OUR TOWN, PUNGGOL:
TOWN DESIGN GUIDE

Completed 2021
Updated 2024

Preamble

Acknowledgements

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.

Contents

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.

District Scale Layers

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

District 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 sub-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 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.
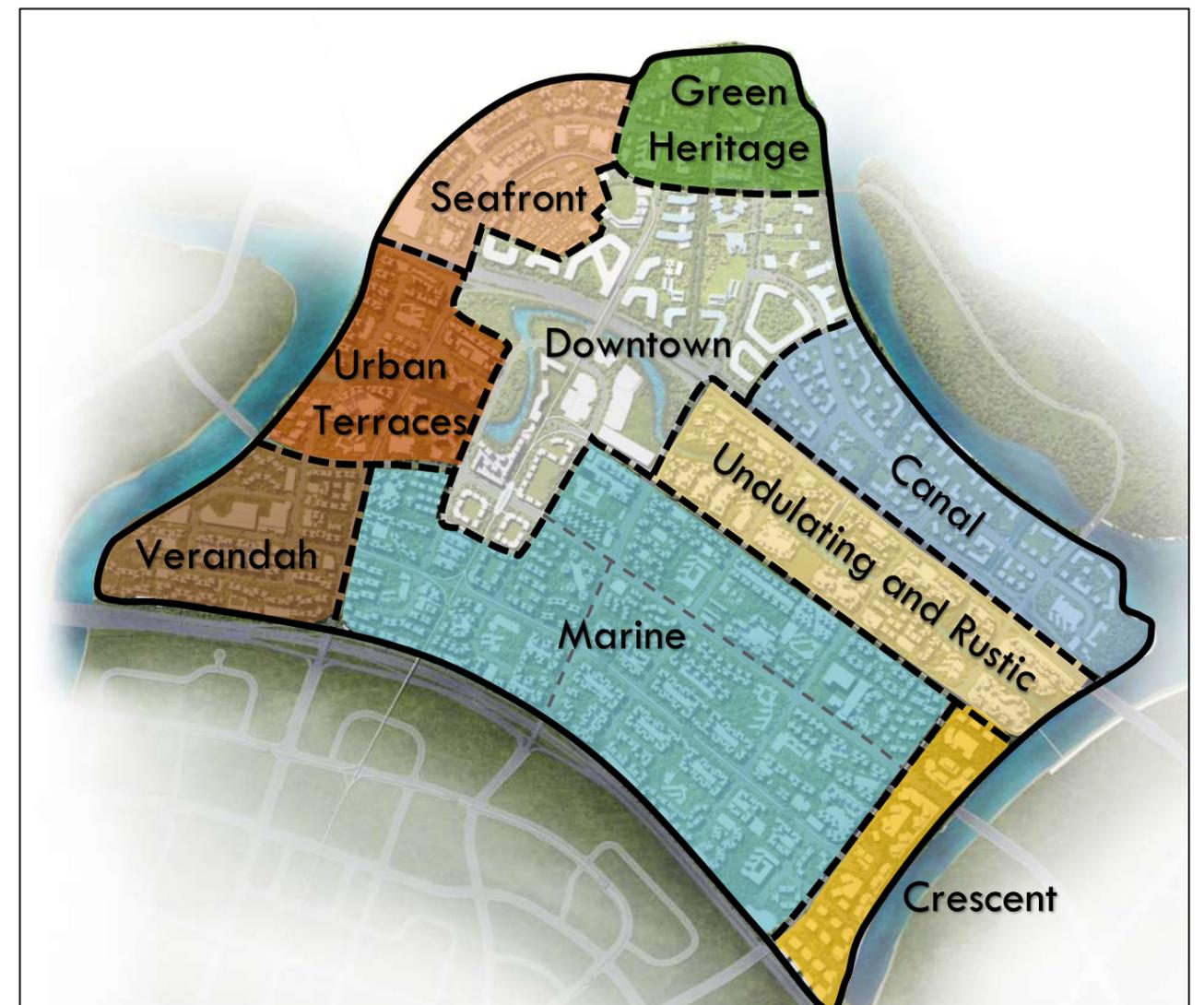
Sub-themes in Punggol

