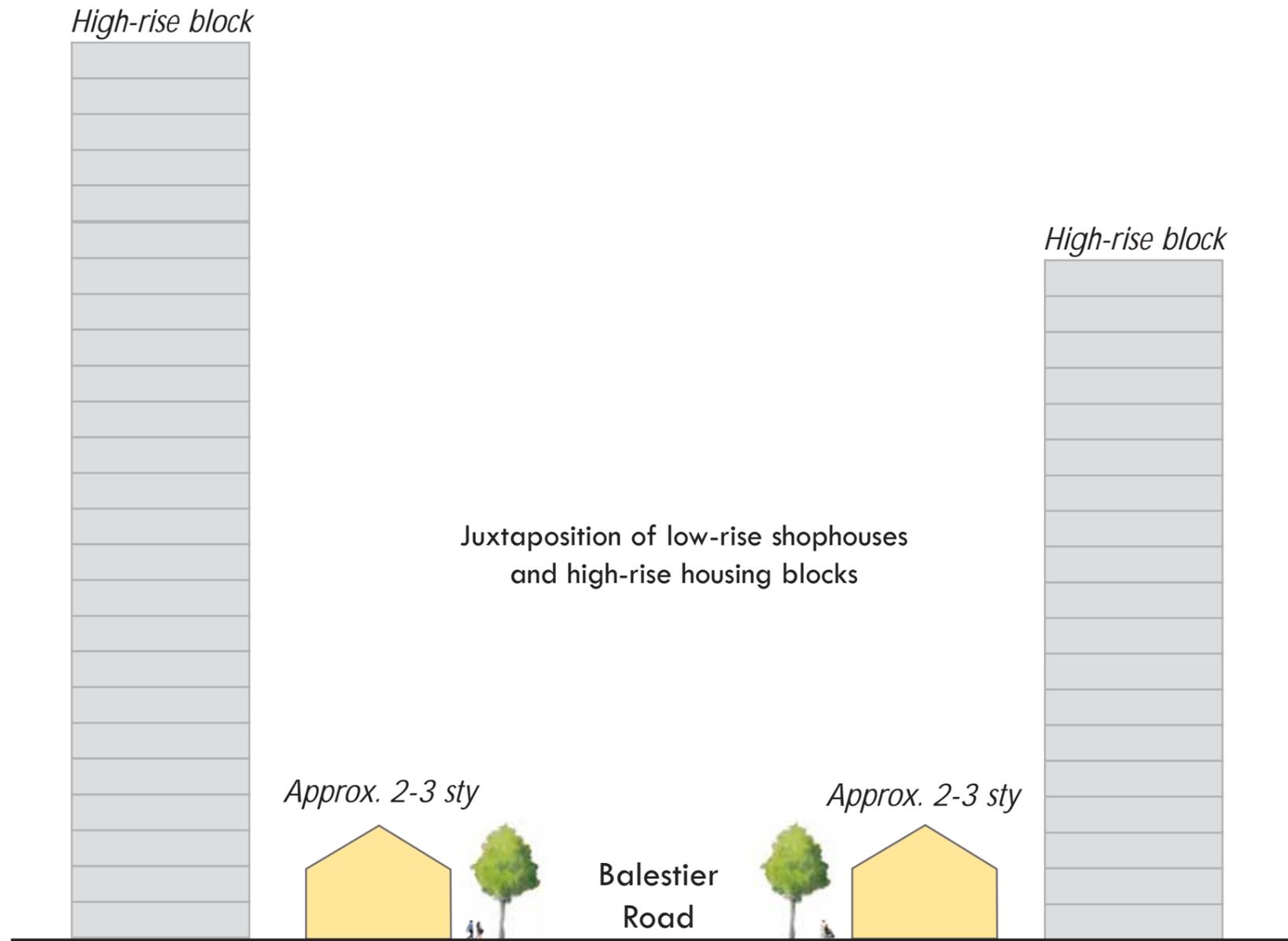
Planning and Design Considerations

- Preserve unique juxtaposition (old and new, high and low-rise developments)
- Developments near/ close to the narrow tributary of Sungei Whampoa to respond to and reference riverine features

Novena/ Whampoa – Kaleidoscope

Form and Massing

- Residential blocks could juxtapose against low-rise areas like Balestier Road



Schematic section across housing development with response to Balestier Road

Novena/ Whampoa – Kaleidoscope



Enhancing Sungei Whampoa with the greening of canal walls through the use of creepers and other improvements such as sheltered seating areas



Lushly planted seating areas introduced as part of PUB's ABC Waters Programme along Sungei Whampoa

Public Spaces

- Public spaces in this subzone should take reference from PUB's ABC Waters improvement works along Sungei Whampoa
- Facilities could also take reference from the plans for Novena HealthCity

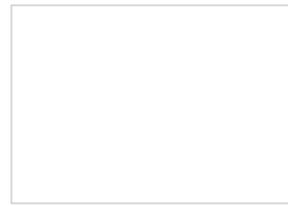
Novena/Whampoa – Kaleidoscope

Colour Palette

In line with the ‘Kaleidoscope’ sub-theme, the suggested colour palette for Novena / Whampoa has white, tan colours with shades of light blue and blue-grey, and vibrant accents of aqua, orange and olive-grey.

Primary Colours

Unify the identity of the area, and form the main base of the colour scheme
(choose both primary colours)



BS 00 E 55



BS 08 B 15

Secondary Colours

Complement the primary base colours
(choose 1 or more secondary colours)



BS 18 E 50



BS 18 C 35



BS 00 A 05

Accent Colours

Highlight certain architectural features, such as fins, ledges, canopies, spandrels, selected parts of gable end walls, etc.
(choose 1 or more accent colours)



BS 08 E 55



BS 18 E 51



BS 12 B 25

Facade and Roofscape

- Consider design elements that express the intimate character of the smaller scale river tributaries
- Consider juxtaposition of forms that take reference to the eclectic nature of Balestier Road



From left: Use of light shades of aqua accents in Whampoa Dew; juxtaposition of horizontality, verticality and randomness expressed on the facade of 1 Moulmein Rise



HDB blocks around Whampoa Road with facade designs that reference the arched details in Masjid Hajjah Rahimabi Kebun Limau

Novena/Whampoa – Kaleidoscope



The 'Kaleidoscope' sub-theme can be expressed with grouping of feature trees, supplemented with colourful and textured shrub planting (example from Blossom Spring @ Yishun)



From left: *Barringtonia asiatica* (Putat Laut); *Dendrolobium umbellatum* (Dendulang); *Syzygium zeylanicum* (Kelat Merah); *Milletia pinnata* (Seashore Mempari)

Landscape Approach

The 'Kaleidoscope' sub-theme can be expressed by applying a plant palette with greater diversity of species consisting of inland riverine planting.

Planting Concept

Small to medium sized trees grouped with a few tall trees to form clusters or avenues of trees with selective placement of colourful and evergreen undergrowth. Plant palette could include feature foliage/ flowers species to add vibrancy and landscape character.

Suggested Tree Species

The following list is intended as a guide for tree species selection and is not meant to be restrictive. Plant selection will need to consider the suitability of species for the site conditions and maintenance requirements.

Small to Medium-Sized Trees with Feature Foliage

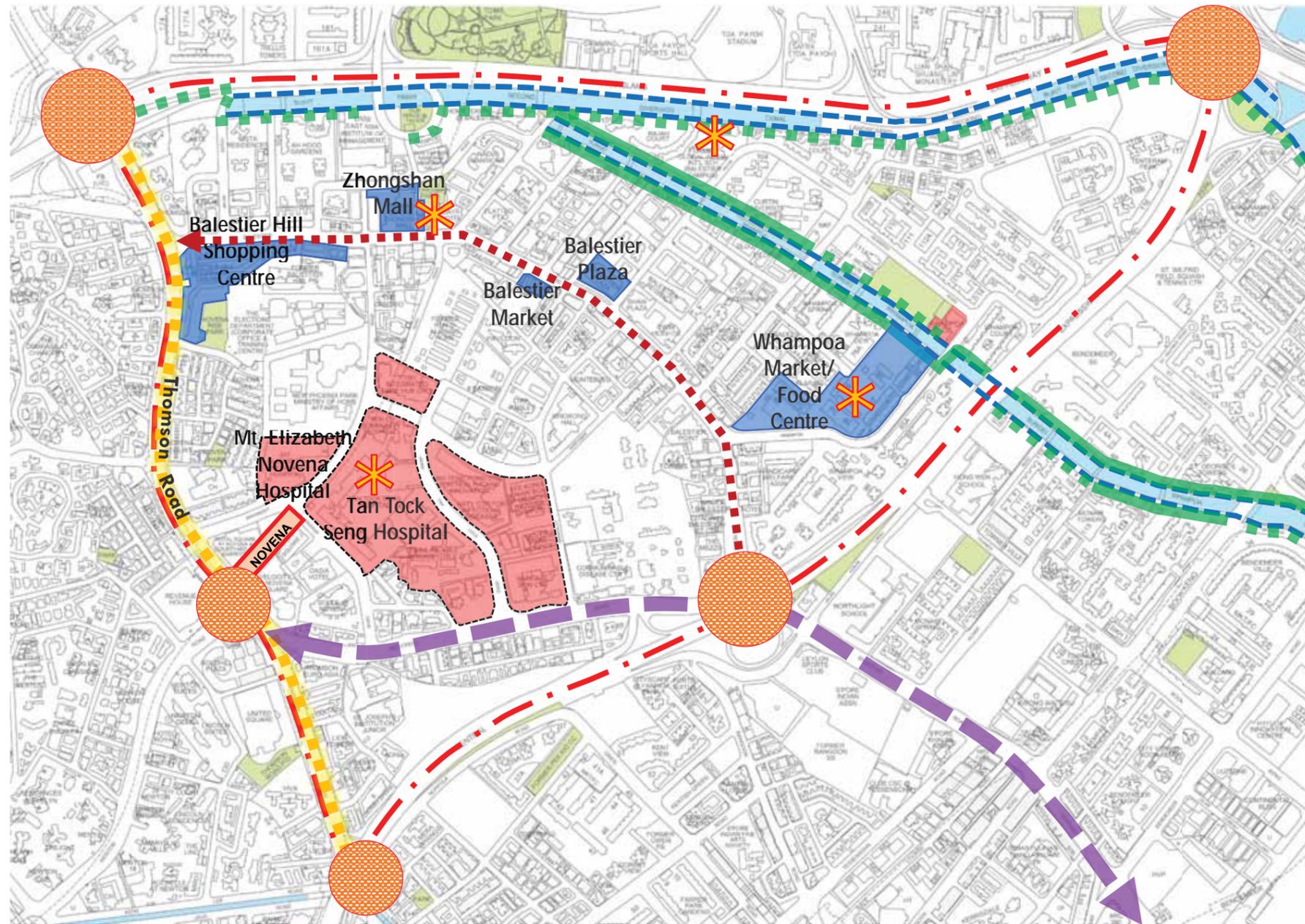
- *Brownea rosa-de-monte* (Rose of Venezuela)
- *Barringtonia asiatica* (Putat Laut)
- *Calophyllum soulattri* (Bintangor Bunut)
- *Dendrolobium umbellatum* (Dendulang)
- *Horsfieldia superba* (Pendarah)
- *Milletia pinnata* (Seashore Mempari)
- *Syzygium zeylanicum* (Kelat Merah)

Tall Trees

- *Calophyllum macrocarpum* (Bintangor Bunut)
- *Melaleuca cajuputi* (Paper-bark)
- *Palaquium obovatum* (White Gutta)

Novena/ Whampoa – Kaleidoscope

Overview of Key Urban Design Considerations



Transport

EXISTING PROPOSED

MRT Station

Facilities

Neighbourhood/ Commercial Centres

Medical Institutions / Facilities

Parks and Waterbodies

Park

Waterbody

Park Connector

Key Corridors

Community Link

River Way

Balestier Road

North-South Corridor

Key Nodes and Junctions

Landmark

Key Junction

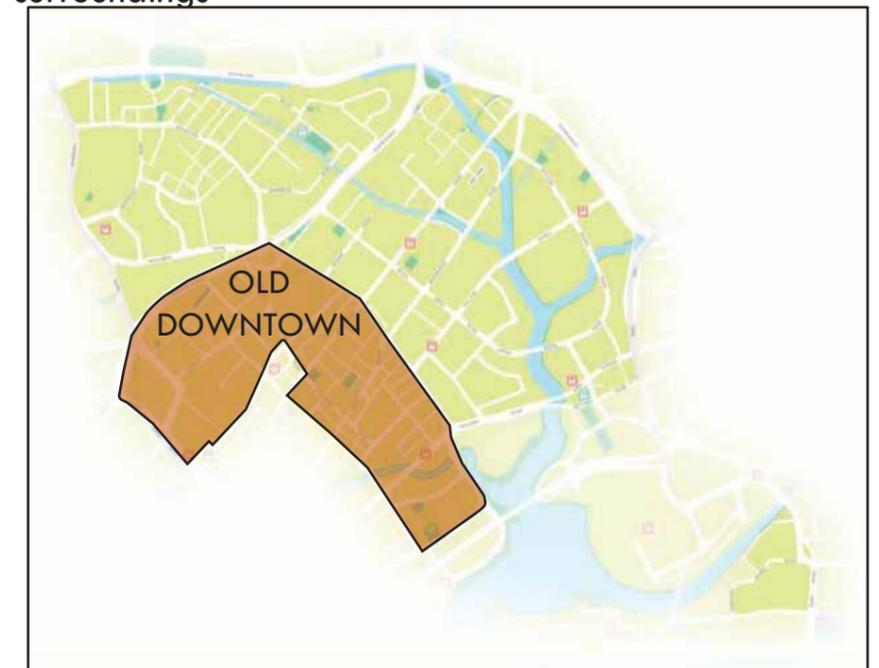
Kampong Java/ Jalan Besar – Old Downtown