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

SEMBAWANG

WOODLANDS

YISHUN

PUNGGOL

SENGKANG

CHOA CHU KANG

BUKIT PANJANG

ANG MO KIO

HOUGANG

PASIR RIS

TENGAH

BUKIT BATOK

JURONG WEST

SERANGOON

BISHAN

TAMPINES

JURONG EAST

* BUKIT TIMAH

TOA PAYOH

GEYLANG

BEDOK

KALLANG WHAMPOA

CLEMENTI

QUEENSTOWN

* CENTRAL AREA

* MARINE PARADE

BUKIT MERAH
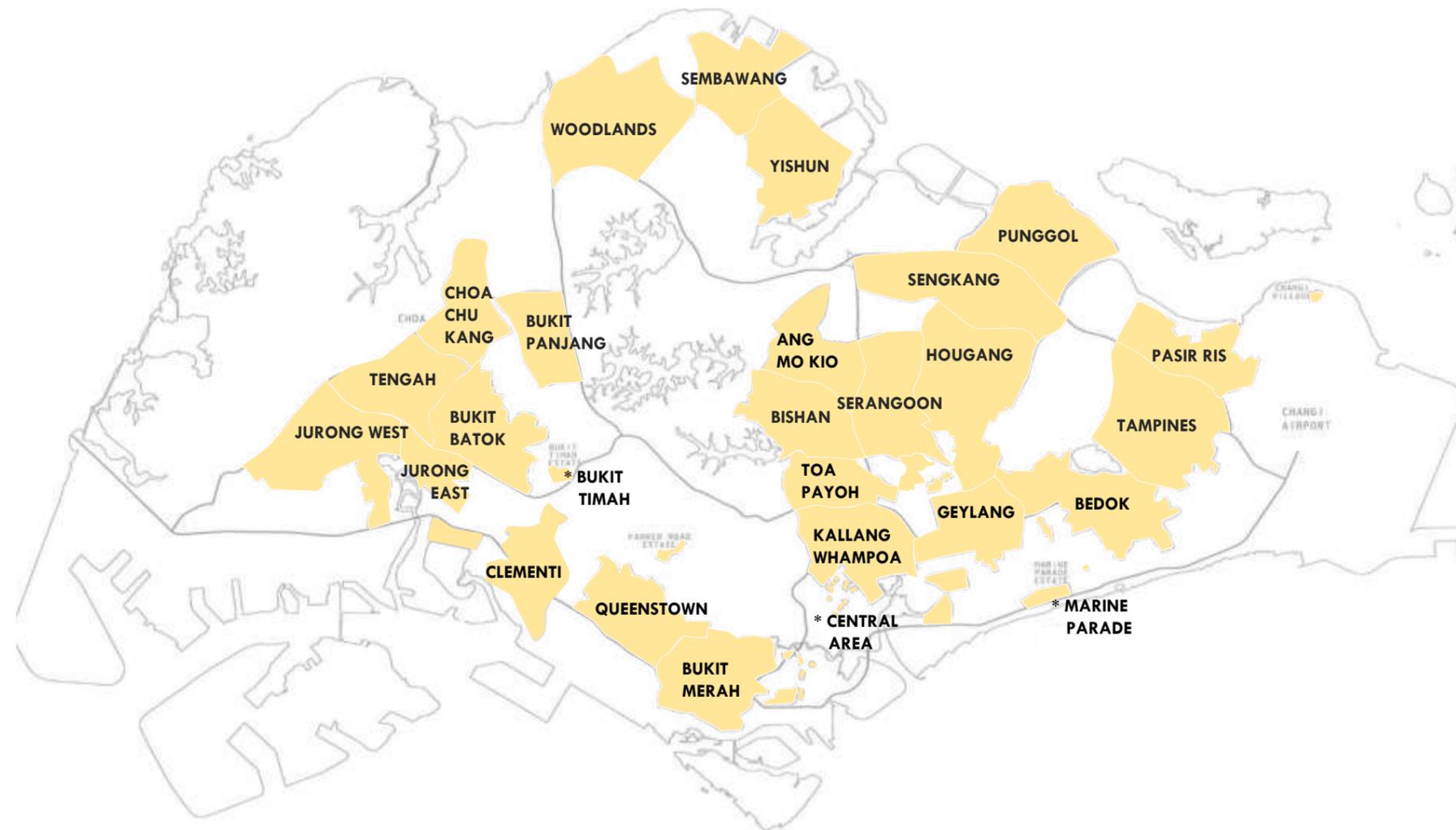
Frameworks

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

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

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

HDB Roadmap to Better Living (2011)

Well-Designed Towns | Sustainable & Smart Towns | Community Centric Towns

Designing FOR LIFE (2020)
THE FUTURE OF HDB LIVING

LIVE WELL   LIVE GREEN   LIVE CONNECTED

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- Precinct Facilities

- Playgrounds

- Street Furniture

- Wayfinding

- Covered Linkway Design

Context and History
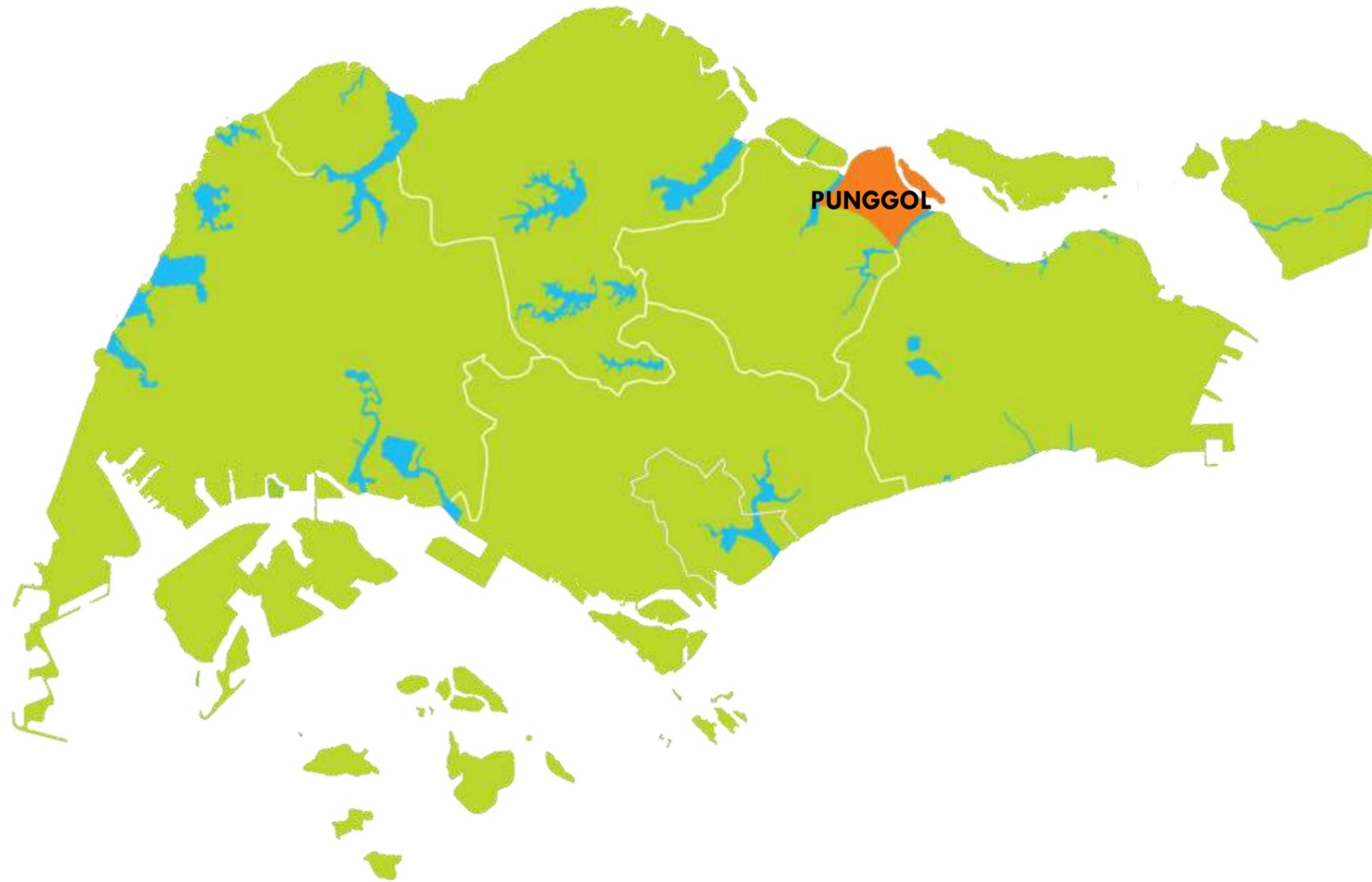
PUNGGOL

Punggol is located in the North East Region of Singapore. Formerly known as 'Kampung Punggol', this area used to be a rural village better known for fishing, poultry farming and pig rearing, as well as its seafood restaurants, and boating facilities and services.

Today, Punggol has been transformed into Singapore's first Eco-Town, and will eventually house 96,000 homes, making it one of the largest HDB towns in Singapore.

Surrounded on three sides by water and positioned as Singapore's first Eco-Town, the development of Punggol is guided by the vision of "A Sustainable Waterfront Town in the Tropics".

This vision is further enhanced with the designation of Punggol as a Strategic National Project (SNP) for Smart Nation in 2020. Punggol will be key in realising Singapore's Smart Nation vision, to stretch its existing sustainable development targets further, and drive the adoption of digital and smart urban solutions throughout the nation.