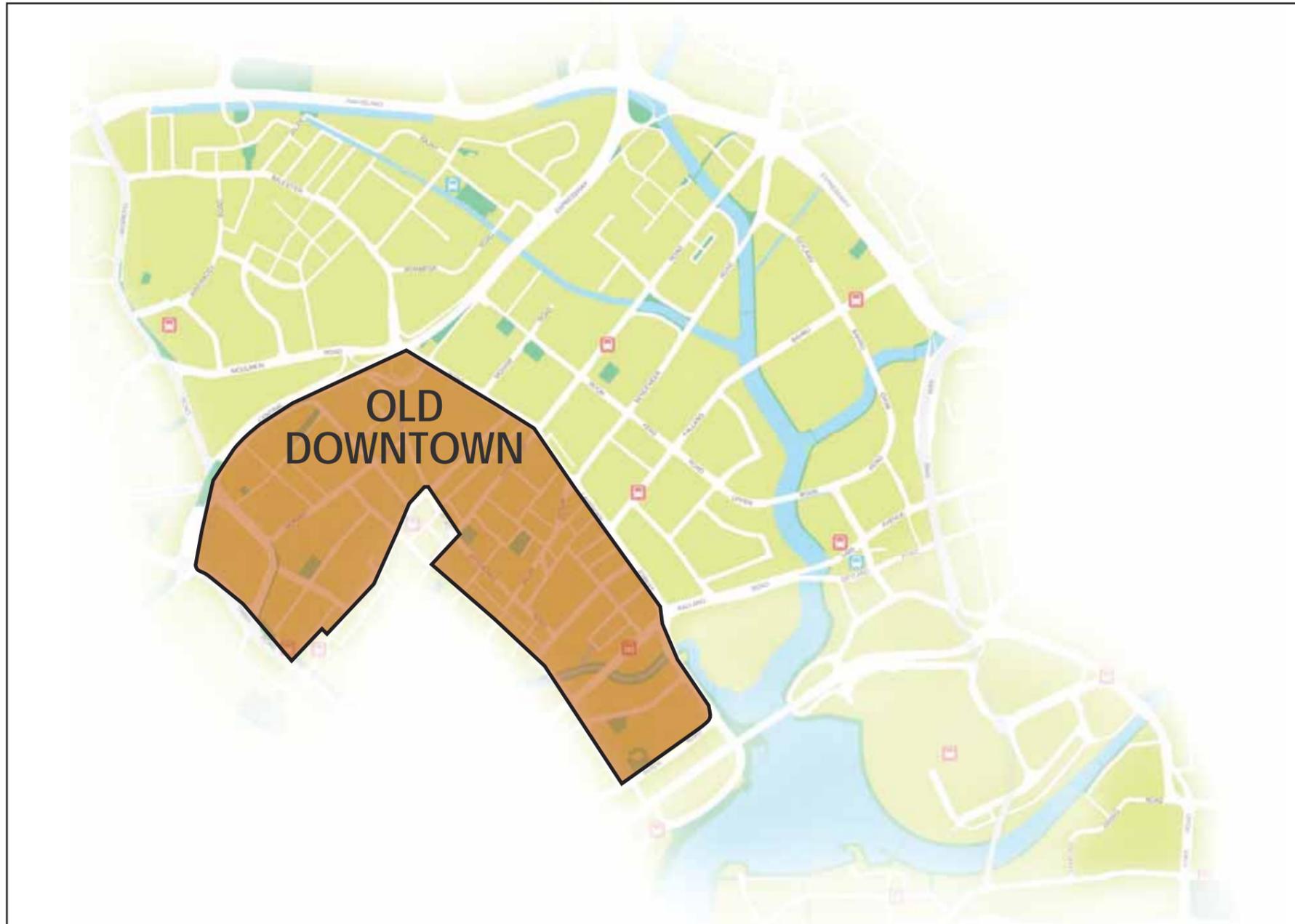
Top: Skyline of Race Course Rd HDB developments
 Bottom left: Kitchener Complex at King George's Ave
 Bottom right: Crawford Court at North Bridge Rd

Sub-theme and Concept

This area has many diverse uses and significant heritage markers given its proximity to Little India and Kampong Glam Heritage district. Public housing developments are mainly smaller, scattered estates that have been designed to respond to their surroundings



Kampong Java/ Jalan Besar – Old Downtown

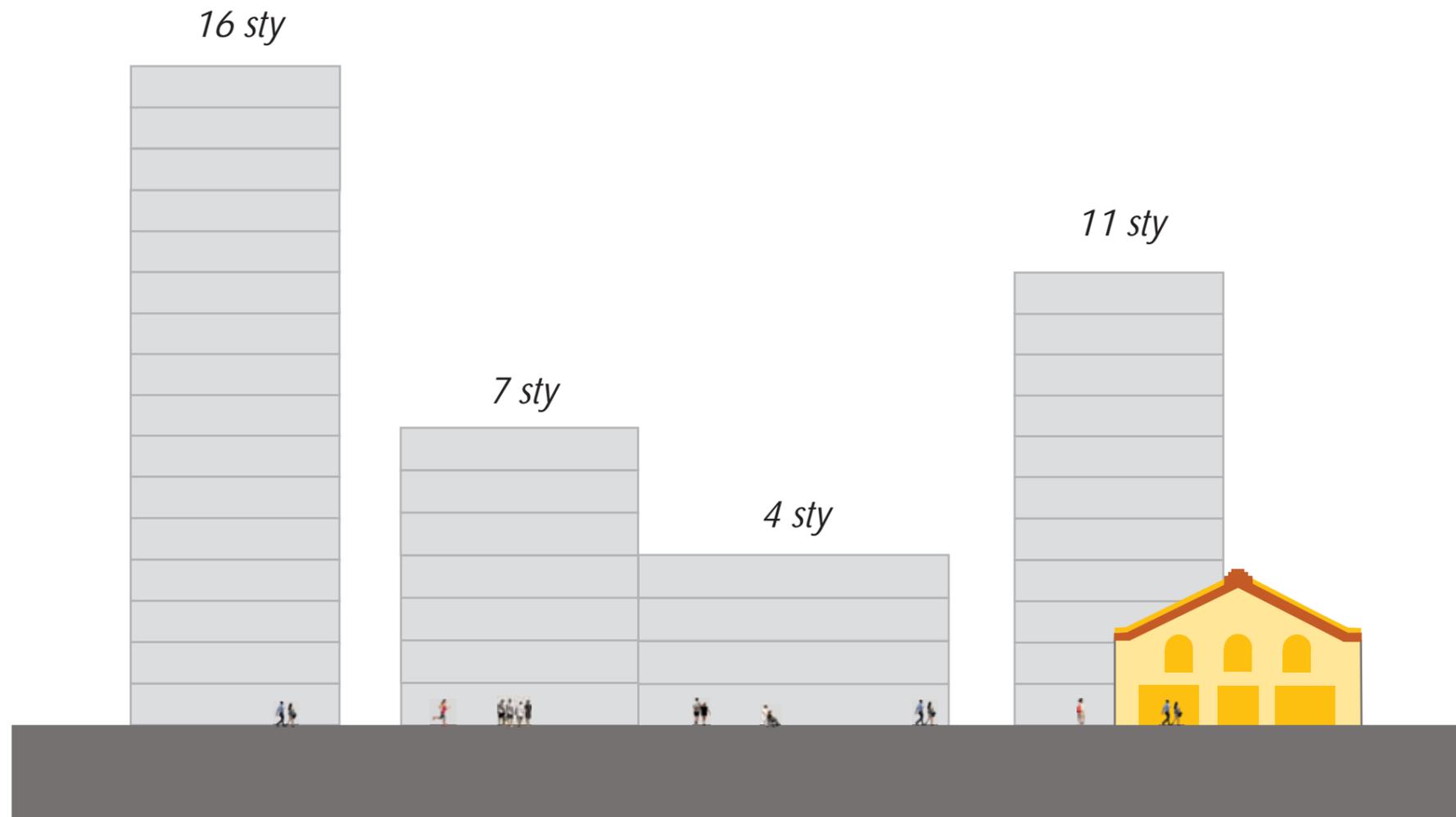


Sub-theme and Concept

Planning and Design Considerations

- Sensitive response to surrounding context/ heritage areas
- Emphasis on streetscape
- Develop unique facades with reference to significant markers in the area to strengthen identity

Kampong Java/ Jalan Besar – Old Downtown



Schematic Section of public housing development along Race Course Rd – response to low-rise buildings

Form and Massing

- Buildings in this area should consider the scale of the proposed buildings when they are to be adjacent to low-rise context
- Building massing could vary along the street to prevent a monolithic massing of tall blocks



Public housing development along Race Course Rd

Kampong Java/ Jalan Besar – Old Downtown



Artist's impression of field/ park space – the former boxing gym building will be repurposed into a multi-purpose community sporting space to honour its unique heritage, set amidst lush greenery

Public Spaces

- Public spaces in this area should take reference from the rich sporting heritage in Farrer Park
- Sporting heritage themes can be incorporated into public spaces, along with the provision of community sporting spaces and facilities

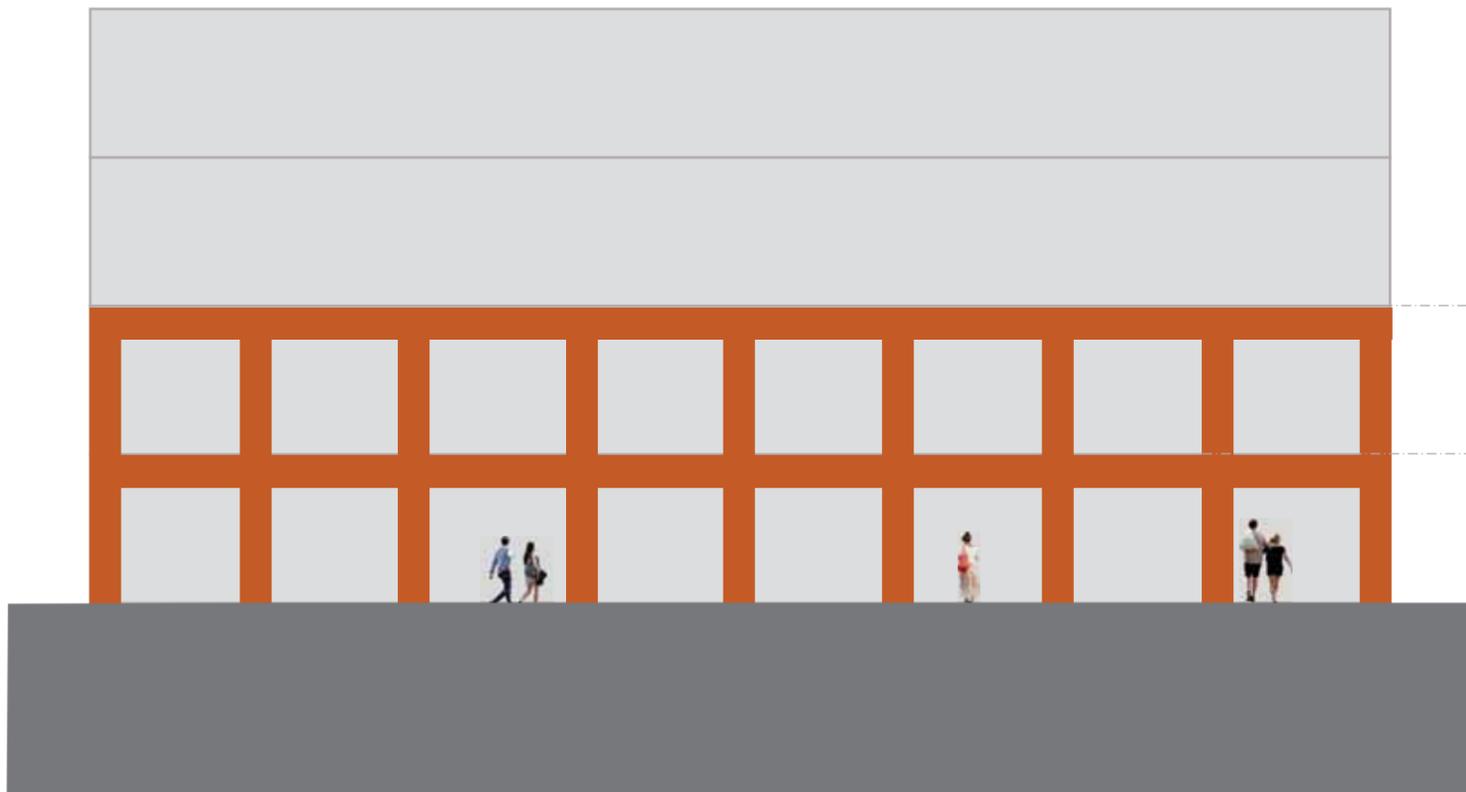
Kampong Java/ Jalan Besar – Old Downtown



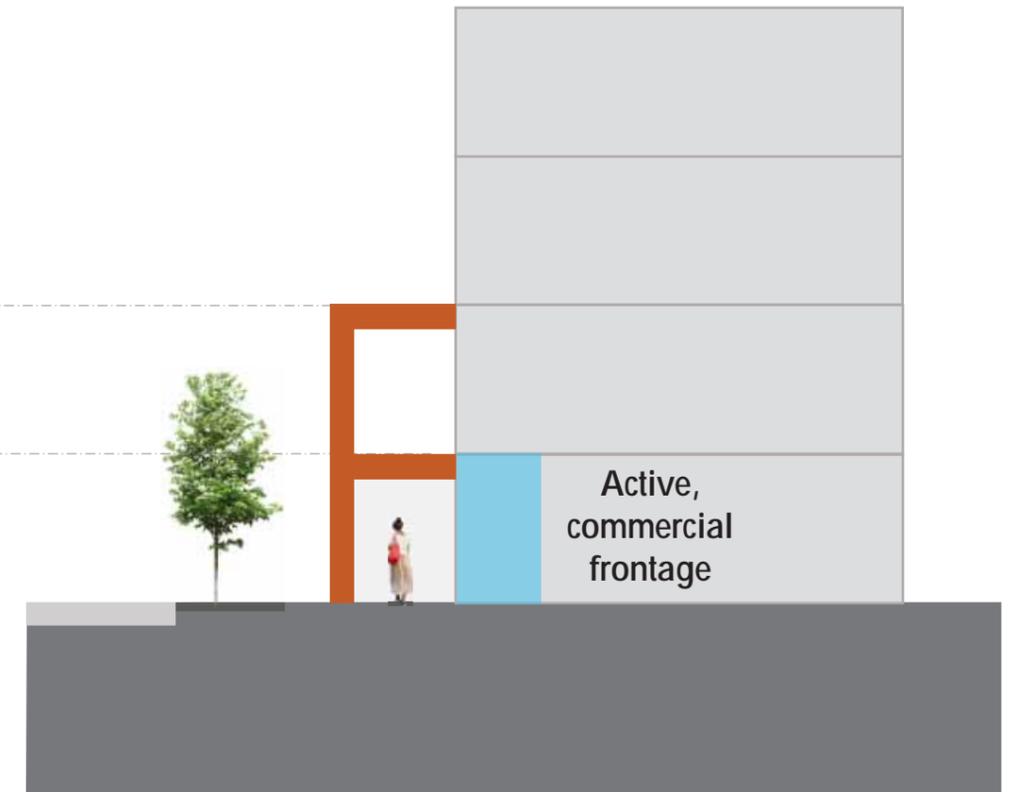
Strong streetscape created by colonnade treatment at Block 803 King George's Ave

Streetscape and Urban Edge

- Some developments have a strong streetscape that has been created by a podium or 'colonnade' that is activated by an active, commercial frontage to the street
- New developments can continue this design language by placing active uses along the street and using rhythmic elements along the street



Schematic sections showing colonnade treatment



Kampong Java/ Jalan Besar – Old Downtown

Colour Palette

The suggested colour palette for Kampong Java/ Jalan Besar closely follows the significant heritage of the areas. White and beige form the basis of the primary colours while bright accent colours accentuate the rich history of this area.