Context and History

From left: Fishing villages; poultry farms; and pig farms

Left and right: Seafood restaurants

Historical Background

In Malay, "Punggol" means to hurl sticks at branches of fruit trees to bring fruit down to the ground.

In the past, Punggol used to be a fishing village occupied predominantly by Malay settlers, and the villagers also planted fruits and vegetables. As more Chinese immigrants settled in Punggol, they engaged in plantation work, poultry farming and pig rearing activities. Punggol was where one would find fruit, vegetable, poultry and pig farms as well as fishing villages and rubber plantations.

Punggol Point was also known for its seafood restaurants, as well as boating facilities and services. The key route for transportation to and from the coast then was the Old Punggol Road.

Context and History

Evolution of Punggol

PUNGGOL DIGITAL DISTRICT

6 TOWN CENTRE

2000s

2010s

2020 onwards
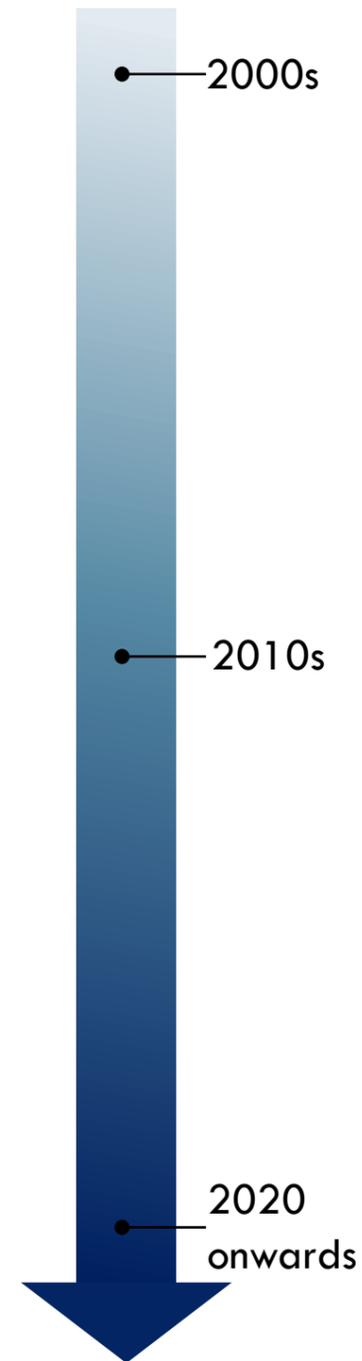
1. Punggol as a fishing village in the past

Punggol used to be a fishing village occupied predominantly by Malay settlers. As more Chinese immigrants settled in Punggol, they engaged in plantation work, poultry farming and pig rearing activities.