Facade and Roofscape

- Consider unique ornamentation by taking reference from adjacent conservation areas
- Consider differentiated roof silhouettes to respect the pitched roofs of the historical district
- Adopt and extend rhythmic elements from the streetscape to the facade to provide continuity



Zoning of accent colours

Primary Colours

Unify the identity of the area, and form the main base of the colour scheme
(choose both primary colours)



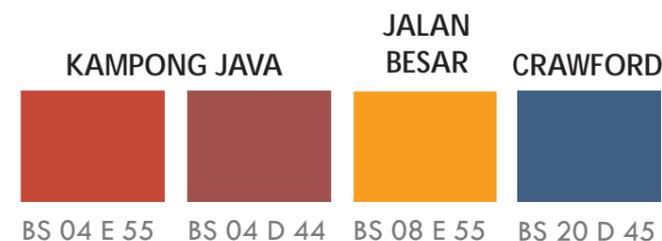
Secondary Colours

Complement the primary base colours
(choose 1 or more secondary colours)



Accent Colours

Highlight certain architectural features, such as fins, ledges, canopies, spandrels, selected parts of gable end walls, etc.
(choose 1 or more accent colours)



Distinct roofscape of the HDB blocks at Race Course Road that match the language of the nearby terrace houses



Example of unique ornamentation on the building facade at Blk 815 Jellicoe Rd

Kampong Java/ Jalan Besar – Old Downtown



The 'Old Downtown' sub-theme can feature heritage elements set in lush planting (example from Heritage Garden @ Yishun)



From left: *Citharexylum spinosum* (Fiddlewood); *Diospyros tristis*; *Flacourtia inermis* (Rukam); *Neolitsea cassia* (Shore Laurel); *Dyera costulata* (Jelutong)

Landscape Approach

The landscape design for 'Old Downtown' sub-theme should respond sensitively to the surrounding context and heritage areas. Proposed landscape elements of heritage and cultural value could be set within gardens with an urban character.

Planting Concept

Feature tree species with ornamental flowers and foliage mixed with trees of structured, tiered/layered forms. The planting design could adopt an urban garden landscape character with rhythmic patterns.

Suggested Tree Species

The following list is intended as a guide for tree species selection and is not meant to be restrictive. Plant selection will need to consider the suitability of species for the site conditions and maintenance requirements.

Feature Trees with Ornamental Flowers/ Foliage

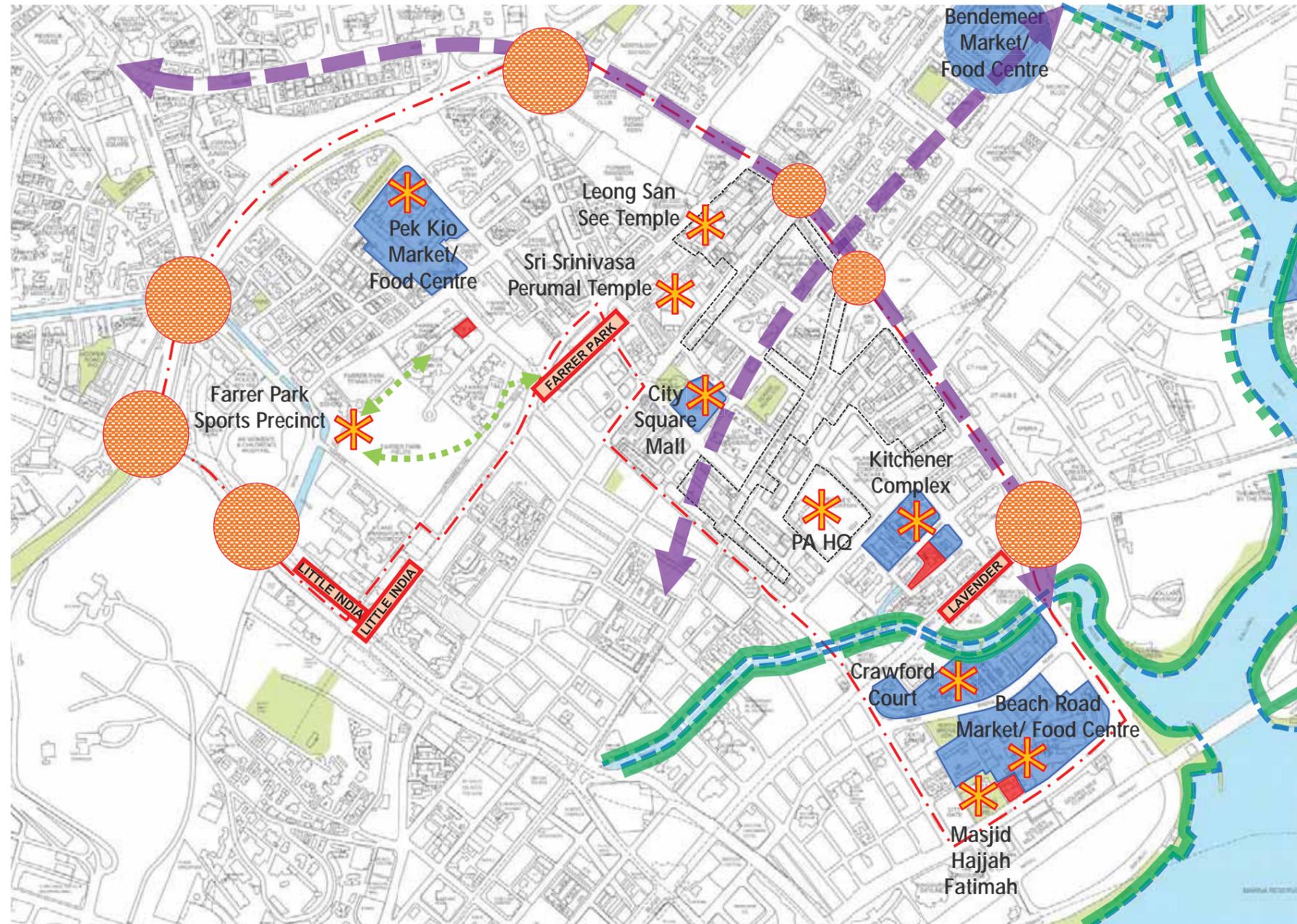
- *Brownea rosa-de-monte* (Rose of Venezuela)
- *Citharexylum spinosum* (Fiddlewood)
- *Diospyros tristis*
- *Flacourtia inermis* (Rukam)
- *Neolitsea cassia* (Shore Laurel)
- *Suregada multiflora* (False Lime)

Trees of Tiered/ Layered/ Structured Form

- *Diospyros buxifolia*
- *Dyera costulata* (Jelutong)
- *Terminalia catappa* (Sea Almond)

Kampong Java/ Jalan Besar – Old Downtown

Overview of Key Urban Design Considerations



Transport

EXISTING PROPOSED

MRT Station

Facilities

Neighbourhood/ Commercial Centre

Medical Institution / Facilities

Parks and Waterbodies

Park

Waterbody

Park Connector

Proposed Local Links between Developments

Key Corridors

Community Link

River Way

Key Nodes and Junctions

Landmark

Key Junction

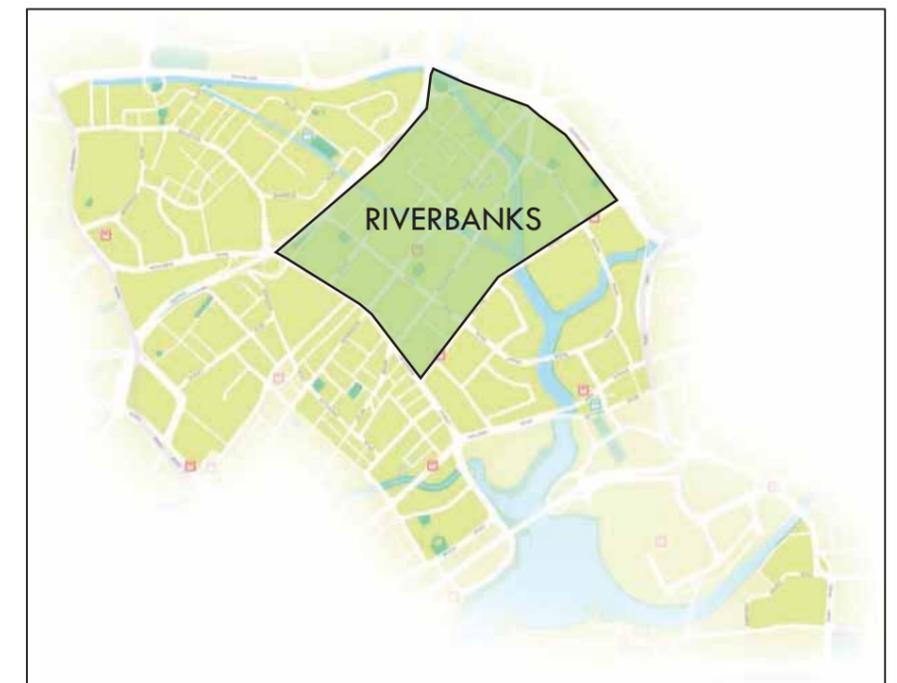
Kallang Basin – Riverbanks



Anti-clockwise from top: The River Vista @ Kallang; Kolam Ayer Community Club; Bendemeer Shopping Mall

Sub-theme and Concept

This area includes Bendemeer and Geylang Bahru Neighbourhood Centres which are vibrant community and commercial hubs. It also has one of the most recognisable stretches of Kallang River characterised by naturalised banks with housing on both sides.



Kallang Basin – Riverbanks

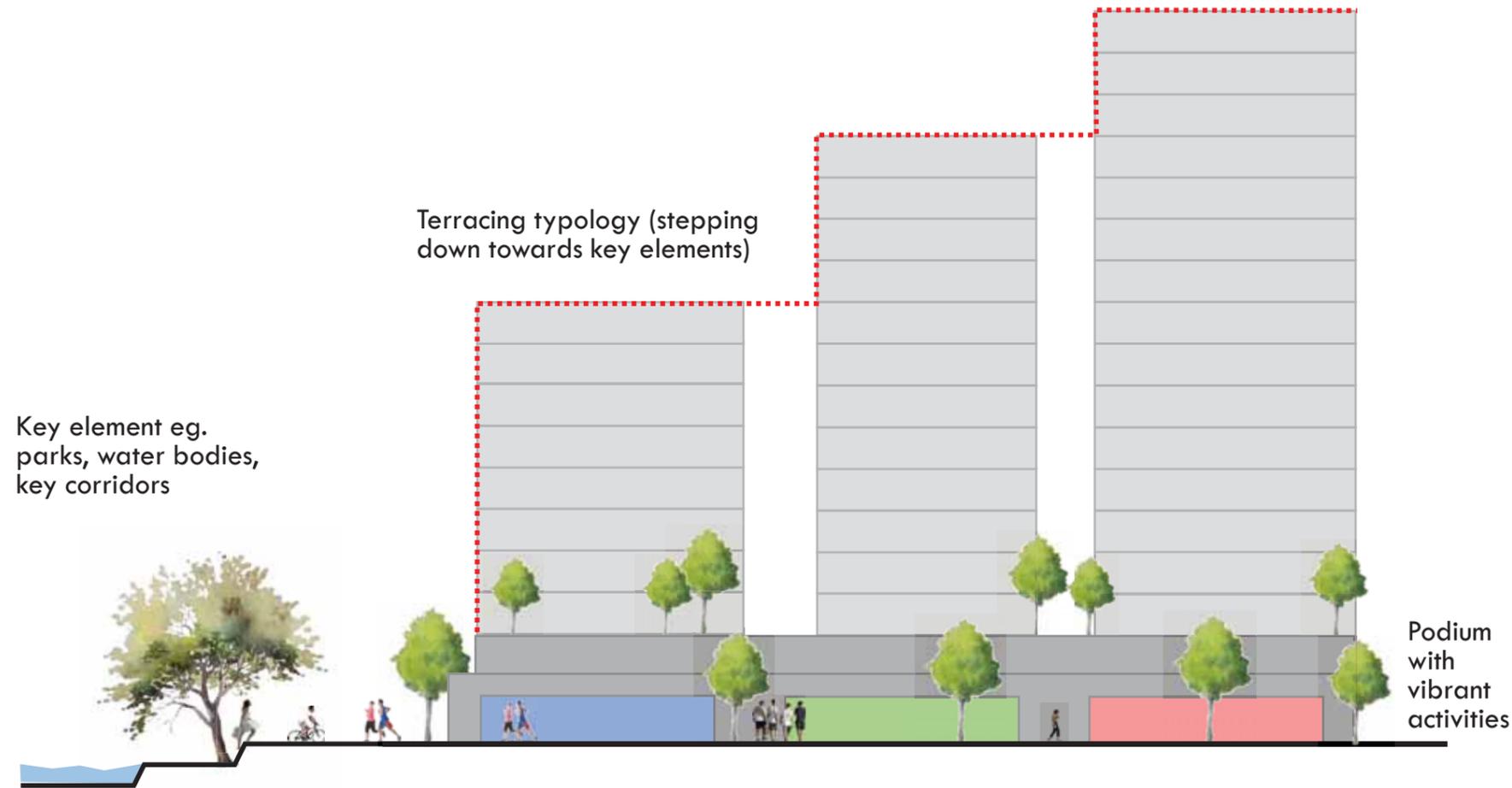


Sub-theme and Concept

Planning and Design Considerations

- Respond to the intimate scale along this stretch of the riverfront which has a naturalistic character e.g. gentle-sloping banks and lush landscaping
- Strengthen the cohesive streetscape along key roads that lend identity to the area