2. Land Reclamation

1983-2001

To facilitate the development of Punggol, 277ha of land was reclaimed in phases between 1983 and 2001.

3. Masterplan 1996

1996

The blueprint for Punggol 21 was first unveiled with the vision of developing Punggol 21 as 'A Waterfront Town of the 21st Century'.

4. Remaking our Heartland

2007

Sungei Serangoon and Sungei Punggol were dammed up to introduce a 4.2km long man-made waterway through the town, opening up opportunities for waterfront living and activities.

5. Vision of an Eco-Town

2010

Punggol was selected as Singapore's first Eco-Town to enhance its living environment, and to encourage residents to do their part for the environment.

6. Punggol Waterway/ Punggol Walk Bridge

2012

The next phase of development in Punggol saw the creation of signature waterfront housing districts, and the expansion of the Punggol Town Centre to form a new Punggol Downtown.

7. Punggol Smart Town

2020

Punggol was designated as a full-fledged Smart Town, to expand on current sustainability efforts, and drive the adoption of digital and smart urban solutions throughout Singapore.

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Context and History

Aerial view of the pedestrianised Punggol Heritage Trail leading to Punggol Point

Old bus stop along Punggol Waterway, in close proximity of the Punggol Heritage Trail

Heartwave Wall along Punggol Waterway

Heritage and Identity

Our heritage connects us to our past, enriching our sense of place, belonging and identity. The stories from Punggol's rich history are told today through various wall murals, a heritage trail, conserved buildings and heritage elements.

Some of the key heritage elements that strengthen the identity of Punggol Town are:

- Punggol Heritage Trail, which will feature historical elements along Old Punggol Road, and enhance the existing plant collections. Serving as one of the major green links from the Town Centre to the northern tip of Punggol, the public can enjoy leisure activities amidst a tunnel of lush greenery. Along its length, existing greenery will be conserved and its unique undulating topography retained. More details on the Punggol Heritage Trail can be found under the 'Key Corridors: Punggol Heritage Trail' layer.

- Heartwave Wall, a 280m long retaining wall along the promenade of Punggol Waterway. It features a series of heritage panels tracing Punggol's transformation from a fishing village in the 1800s to a vibrant waterfront town today.

Context and History

**The Vision
A Waterfront Town
of the 21st Century**

Bringing waters closer to residents

- Creation of 2 new reservoirs by damming up Sungei Serangoon and Sungei Punggol

- New waterway to run through the town to connect the reservoirs, more opportunities for waterfront living

Creating a unique Town Centre

- Transformation of Punggol Town Centre into a vibrant hub, well-served by a lively mix of commercial, entertainment, residential, cultural and recreational facilities (e.g. Punggol Town Square, SAFRA Punggol etc.)

- Development of an iconic commercial cum residential development with shopping, dining and entertainment facilities under one roof

Offering more housing choices & Building up the Critical Mass

- Innovative housing designs by the waters, comprising a mix of public and private housing

- Abundant common areas for activities and interactions

Activating the Recreation Coastline

- Introduction of a range of recreational facilities along the coastline for Punggol residents to partake in leisure activities

Enhancing connectivity

- New distinct boulevard along Punggol Central with thematic landscaping

- Widening a part of TPE for faster access to the city

Remaking Our Heartland 1 Punggol Town

Punggol Town was one of pilot towns selected under the first batch of towns/estates to undergo Remaking Our Heartland 1 (ROH 1) in 2007. The key strategies for Punggol ROH1 include:
- Bringing waters closer to residents
- Creating a unique Town Centre
- Offering more housing choices
- Building up critical mass
- Activating the recreational coastline
- Enhancing connectivity

Town Vision, Theme and Concept

Town Vision:

PUNGGOL **SMART-TOWN**

A thriving, smart and sustainable town for all

As Singapore's first Eco-Town and Smart-Town, Punggol will be a demonstration of the future of living in Singapore and will serve as a living lab to test out new concepts of living, working and service delivery. Punggol will also showcase how digital technologies can improve liveability and sustainability, create business opportunities, and forge a closer community.

Town Theme:

Water and Nature

The concept and design considerations for Punggol should align with its overall town theme, which is inspired by the waters and greenery surrounding and within the town.

Planning Principles
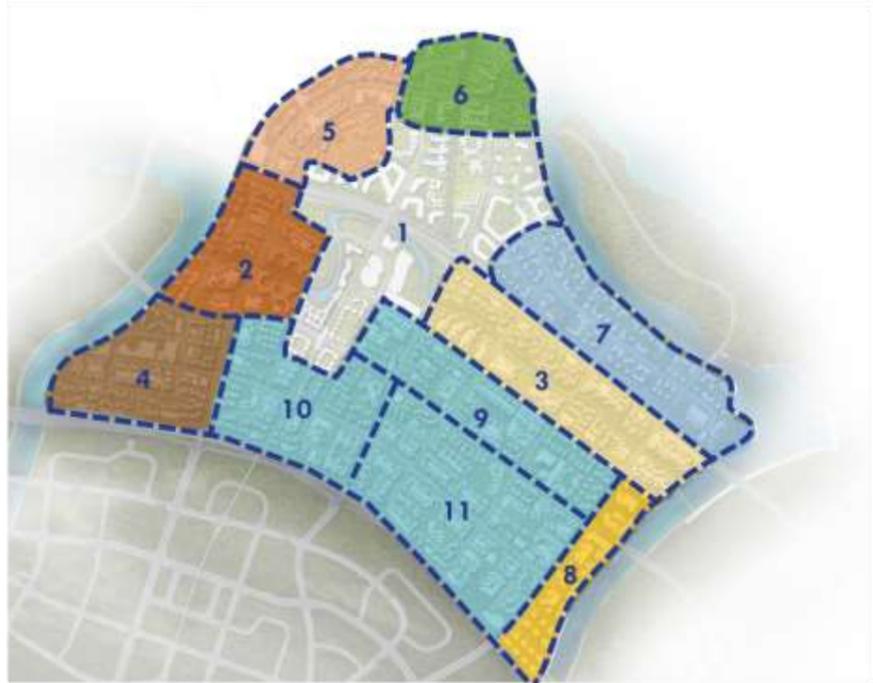
Distinctive Housing Districts

Moving around with Ease

Green and Blue Network

Great Places for the Community

Punggol Downtown – A New Destination for the North-East Region

Planning Principles

1. Distinctive Housing Districts

There are 11 districts in Punggol, each planned with its own distinctive character.

Sub-themes by Area

Punggol's 11 districts form 9 different areas and their sub-themes are identified based on the town theme and physical features of the area.

District	Sub-theme
1. Downtown District	– Downtown
2. Waterway West District	– Urban Terraces
3. Waterway East District	– Undulating and Rustic
4. Matilda District	– Verandah
5. Northshore District	– Seafront
6. Punggol Point District	– Green Heritage
7. Canal District	– Canal
8. Crescent District	– Crescent
9. Central District	
10. Punggol Field West District	– Marine
11. Punggol Field East District	