Kallang Basin – Riverbanks



Schematic section of future housing development with response to Kallang River

Form and Massing

- Terracing typology (stepping down of blocks towards key elements, i.e. parks, water bodies and key corridors) to preserve intimate scale of riverfront
- To create a human-scale experience at street level, the horizontal elements at the lower levels can be more defined, for example by adopting podium-block typologies

Kallang Basin – Riverbanks



PUB's ABC Waters @ Kallang River project – Intimate seating nooks along a lushly planted riverfront

Public Spaces

- Public spaces in this subzone should take reference from PUB's ABC Waters project along Kallang River
- Introduce new intimate seating nodes along the lushly planted waterfront where possible



Riverine themed playground fronting the Kallang River

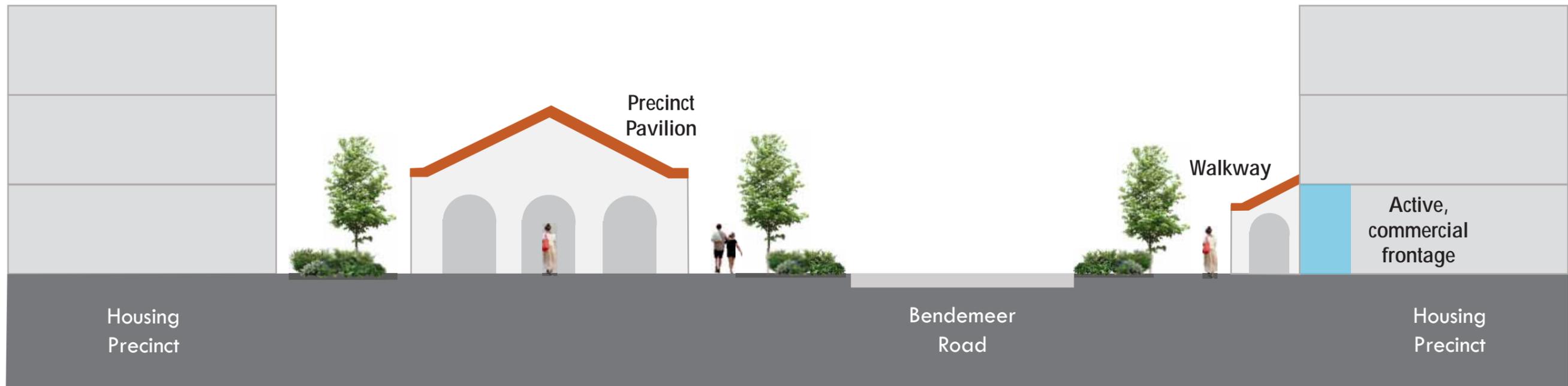
Kallang Basin – Riverbanks



Repeating motifs and design elements along both sides of Bendemeer Rd and within developments

Streetscape and Urban Edge

- Some of the key streets in this area, like Bendemeer Road and Geylang Bahru Road, have a cohesive streetscape created by mirroring the design language across the street
- This can be continued in new developments where applicable



Schematic section across Bendemeer Road

Kallang Basin – Riverbanks

Colour Palette

In line with the well-defined and recognisable stretch of the Kallang River, the suggested colour palette for Kallang Basin is white with shades of blue to give a cohesive language. In addition to relating to the river, there is the low-rise context of conserved cluster Townerville, with warmer orange tones. Accents of dark blue and orange can help accentuate visual interest.

Facade and Roofscape

- Continue to strengthen the unique application of riverine design language through facade details and possible play of light; and mirroring design elements
- Simple roof forms that accentuate the terracing typology

Primary Colours

Unify the identity of the area, and form the main base of the colour scheme
(choose both primary colours)



Secondary Colours

Complement the primary base colours
(choose 1 or more secondary colours)



Accent Colours

Highlight certain architectural features, such as fins, ledges, canopies, spandrels, selected parts of gable end walls, etc.
(choose 1 or more accent colours)

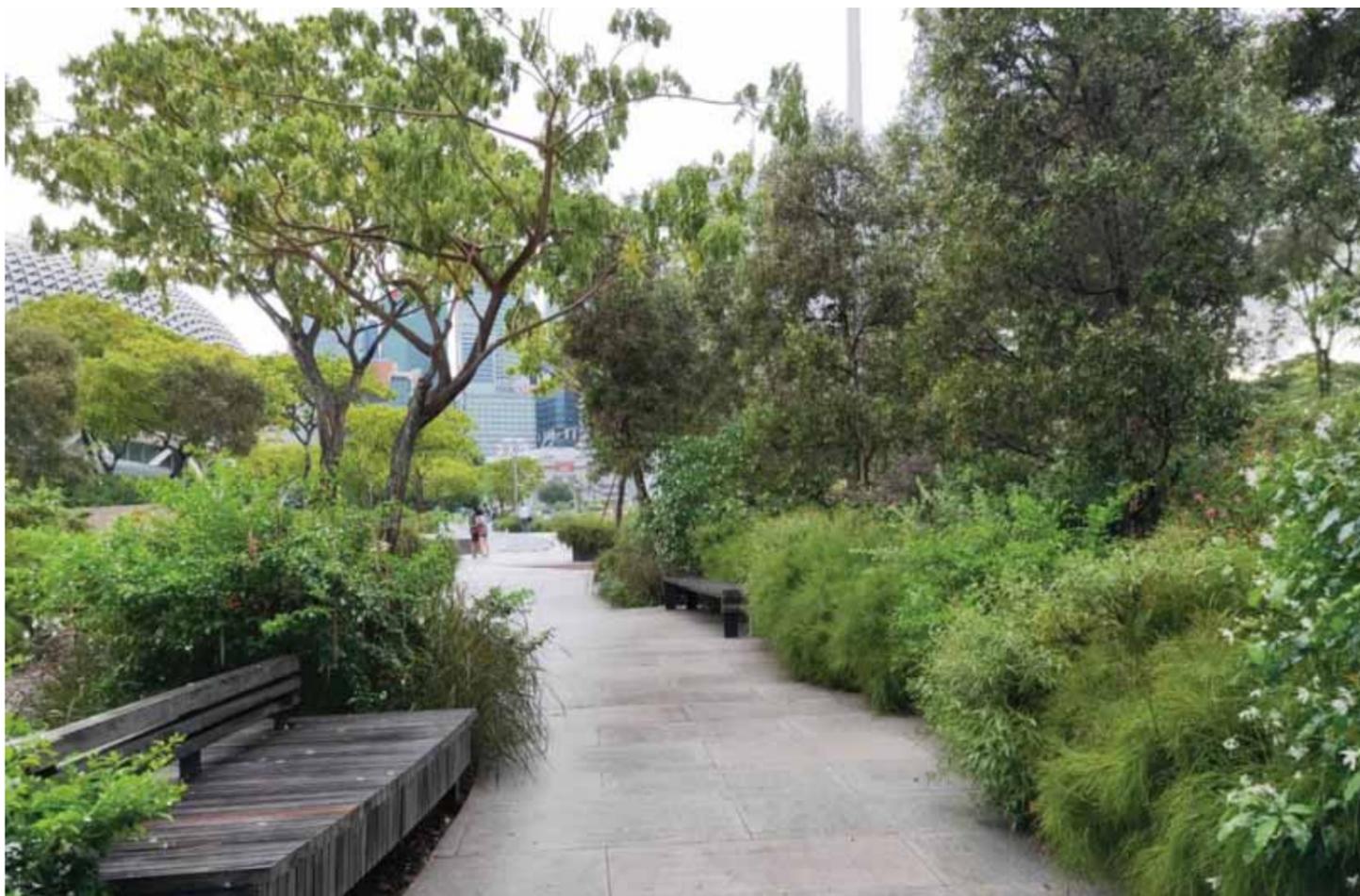


Riverine colours and motifs evident in artist's impression of Kempas Residences (left) and The River Vista @ Kallang (right)



Accents of orange used in artist's impression of Towner Residences, strengthening localised references such as the conserved cluster Townerville

Kallang Basin – Riverbanks



The 'Riverbanks' sub-theme can be expressed with naturalistic riverine planting and meandering paths (example from Esplanade Forecourt Garden)



From left: *Amesiodendron chinense*; *Cananga odorata* (Ylang Ylang); *Dalbergia oliveri* (Black Rosewood); *Calophyllum soulattri* (Bintangor Bunut)

Landscape Approach

Inland riverine planting with greater diversity of species could be planted along winding landscape spaces, leading people towards the river tributaries. Proposed plants can have leathery leaves, with soft and weeping foliage. Where feasible, stormwater management features like gravel swales and bioswales can be integrated into the landscape to showcase water after rain.

Planting Concept

Riverine tree clusters with pendulous foliage cascades, droopy branches and soft foliage undergrowth, arranged in naturalistic groupings. Feature trees could showcase yellow/ orange foliage and ornamental flowers.

Suggested Tree Species

The following list is intended as a guide for tree species selection and is not meant to be restrictive. Plant selection will need to consider the suitability of species for the site conditions and maintenance requirements.

Trees with Pendulous Foliage

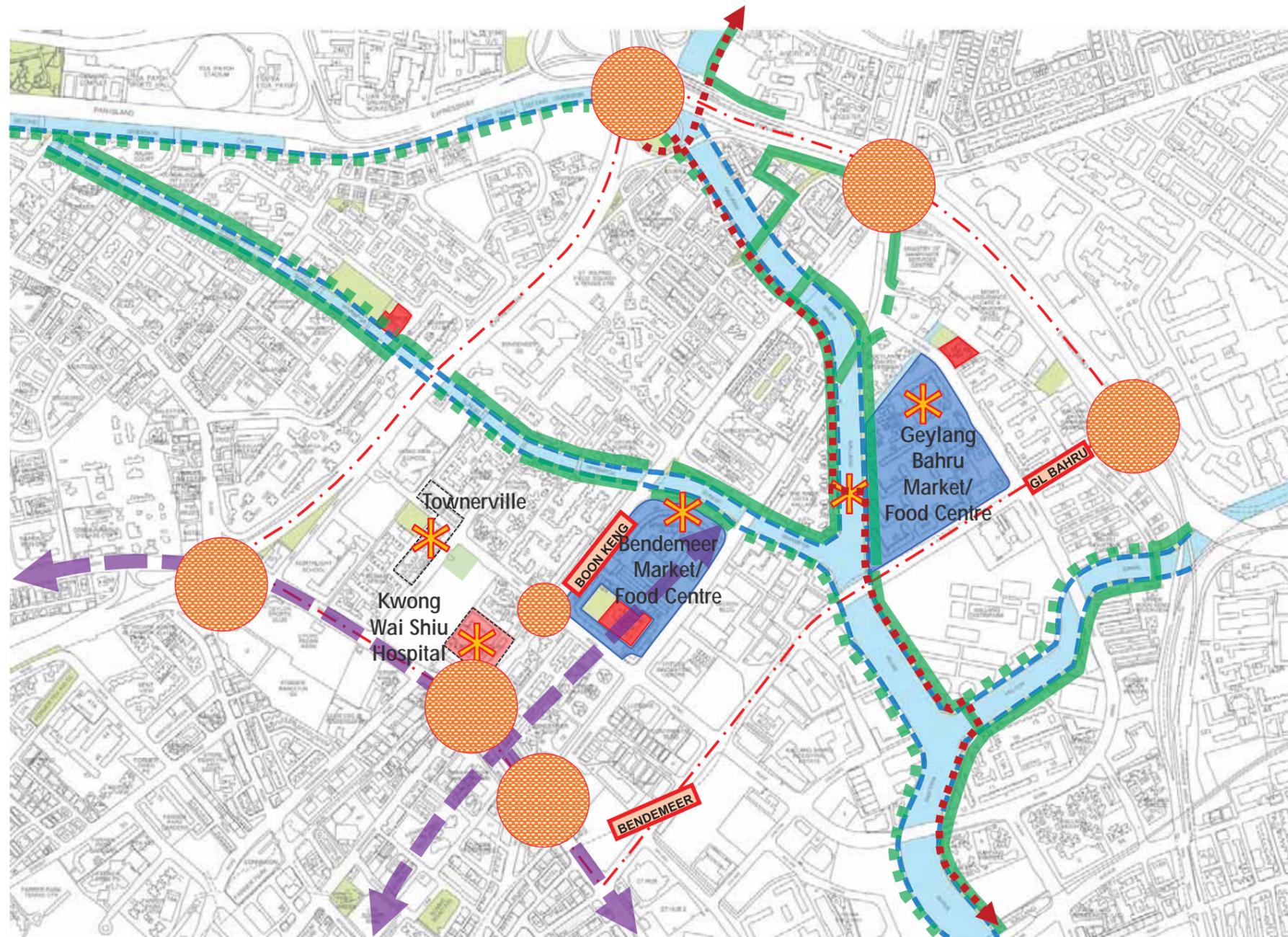
- *Amesiodendron chinense*
- *Cananga odorata* (Ylang Ylang)
- *Cratoxylum cochinchinense* (Kayu Arang)
- *Dalbergia oliveri* (Black Rosewood)
- *Leptospermum madidum* (Weeping Tea-Tree)

Trees with Yellow/ Orange Foliage or Flowers

- *Calophyllum soulattri* (Bintangor Bunut)
- *Millettia pinnata* (Seashore Mempari)
- *Pometia pinnata* (Island Lychee)
- *Tarena fragrans* (River Tarena)