Planning Principles

1. Distinctive Housing Districts

Each district is split into smaller estates which help to foster greater interaction among the residents, and are also more walkable.
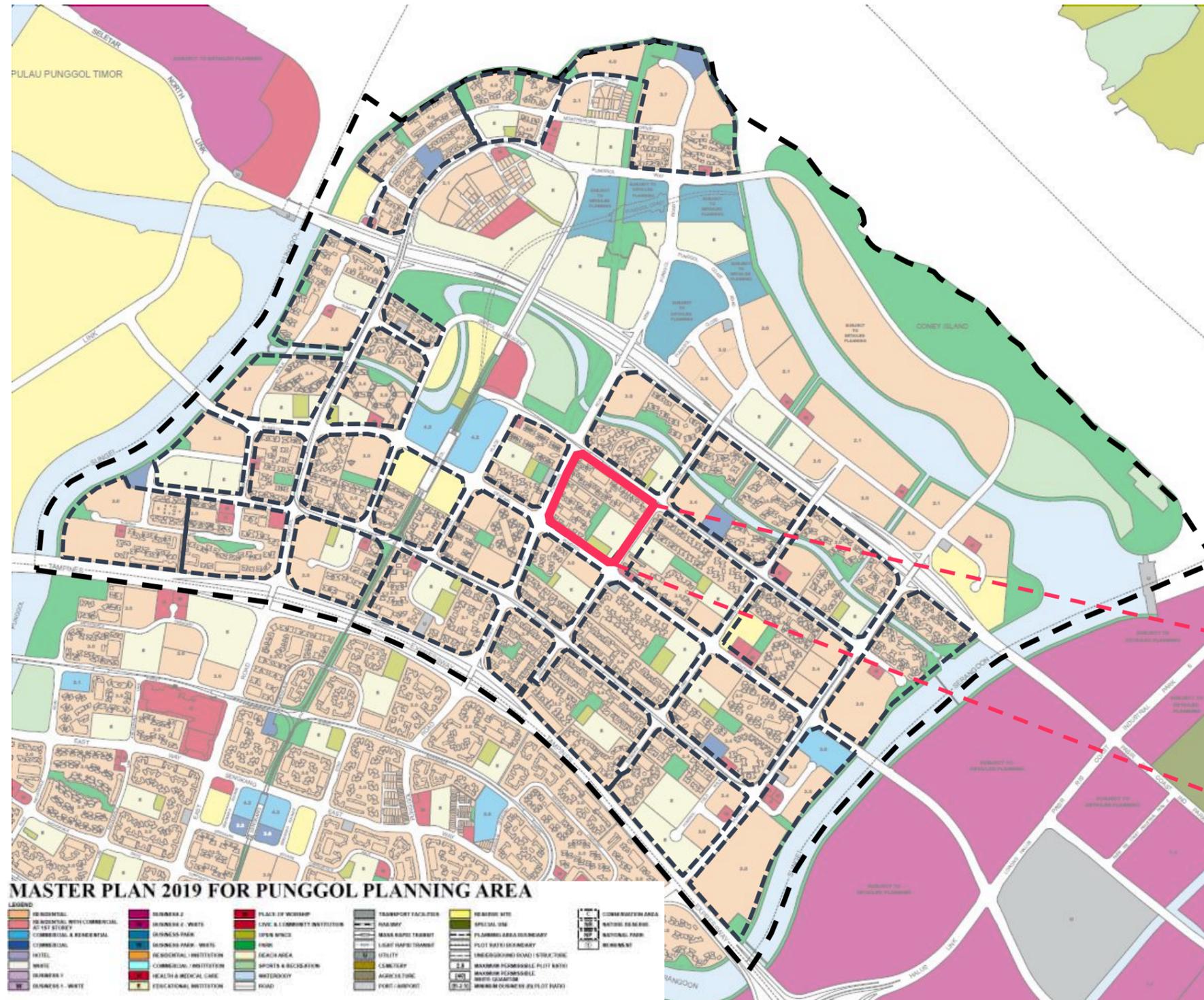
Punggol 21 Concept

From the mid-1990s onwards, HDB applied the Punggol 21 Concept, starting in Punggol Town.

- Smaller and more intimate planned housing estates (2,000 – 3,000 flats), each with a common green (a pocket park located within each estate), school and precinct shop cluster were developed

- Integration of Light Rail Transit (LRT) systems with the Mass Rapid Transit (MRT) systems

- Commercial provision was focused mainly in the Town Centre, with a few Commercial Centres, as well as local clusters of shops at the LRT stations

- Greater emphasis on Green and Blue Network and Cycling Network

MASTER PLAN 2019 FOR PUNGGOL PLANNING AREA

Damai Grove
Punggol Lodge
Punggol Spring
Punggol Vista
CG
Punggol Secondary School