Kallang/ Whampoa – Riverbanks

Overview of Key Urban Design Considerations



Transport

EXISTING PROPOSED

MRT Station

Facilities

Neighbourhood/ Commercial Centre

Medical Institution/ Facilities

Parks and Waterbodies

Park

Waterbody

Park Connector

Key Corridors

Community Link

River Way

Bishan-to-City Route

Key Nodes and Junctions

Landmark

Key Junction

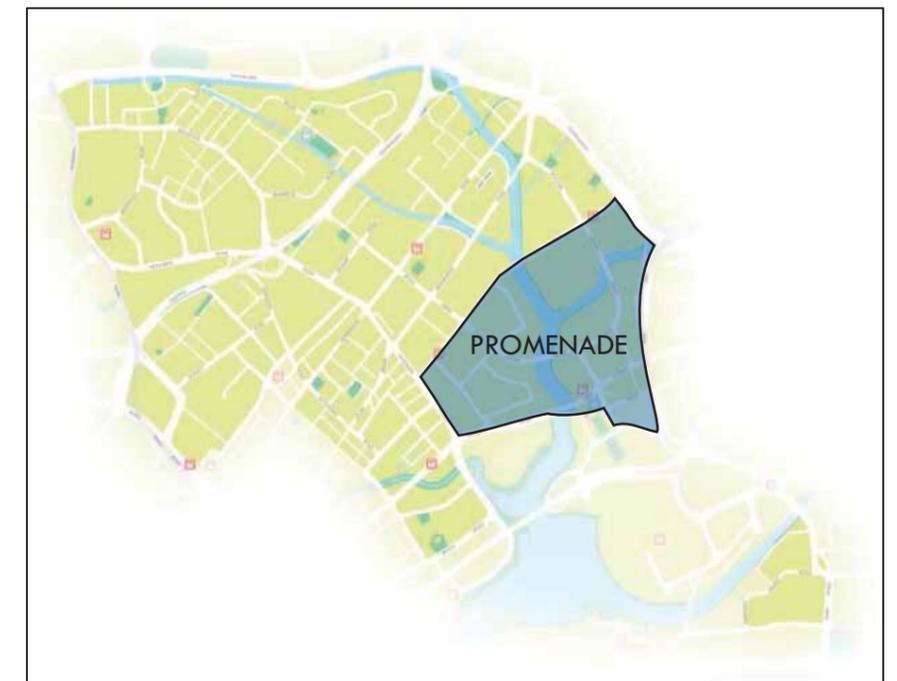
Upper Boon Keng – Promenade



Aerial view from Upper Boon Keng Road

Sub-theme and Concept

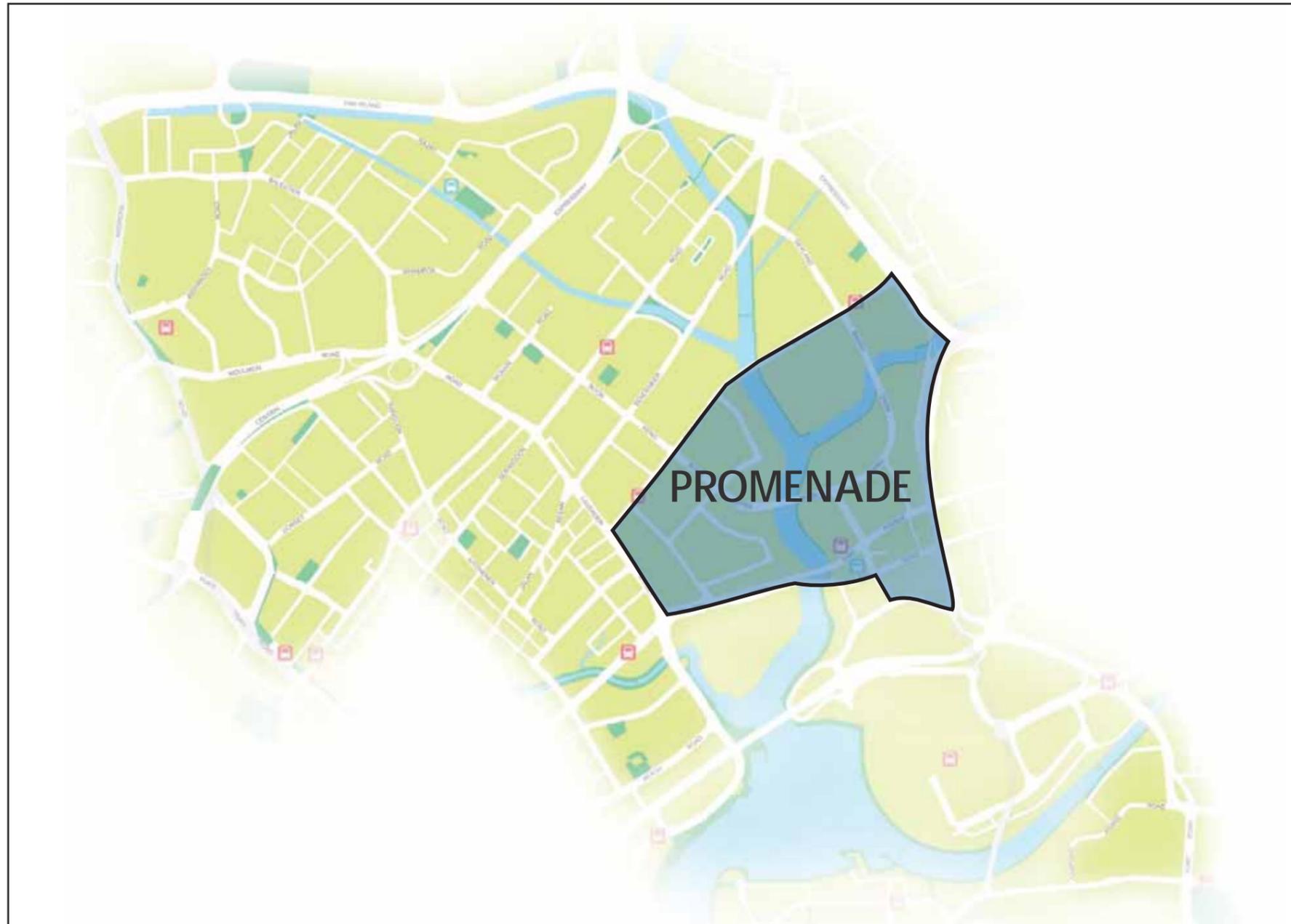
The main activity hubs of this area are the commercial cluster at Boon Keng Ville, Geylang West Community Centre and Kallang MRT. Located at the wider course of the river, this area offers a grander riverfront experience and views towards the city, thus exuding a more urban character.



RIVER VISTAS
CITY VIEW
PROMENADE
URBAN
BOON KENG VILLE

INDUSTRIAL
WIDE RIVER
GRAND
KALLANG MRT
OLD & NEW
PLAZA

Upper Boon Keng – Promenade

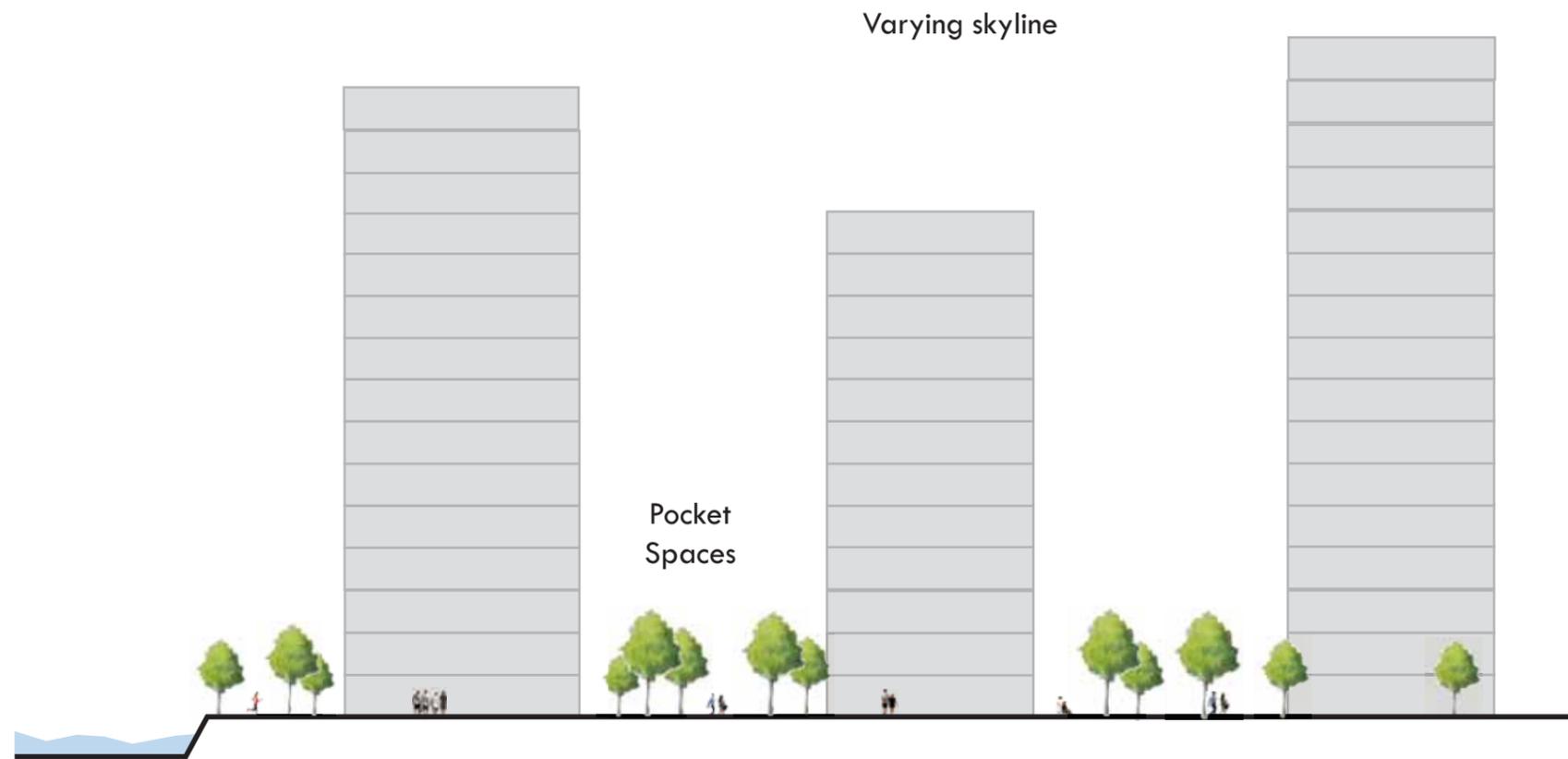


Sub-theme and Concept

Planning and Design Considerations

- Respond to the wider scale of the riverfront which has a more urban character
- Opportunity to capitalise on the city views
- Create pocket spaces at various levels to provide visual and green relief amidst the urban landscape

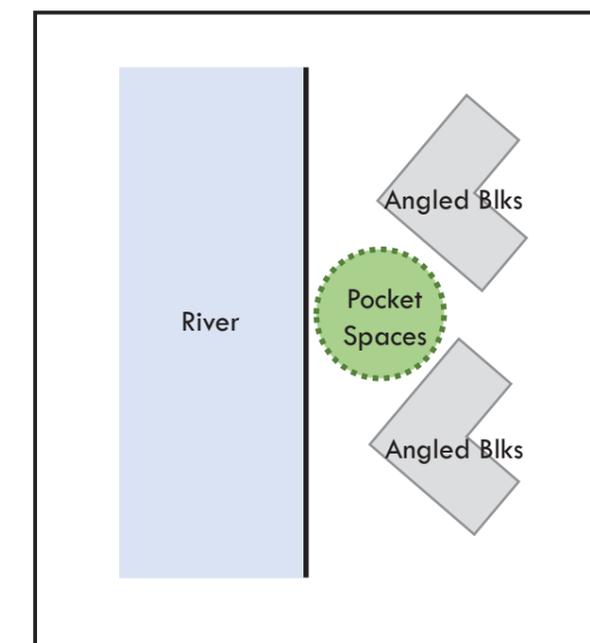
Upper Boon Keng – Promenade



Schematic section across future housing development with response to Kallang River

Form and Massing

- Create a more urban edge to the riverfront
- Blocks to compose a varying skyline, with glimpses of the riverfront
- Angled blocks to create pocket spaces along river; similar to approach taken by existing Kallang Trivista
- Pocket spaces create visual relief within urban landscape



Schematic plan of angled blocks along riverfront

Upper Boon Keng – Promenade



PUB's ABC Waters project along Kallang River showing decked urban seating area with shade, with views towards the water

Public Spaces

- Public spaces in this area should take reference from PUB's ABC Waters project along Kallang River
- An urban treatment should be applied to public spaces, incorporating urban plazas, amphitheatres, with clear vista lines



A network of sheltered connections in Kallang Trivista leads to an open plaza space fronting the Kallang River

Upper Boon Keng – Promenade

Colour Palette

As the Kallang River widens to a grander riverfront experience in this area, darker secondary and accent tones highlight the difference in scale of the river in this area compared to the ‘Riverbanks’ sub-theme area. Accents of dark blue, brown and orange tones can be adopted to reflect the character of the industrial estate and shophouses in the area.

Facade and Roofscape

- Consider strong urban forms to shape the city skyline
- Part of the roofscape can adopt riverine design language or be lit up for landmark blocks
- Strengthen the local identity such as designing industrial or shophouse elements, interpreted in a contemporary way

Primary Colours

Unify the identity of the area, and form the main base of the colour scheme
(choose both primary colours)



Secondary Colours

Complement the primary base colours
(choose 1 or more secondary colours)



Accent Colours

Highlight certain architectural features, such as fins, ledges, canopies, spandrels, selected parts of gable end walls, etc.
(choose 1 or more accent colours)



Strong urban forms of Kallang Trivista as part of city skyline which can be easily identified from the wide riverfront promenade



Accents of orange and dark grey are used in Kallang Residences, reflecting the colours of the surrounding older HDB blocks and shophouses

Upper Boon Keng – Promenade



The ‘Promenade’ sub-theme could be expressed through the use of trees to enhance and frame open frontage views towards the city and river edge (example from Kallang Park Connector)



From left: *Cratoxylum formosum* (Pink Empat); *Erythroxylum cuneatum* (Inai Inai); *Libidibia ferrea* (Leopard Tree); *Tristaniopsis whiteana* (River Tristania); *Cyrtophyllum fragrans* (Tembusu)

Landscape Approach

The area in the ‘Promenade’ sub-theme features a more urban riverfront experience, with views and sight lines towards the city. The trees proposed in this area could showcase interesting bark, trunk, or foliage that frame views and lead people to the river edge.

Planting Concept

Trees with glossy/ leathery leaf texture and an open crown that allow light to filter through, interspersed with shade-providing trees that provide shade along the promenade. Trees should be specified with sufficient clear trunk height to enable unblocked sight lines and views, and to create a sense of openness.

Suggested Tree Species

The following list is intended as a guide for tree species selection and is not meant to be restrictive. Plant selection will need to consider the suitability of species for the site conditions and maintenance requirements.

Trees with Crowns of Light Foliage

- *Cratoxylum formosum* (Pink Empat)
- *Erythroxylum cuneatum* (Inai Inai)

Trees with Ornamental Trunks

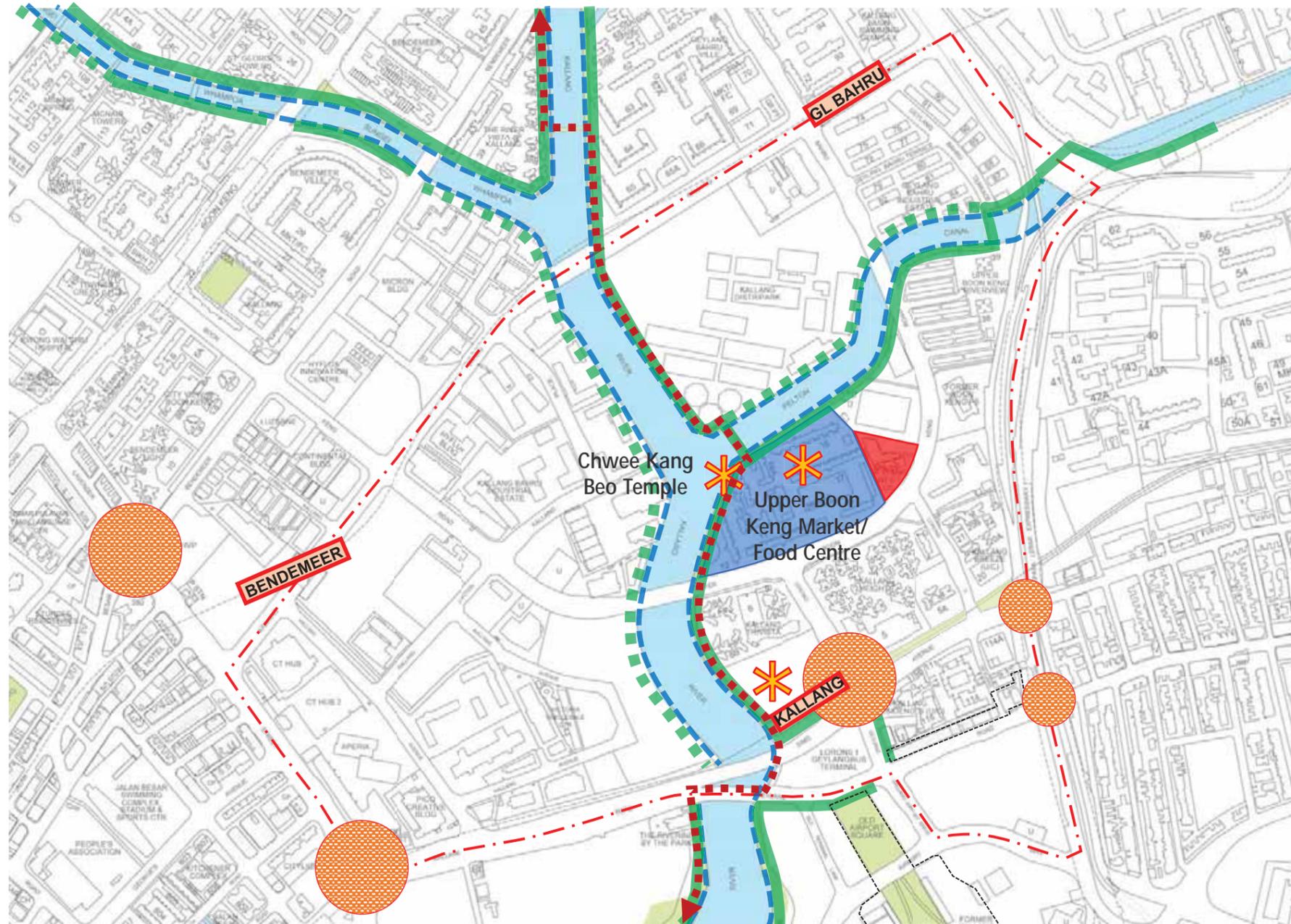
- *Libidibia ferrea* (Leopard Tree)
- *Tristaniopsis spp.* (River, Sea, Hill Tristania)

Shade Trees

- *Dalbergia oliveri* (Black Rosewood)
- *Cyrtophyllum fragrans* (Tembusu)
- *Vatica rassak* (Resak Irian)

Upper Boon Keng – Promenade

Overview of Key Urban Design Considerations



Transport

EXISTING PROPOSED

MRT Station

Facilities

Neighbourhood/ Commercial Centres

Medical Institutions / Facilities

Parks and Waterbodies

Park

Waterbody

Park Connector

Key Corridors

Community Link

River Way

Bishan-to-City Route

Key Nodes and Junctions

Landmarks

Key Junctions

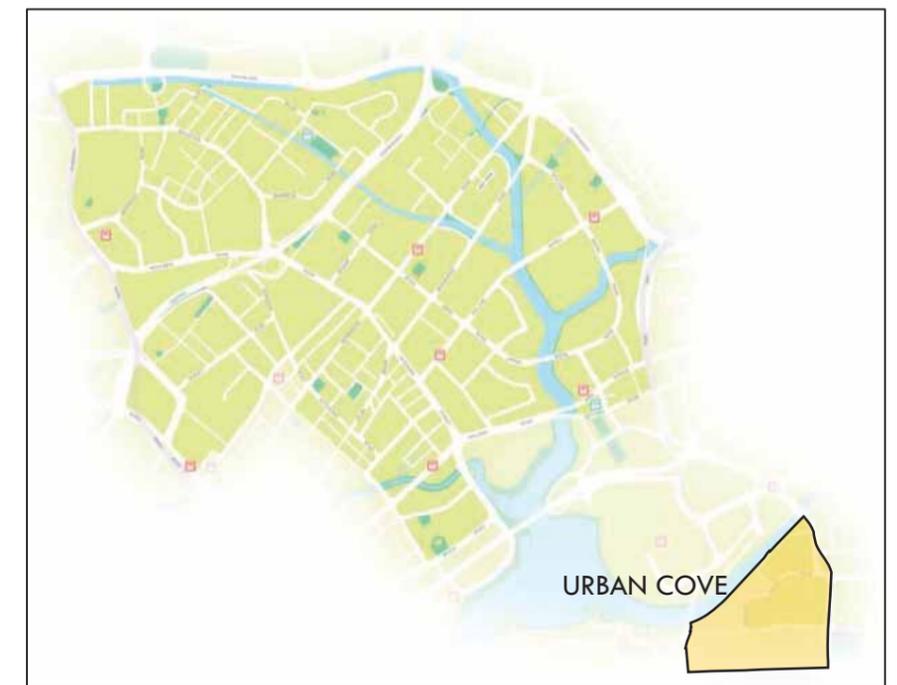
Tanjong Rhu – Urban Cove



Di Tanjong Rhu estate with housing blocks arranged around a central courtyard, and along the riverfront

Sub-theme and Concept

This area is an intimate cluster that is predominantly residential, tucked away from the rest of the town like a 'cove'. Its waterfront location offers views of the city and great access to Geylang Park Connector, as well as recreational amenities at Sports Hub.



TUCKED AWAY
 INTIMATE GREEN CITY VIEW
URBAN COVE SKYLINE
 TRANQUIL SPORTS HUB
 SCENIC LUSH RECREATION

Tanjong Rhu – Urban Cove

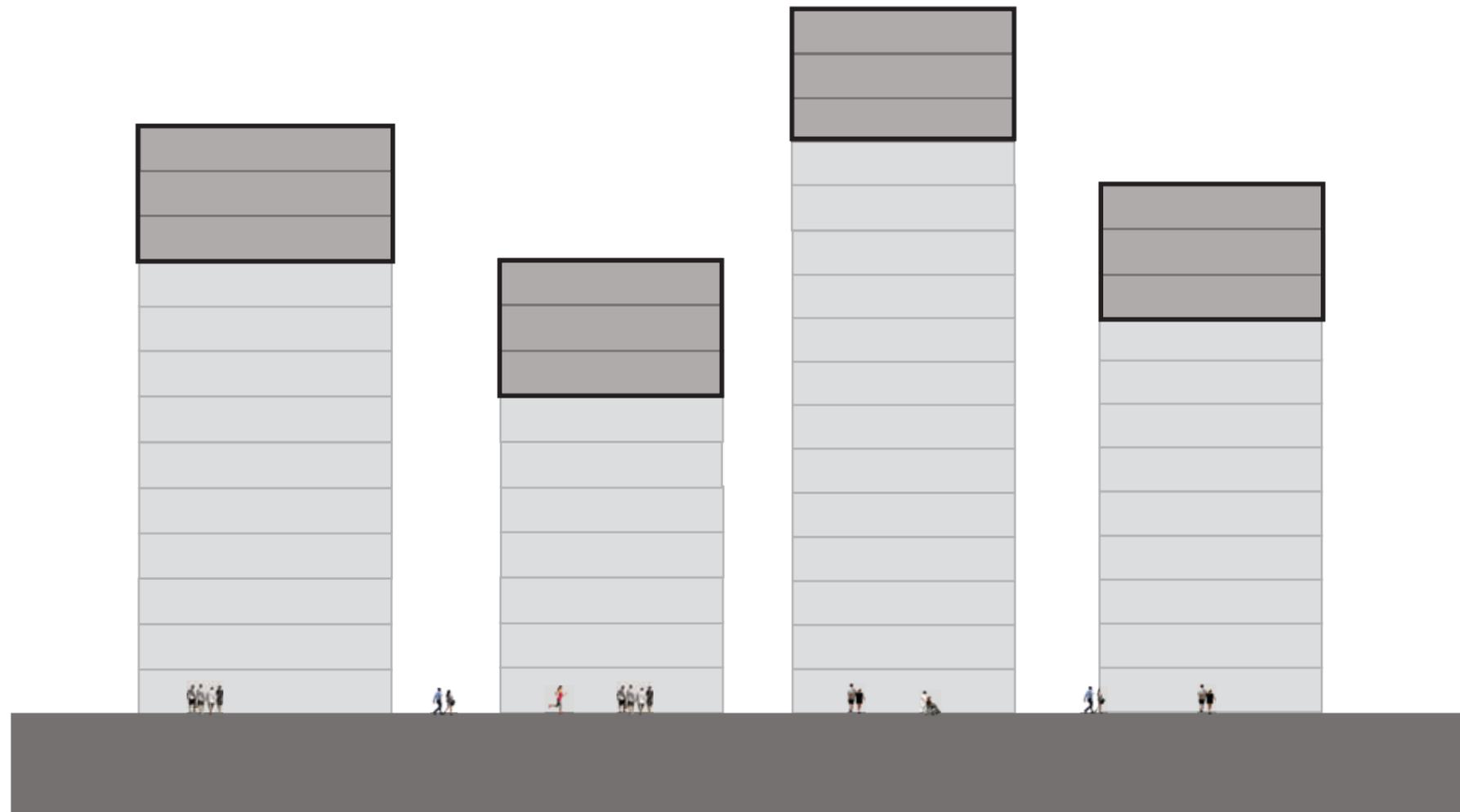


Sub-theme and Concept

Planning and Design Considerations

- Create differentiating heights of blocks for varied skyline and to capitalise on views of the city
- Design treatment on the roof/ facade of upper floors to achieve identifiable 'peaks'
- Preserve tranquil, lush courtyard spaces

Tanjong Rhu – Urban Cove



Schematic section – emphasizing 'peaks' or 'caps' of blocks to create varied skyline

Form and Massing

- The private housing developments at Tanjong Rhu create an iconic skyline when viewed from Kallang Basin
- Proposed developments in the area should continue this cohesive skyline effect by differentiating the heights of blocks to create a varied skyline and by emphasizing the 'peaks' of buildings



Iconic skyline along Tanjong Rhu as viewed from Kallang Basin

Tanjong Rhu – Urban Cove



Riverside area along Geylang Park Connector

Public Spaces

- Aim to preserve the tranquil lush environment through use of meandering paths, lush planting and intimate nooks/ courtyard spaces



Amphitheatre-style seating around a water fountain

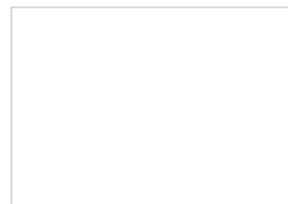
Tanjong Rhu – Urban Cove

Colour Palette

The suggested colour palette consists of creams and orange, taking reference from the distinctive skyline in this area. Accents of blue and teal tie back to the overall riverfront living theme.

Primary Colours

Unify the identity of the area, and form the main base of the colour scheme
(choose both primary colours)



BS 00 E 55



BS 08 B 15

Secondary Colours

Complement the primary base colours
(choose 1 or more secondary colours)



BS 10 C 33



BS 08 D 41



BS 18 C 35

Accent Colours

Highlight certain architectural features, such as fins, ledges, canopies, spandrels, selected parts of gable end walls, etc.
(choose 1 or more accent colours)



BS 08 E 55



BS 06 C 37



BS 16 C 37



BS 20 E 53

Facade and Roofscape

- Consider continuing the existing roofscape and emphasise the cascading peaks of the skyline



Use of creams and orange with teal accents in Camelot by the Water



Distinct roofscape of Camelot by the Water and Casuarina Cove that emphasises the cascading peaks of the skyline-

Tanjong Rhu – Urban Cove



The ‘Urban Cove’ sub-theme could be expressed through lush and multi-layered planting along meandering garden paths and amenities (example from Ethnobotany Garden)



From left: *Planchonella obovata* (Sea Gutta); *Cynometra ramiflora* (Belangkan); *Hibiscus tiliaceus* ‘Tricolor’ (Sea Hibiscus); *Horsfieldia irya* (Lempoyang Paya)

Landscape Approach

The landscape under the ‘Urban Cove’ sub-theme seeks to evoke an exclusive, intimate and sensory garden experience. Paths and planting could be in curves, avoiding sharp and perpendicular intersections.

Planting Concept

Use riverine/ shoreline plants that feature interesting leaves, flowers, form and colours. The scale of the planting should be relative to the landscape space and carefully planned and considered with varying heights, feature plants and fragrant plants.

Suggested Tree Species

The following list is intended as a guide for tree species selection and is not meant to be restrictive. Plant selection will need to consider the suitability of species for the site conditions and maintenance requirements.

Datum Trees

- *Carallia brachiata* (Corkwood)
- *Hibiscus tiliaceus* (Sea Hibiscus)
- *Planchonella obovata* (Sea Gutta)

Riverine/ Shoreline Trees with Ornamental Features

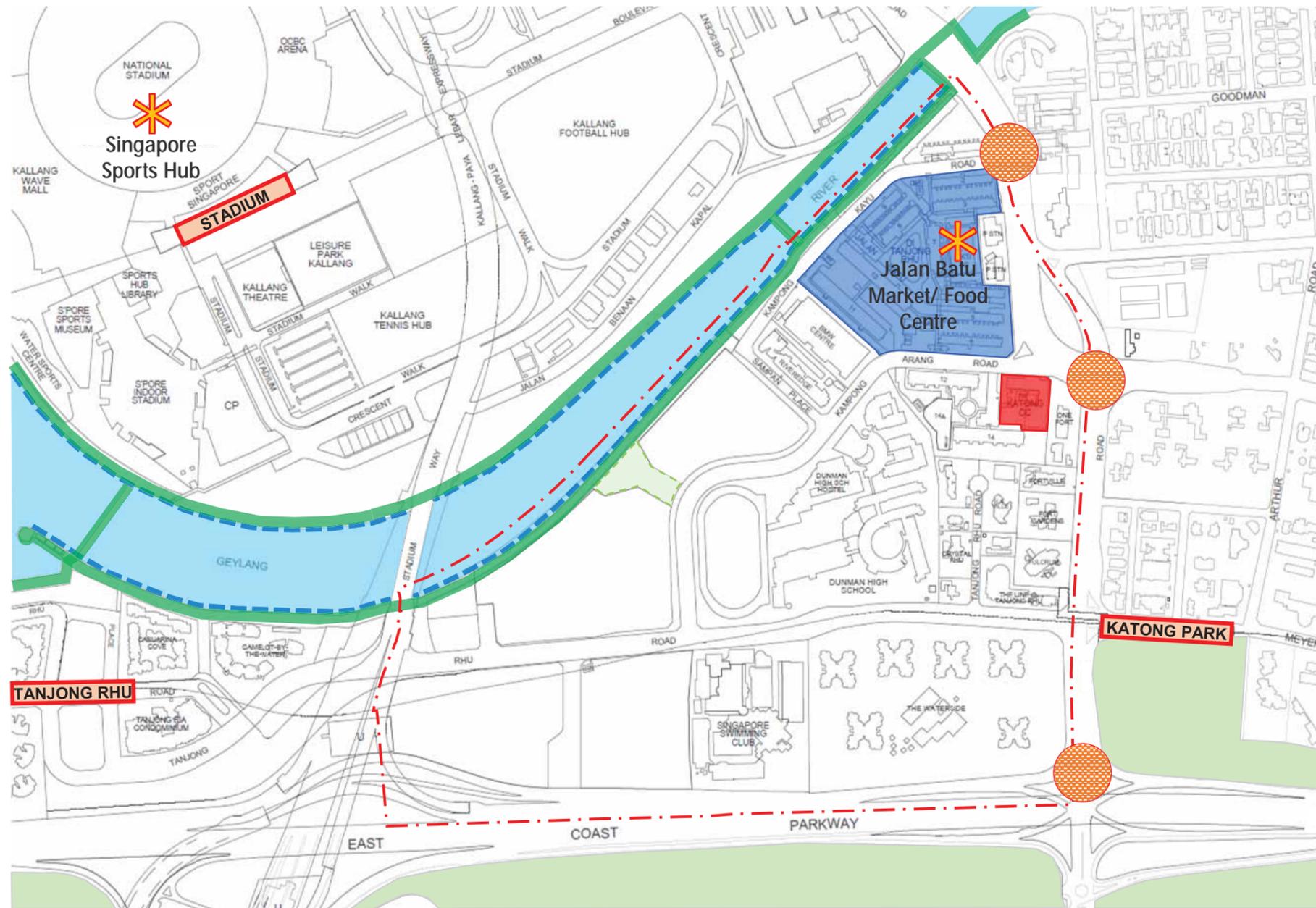
- *Cynometra ramiflora* (Belangkan)
- *Hibiscus tiliaceus* ‘Tricolor’ (Sea Hibiscus)
- *Tristanopsis spp.* (River, Sea, Hill Tristania)

Trees with Fragrant Flowers

- *Atractocarpus fitzalanii* (Brown Gardenia)
- *Citharexylum spinosum* (Fiddlewood)
- *Horsfieldia irya* (Lempoyang Paya)

Tanjong Rhu – Urban Cove

Overview of Key Urban Design Considerations



Transport

EXISTING PROPOSED

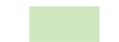
  MRT Station

Facilities

  Neighbourhood/ Commercial Centres

  Medical Institutions / Facilities

Parks and Waterbodies

  Park

  Waterbody

  Park Connector

Key Corridors

 Community Link

 River Way

 Bishan-to-City Route

Key Nodes and Junctions

 Landmarks

 Key Junctions

Contents

Town Scale

- Context and History
- Planning Principles
- Town Theme and Concept
- Pedestrian and Cycling Connectivity
- Parks and Waterbodies
- Key Corridors
- Key Nodes and Junctions
- Heritage Elements
- Art Elements
- Broad Landscape Theme

Neighbourhood Scale

- Sub-themes and Concepts
 - Form and Massing
 - Public Spaces
 - Streetscape and Urban Edge
 - Colour Palette
 - Facade and Roofscape
 - Landscape Approach

Precinct Scale

- Precinct Facilities
- Playgrounds
- Street Furniture
- Wayfinding
- Covered Linkway Design

Precinct Facilities

Precinct facilities include structures like precinct pavilions, shelters, trellises, drop-off porches, and precinct markers.

Here are possible ideas of how precinct facilities could be designed to express the respective sub-themes.

Novena/ Whampoa Kaleidoscope

Design Considerations

- Use of bright colours to reflect the rich and eclectic nature of the area



Use of bright colours in a pavilion (example from Segar Grove)

Kampong Java/ Jalan Besar Old Downtown

Design Considerations

- Use repeated patterns or ornaments that could be adapted from heritage elements around the area to help relate to the strong 'colonnade' streetscape



Use of triangular patterns in the precinct pavilion (example from SkyVille@Dawson)

Precinct Facilities

Kallang Basin Riverbanks

Design Considerations

- Take reference from existing elements (columns, roofs, motifs, ornamentation etc.) along the current streetscape
- Use natural patterns or riverine elements to add a sense of liveliness



Structures with perforated details create a play of light and shadow (example from Teck Whye Vista)

Upper Boon Keng Promenade

Design Considerations

- Consider smooth, clean and refined textures to create a strong urban edge



Clean lines in precinct pavilion at St George's Towers

Tanjong Rhu Urban Cove

Design Considerations

- Consider organic/ sculptural forms or irregular geometries to add visual interest



Shelters with organic forms (example from artist's impression of Ulu Pandan Banks)

Playgrounds

Playgrounds are one of the key facilities in our housing precincts. They are commonly co-located with adult and elderly fitness facilities to form a 3-Generation (3G) playground to foster inter-generational bonding.

Themed playgrounds are opportunities to contribute to a unique precinct identity, enhance wayfinding by serving as nodes or landmarks, and also form part of the social memories of residents. The design of themed playgrounds can draw reference from the area's sub-theme, character, heritage or historical context.

For larger playgrounds in neighbourhood parks and common greens, inclusive elements could be incorporated within the playgrounds to cater for children with special needs. Nature play spaces, sensory gardens or lawns can also be incorporated for a greater variety of learning experiences.

Design Principles

Value and Variety of Play

Playgrounds should have sufficient play values to activate the cognitive and motor skills of the young, spark their imagination, allowing children to learn through play and interaction with one another. Playgrounds in adjacent precincts and parks should not be repeated to ensure variety among the playgrounds.

Creating Identity

Playgrounds can help in creating precinct identity, enhance wayfinding and also form part of the social memories of HDB residents.

Practicality

Practical considerations for playgrounds include space to accommodate play equipment and their safety zones, meeting safety standards, maintainability and cost, particularly with customised playgrounds. For a more comfortable play environment, playgrounds should be sited in areas shaded by buildings during the anticipated times of usage, or adequately sheltered by larger trees.

Playgrounds

Novena/ Whampoa Kaleidoscope

Design Ideas

Incorporate colourful and imaginative radiating patterns/forms



From top: Brightly coloured and imaginative play spaces (examples from Tampines GreenEdge and Dawson Vista)

Kampong Java/ Jalan Besar Old Downtown

Design Ideas

Inspired by sports or heritage while incorporating details of local significance



A reimagined mosaic-look sparrow playground (example from Tiong Bahru Plaza)

Kallang Basin Riverbanks

Design Ideas

Wooden stilt houses with crossings/ bridges/ boardwalks/ climbing nets as well as including small boat structures (*sampans*)



Clockwise from top left: Stilt play houses and small boat play structures (examples from Clementi Crest, Bedok North Vale and SkyParc @ Dawson)

Playgrounds

Upper Boon Keng Promenade

Design Ideas

Industrial theme that is inspired by the area's history of factories, brickeries and mills



Artist's impression of a play tower playground at Kallang Horizon

Tanjong Rhu Urban Cove

Design Ideas

Inspired by urban, sculptural and use of organic forms



Striking play structures with organic forms and bright colours (example from Taman Jurong Park)

Street Furniture – Seating

Seating is found in various locations within the precinct, such as community living rooms, etc. They are used for rest, people and activity-watching, social interaction, and can also be used for exercise.

Design Principles

Aesthetics

The design of the various seats in the precinct can draw reference from the area’s sub-theme.

Adequate Weather Protection

Seating in sheltered but unenclosed spaces like precinct pavilions, should be placed such that they are adequately shielded from rain.

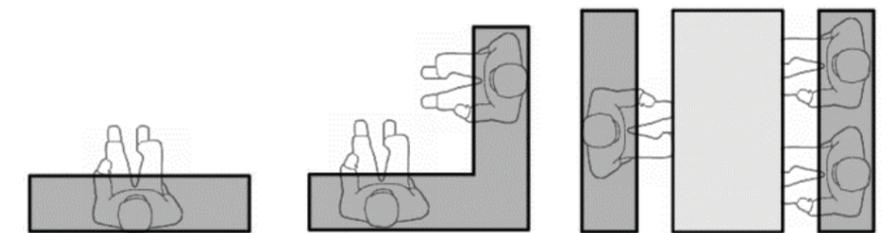
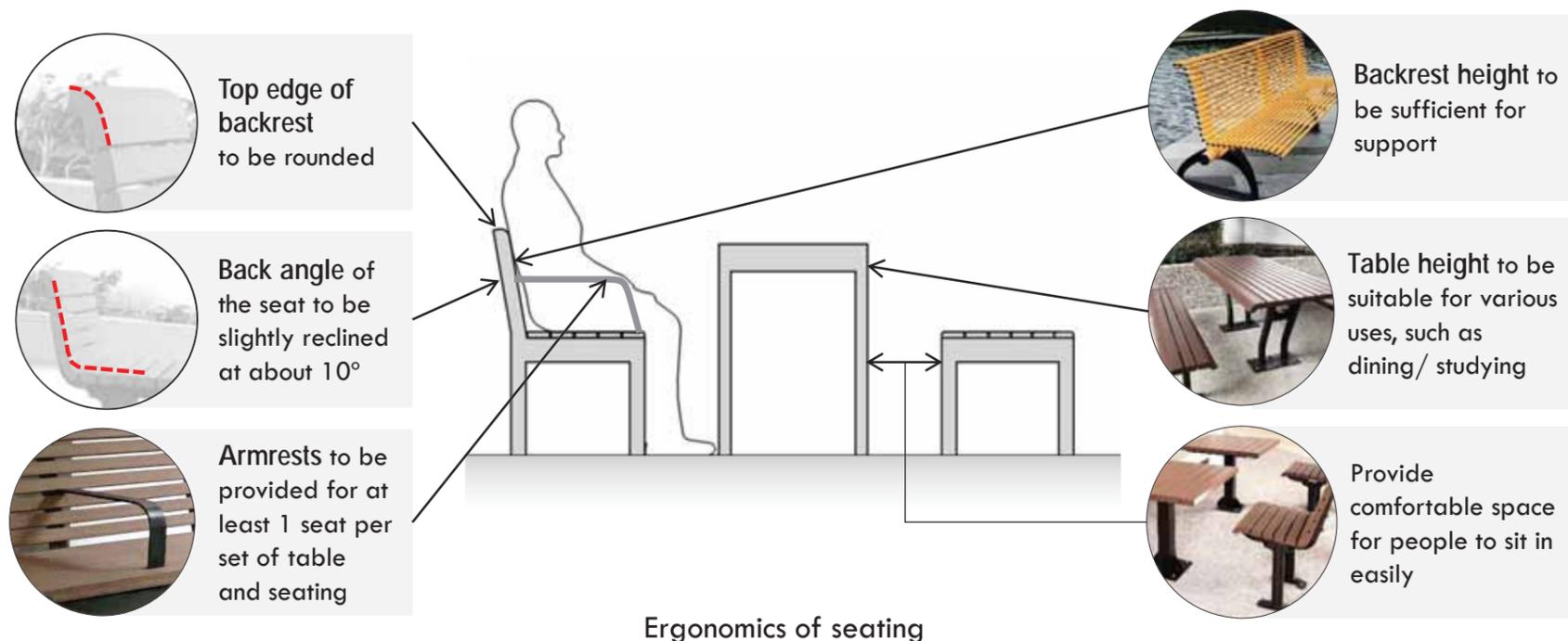
Universal Design

It is important to consider the needs of children, elderly, and users of different heights and abilities, to ensure a user-friendly and inclusive design.

- Provide a variety of seating arrangements, to facilitate different levels of social interaction
- Place along pedestrian routes at regular intervals as specified in BCA’s ‘Code on Accessibility in the Built Environment’
- Proprietary systems recommended for better ergonomics
- Cater to different heights
- Benches with exercise elements should be provided at non-dedicated fitness areas to encourage residents to do simple exercises
- Space for wheelchair users

Maintenance

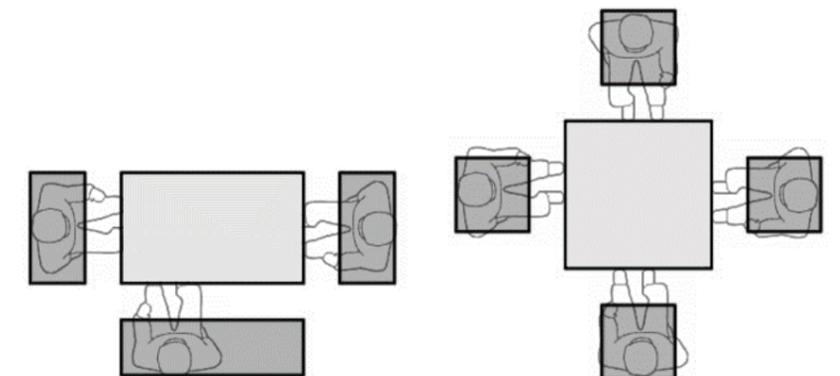
- Proprietary systems are generally easy to replace
- Select materials that are durable against weathering and vandalism (e.g. avoid natural wood, recommended to use metal with wood grain finish, powder coated metal etc.)
- Place seating in the landscaped areas on paved surfaces to avoid the need for grass cutting below



Individual seating for resting and solitary moments

L-shape seating for views and small group conversation

Face-to-face seating for conversation



3-sided seating creates greater intimacy and opens up towards views

4-sided seating for social gatherings and interaction

Variety of seating arrangements for different uses

Street Furniture – Outdoor Lighting

Besides its functional purpose, the choice of outdoor lighting also lends ambience and character to the space.

Selection Principles

Function and Aesthetics

The selected light fixtures should serve the purpose intended for its location either for functional or ambient lighting. It can also complement the design of the development and reinforce the identity of the precinct. In addition, the placement and colours of the various types of outdoor lighting within the development should be carefully chosen and coordinated.

Driveway/ Service Road

The light fixtures should have the appropriate lux level for the safety of both drivers and pedestrians. The choice of these light fixtures contribute to precinct identity as they usually envelop the development along the service road.

Hardcourt

The light fixtures should provide sufficient lighting levels for the activities/ games intended at the hardcourt, while not causing glare to the users and the residential units in the surrounding blocks.

Landscape/ Playground

The choice of light fixtures should create a welcoming and relaxed ambience in these spaces, and also contribute to the unique character of the precinct.

Covered Linkway/ Precinct Pavilion

Light fixtures selected should be well integrated with the design of the covered linkway and precinct pavilion structure, and also be functional for the usage of the space.

Maintenance

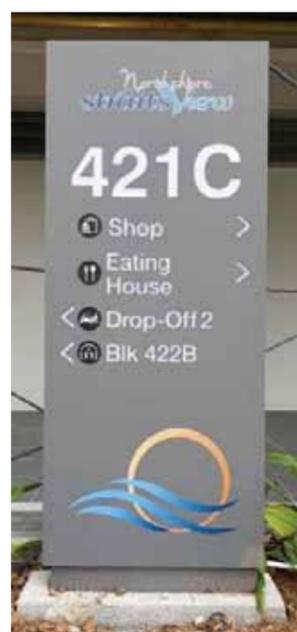
Easy maintenance of the light fixtures and cost-efficient replacement of parts is recommended.

Wayfinding

A clear wayfinding strategy is important so that users can find their way around the precinct easily.



Use of simple motifs, colour and tile bands for wayfinding



A precinct map and block entrance signage (example from Northshore StraitsView)

Main Circulation Route

Demarcate the main circulation route through the blocks connecting to the key nodes (e.g. lift lobbies, community living rooms, drop-off porches, etc.):

Clarity and Aesthetics

- Use visual cues such as tile bands, motifs, column and wall painting
- Use clear and consistent floor demarcation
- Use simple floor patterns, avoid dark colours and avoid using too many colours to reduce confusion, in particular for persons living with dementia
- Design and colours should complement the overall design concept

Sense of Familiarity

- Consider placing distinctive design features (e.g. motifs, sculptures, murals, etc.) that relate to the site's heritage and context as well as to serve as familiar references for persons living with dementia

Maintenance and Safety

- Use materials and floor finishes that are easy to maintain and replace
- Avoid using floor finishes that would be slippery when exposed to rain

Signage

There are various types of signages in a precinct, such as precinct maps, and directional signage. They should be designed with reference to the 'SS 599 Guide for Wayfinding Signage in Public Areas'.

Aesthetics and Identity

- Design the various signage in a precinct for consistency in aesthetics and precinct identity

Legibility and Clarity

- Use appropriate font sizes for the intended viewing distance and avoid cursive fonts, to ensure that the font is legible
- Use pictograms/ motifs that are easy to recognise and not too abstract
- Ensure good colour contrast between the font and the background
- Provide well-lit signage so it can be clearly seen at night

Location

- Locate signage at key decision points along the pedestrian and vehicular flow to give clear directions.
- Ensure signage are not blocked from view

Covered Linkway Design

Covered linkways provide shelter and can be found extensively in the built-up environment in our towns. Hence, the design of covered linkways should recede into or match the surroundings and existing contexts (in terms of profile and colours), rather than stand out. Only at appropriate areas where the intention is to create a gateway, can covered linkways be designed as features. The following design principles apply to covered linkways within HDB precincts.

Design Principles

Neat and Elegant Design

Columns are only provided on one side of the linkway for a more seamless walking experience. Services such as M&E conduits and junction boxes should be detailed to be integrated with the design and hidden from pedestrian view. Added attention should be paid to details such as the column stumps, light fixtures, roof edge, location of the grated drains, interfacing details between the linkways, high links, drop-off porches and buildings. Neutral colours and shallow roof profiles are recommended. If necessary, block numbers, directional signage, floor patterns and other visual cues are encouraged to be included to improve wayfinding.

Adequate Weather Protection

Width \geq to height is recommended for linkways, to minimise rainwater splashing.

Lighting Ambience

Lighting should be pleasant and non-glaring. Placement of light fixtures should avoid lights shining directly at pedestrians', cyclists' and motorists' lines of sight.

Materials

Materials used should be commonly available in the market, and easy to maintain or replace.



Covered linkway in a new HDB precinct



A covered linkway added to an existing HDB precinct has block numbers to help in wayfinding (example from Blk 618 Yishun Ring Road)



Careful interfacing between linkways and a new drop-off porch added to an existing HDB precinct (example from Choa Chu Kang North 7)

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- Page 10, top row: *Kampungs* at the Kallang River.
- Page 10, bottom row: Prominent landmarks such as Serangoon Road Race Course (1843 – 1933) and Kallang Airport (1937 – 1955).
- Page 11, top: Riverine settlements.

National Parks Board

- Page 39, bottom left: *Barringtonia asiatica* (Putat Laut). Photo credit: Jessica Teo, NParks Flora & Fauna Web.
- Page 39, bottom second from right: *Syzygium zeylanicum* (Kelat Merah). Photo credit: Patricia Yap, NParks Flora & Fauna Web.
- Page 39, bottom right: *Millettia pinnata* (Seashore Mempari). Photo credit: NParks Flora & Fauna Web.
- Page 47, bottom left: *Citharexylum spinosum* (Fiddlewood). Photo credit: NParks Flora & Fauna Web.
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- Page 47, bottom third from left : *Flacourtia inermis* (Rukam). Photo credit: Patricia Yap, NParks Flora & Fauna Web.
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- Page 47, bottom right: *Dyera costulata* (Jelutong). Photo credit: Erika Halim, NParks Flora & Fauna Web.
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- Page 55, bottom right: *Calophyllum soulattri* (Bintangor Bunut). Photo credit: Vicky Lim Yen Ngoh, NParks Flora & Fauna Web.
- Page 62, bottom left: *Cratoxylum formosum* (Pink Empat). Photo credit: Ang Wee Foong, NParks Flora & Fauna Web.
- Page 62, bottom second from left: *Erythroxylum cuneatum* (Inai Inai). Photo credit: Ang Wee Foong, NParks Flora & Fauna Web.
- Page 62, bottom third from left : *Libidibia ferrea* (Leopard Tree). Photo credit: Chng Mun Wye, NParks Flora & Fauna Web.
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- Page 62, bottom right: *Cyrtophyllum fragrans* (Tembusu). Photo credit: Tee Swee Ping, NParks Flora & Fauna Web.
- Page 69, bottom left: *Planchonella obovata* (Sea Gutta). Photo credit: Patricia Yap, NParks Flora & Fauna Web.
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JYHa LLP

- Page 80, right: Careful interfacing between linkways and a new drop-off porch added to an existing HDB precinct (example from Choa Chu Kang North 7).

LOOK Architects Pte Ltd

- Page 73, middle: Clean lines in precinct pavilion at St George’s Towers.

P&T Consultants Pte Ltd

- Page 75, third column, top left: Stilt play houses and small boat play structures (example from Clementi Crest).

SAA Architects Pte Ltd

- Page 73, right: Shelters with organic forms (example from artist’s impression of Ulu Pandan Banks).

Surbana Jurong Consultants Pte Ltd

- Page 61, top: Strong urban forms of Kallang Trivista as part of city skyline which can be easily identified from the wide riverfront promenade.

Rachel Koh

- Page 39, bottom second from left: *Dendrolobium umbellatum* (Dendulang).
- Page 55, top: The ‘Riverbanks’ sub-theme can be expressed with naturalistic riverine planting and meandering paths (example from Esplanade Forecourt Garden).
- Page 69, top: The ‘Urban Cove’ sub-theme could be expressed through lush and multi-layered planting along meandering garden paths and amenities (example from Ethnobotany Garden).
- Page 75, middle: A reimagined mosaic-look sparrow playground (example from Tiong Bahru Plaza).
- Page 75, third column, top right and bottom: Stilt play houses and small boat play structures (examples from Bedok North Vale and SkyParc @ Dawson).
- Page 76, right: Striking play structures with organic forms and bright colours (example from Taman Jurong Park).

Lye Pok Min

- Page 80, middle: A covered linkway added to an existing HDB precinct has block numbers to help in wayfinding (example from Blk 618 Yishun Ring Road).

Image Credits

Rebecca Sng

- Page 62, top left: The 'Promenade' sub-theme could be expressed through the use of trees to enhance and frame open frontage views towards the City and river edge, as seen along Kallang Park Connector.
- Page 75, bottom left: Brightly coloured and imaginative play spaces (example from Dawson Vista).

Beryl Tare

- Page 1: Bridge across Kallang River.
- Page 11, middle and bottom: Bendemeer Ville (1970/ 1971) and The River Vista @ Kallang (2010).
- Page 12, clockwise from top left: Sun Yat Sen Memorial; Kwong Wai Shiu Hospital; Art Deco Shophouse; Masjid Hajjah Fatimah.
- Page 21, top row: Interactive water features such as the Archimedes Screw and a floating deck.
- Page 22: Promenade deck along Kallang River.
- Page 25, top row: Balestier Rd; Whampoa Makan Place; Townerville; Kwong Wai Shiu Hospital; Bendemeer Market/ Food Centre; Geylang Bahru Market/ Food Centre.
- Page 25, bottom row: Upper Boon Keng Neighbourhood Centre; Jalan Batu Market/ Food Centre; People's Association Headquarters; City Square Mall; Former Boxing Gym; Pek Kio Market/ Food Centre.
- Page 26, top: Mural at Block 805 French Rd, featuring bullock carts and scenes from the defunct New World Amusement Park that used to be in Jalan Besar.
- Page 26, bottom left: Mural in St George's Towers, depicting Kallang/ Whampoa's history.
- Page 27, clockwise from top left: Mural of a filming scene at 471 Balestier Rd, referencing the former Shaw Brothers' Malay Film Studios located nearby at 8 Jalan Ampas; built in the 1970s, the Whampoa Dragon Fountain is now a landmark in the area; community mural at 69 Boon Keng Road, capturing impressions of Singapore's evolving hawker culture; mural at 471 Balestier Rd, featuring vendors selling produce and goods, and past trades that took place a stone's throw away at Balestier Market.

- Page 34, anti-clockwise from top: Balestier Rd, Masjid Hajjah Rahimabi Kebun Limau with HDB developments in the background, Whampoa Makan Place.
- Page 37, left: Enhancing Sungei Whampoa with the greening of canal walls through the use of creepers and other improvements such as sheltered seating areas.
- Page 41, top: Skyline of Race Course Rd HDB developments.
- Page 49, anti-clockwise from top: The River Vista @ Kallang; Kolam Ayer Community Club; Bendemeer Shopping Mall.
- Page 57: Aerial view from Upper Boon Keng Road.
- Page 60, left: PUB's ABC Waters project along Kallang River showing decked urban seating area with shade, with views towards the water.
- Page 60, right: A network of sheltered connections in Kallang Trivista leads to an open plaza space fronting the Kallang River.
- Page 64: Di Tanjong Rhu estate with housing blocks arranged around a central courtyard, and along the riverfront.
- Page 66: Iconic skyline along Tanjong Rhu as viewed from Kallang Basin.
- Page 67, from left: Riverside area along Geylang Park Connector; amphitheatre-style seating around a water fountain.

Tasmana Ishat Khorshed Alam

- Page 15, from left: View of Geylang Bahru Ville, with the Kallang River in the foreground; riverine details and blue tones are found in various developments, such as Whampoa Dew.
- Page 37, right: Lushly planted seating areas introduced as part of PUB's ABC Waters Programme along Sungei Whampoa.
- Page 41, bottom row: Kitchener Complex at King George's Ave; Crawford Court at North Bridge Rd.
- Page 43: Public housing development along Race Course Rd.

- Page 45, top row: Strong streetscape created by colonnade treatment at Block 803 King George's Ave.
- Page 52, from left: PUB's ABC Waters @ Kallang River project – Intimate seating nooks along lushly planted riverfront; riverine themed playground fronting Kallang River.
- Page 53: Repeating motifs and design elements along Bendemeer Rd and within developments.

Yew Wei Jun

- Page 38, top left: Use of light shades of aqua accents in Whampoa Dew.
- Page 38, top right: Juxtaposition of horizontality, verticality and randomness expressed on the facade of 1 Moulmein Rise.
- Page 38, bottom row: HDB blocks around Whampoa Road with facade designs that reference the arched details in Masjid Hajjah Rahimabi Kebun Limau.
- Page 46, top: Distinct roofscape of the HDB blocks at Race Course Road that match the language of the nearby terrace houses.
- Page 46, bottom: Example of unique ornamentation on the building facade at Blk 815 Jellicoe Rd.
- Page 54, top right: Riverine colours and motifs evident in The River Vista @ Kallang.
- Page 61, bottom: Accents of orange and dark grey are used in Kallang Residences, reflecting the colours of the surrounding older HDB blocks and shophouses.
- Page 68, top: Use of creams and orange with teal accents in Camelot by the Water.
- Page 68, bottom: Distinct roofscape of Camelot by the Water and Casuarina Cove that emphasises the cascading peaks of the skyline.
- Page 72, right: Use of triangular patterns in the precinct pavilion (example from SkyVille@Dawson).

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