PUNGGOL ROAD
PUNGGOL DRIVE
PUNGGOL CENTRAL
EDGEFIELD PLAINS

TYPICAL ESTATE

HOUSING	HOUSING
SCHOOL FIELD	COMMON GREEN
HOUSING	HOUSING
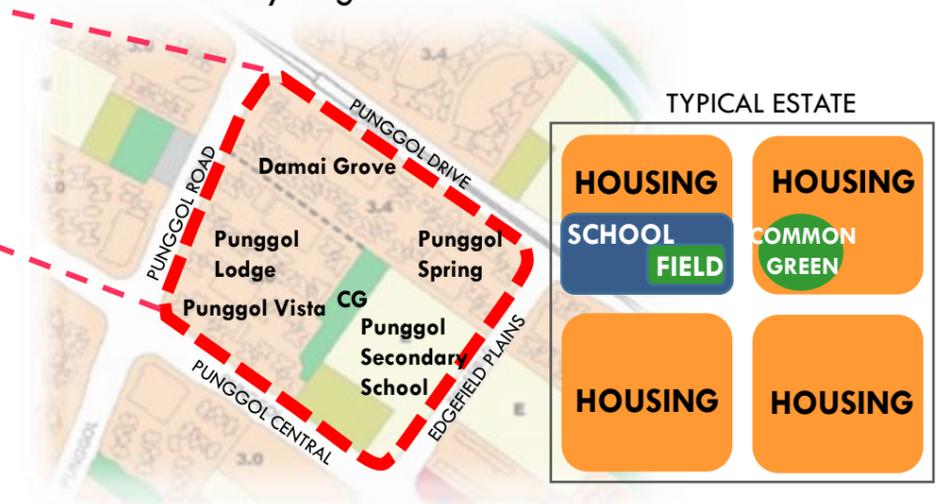
Planning Principles

2. Moving Around with Ease

Residents are served by a comprehensive public transport system supported by the Road and Rail network.

Legend

- Cat 1 Road
- Cat 2 Road
- Cat 3 Road
- Cat 4 Road
- MRT Line
- LRT Line

Transport Network

Punggol town is well served by the North-East MRT Line and Punggol Bus Interchange, with an upcoming Punggol North Integrated Transport Hub, which allows residents to stay well connected to the surrounding areas.

There are also 15 existing LRT stations within two LRT loops in Punggol, facilitating intra-town connectivity.

Transport network and facilities are also planned on a hierarchical basis.

In Punggol, a grid road system with a clear hierarchy of roads is used to facilitate navigation and way finding around the town.

There are major roads in the north-south and east-west directions leading in and out of the town, and local roads that distribute traffic within the town and provide access to developments.

For the major roads, the town name, 'Punggol', is used (e.g. Punggol Way, Punggol Road, Punggol Central). This is to help define the town and to give it its definite geographical orientation.

As for the local roads within the town, thematic or historical names unique to the town are used (e.g. Northshore Drive, New Punggol Road).

Planning Principles

2. Moving Around with Ease

To encourage clean commute and to enhance first and last mile connectivity, a comprehensive intra-town cycling network and Park Connector Network (PCN) has been planned for the town.

Legend

Existing/ U/C	Future	
———	··········	Cycling Path
———	- - - - -	Park Connector

Pedestrian and Cycling Connectivity

A comprehensive cycling network, consisting of existing PCN and cycling paths, both existing and proposed, has been planned for Punggol. The cycling paths are built in tandem with new roads, and where feasible, existing roads are also retrofitted with cycling paths.

Within each estate, a network of green connectors provide a car-free, pedestrian friendly route to each block.

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.

Planning Principles

3. Green and Blue Network

Greenery and waterbodies are weaved into the town, creating opportunities for waterfront living and more recreational spaces.

Green Fingers

Town Park (~13ha)

Punggol Heritage Trail (Old Punggol Road)

Coney Island Park (~50ha)

Common Green (~0.4 to 0.7ha)

Legend

Existing/ U/C   Future

Park/ Common Green

Park Connector

Waterbody

Round Island Route

Parks and Waterbodies

An Even Greener Punggol

'Green Fingers', designed with the adjacent developments to ensure accessibility to the public green spaces, are planned to emanate from Punggol's 'Green Heart', of its town park, which comprises a range of activities and landscapes, towards the coastal promenade as well as Coney Island.

Punggol is surrounded by water on three sides. A 4.2km long man-made waterway, Punggol Waterway, also runs through the town, bringing people closer to water (refer to pages 26 – 28 for more details).

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

Planning Principles

4a. Great Places for the Community – Public Spaces

Legend

- Community Node
- Park and Sports Complex
- Town Centre
- MRT/ LRT Network

Punggol Point Park

Punggol Heritage Trail

Punggol Waterway Park

One Punggol

Town Square

Sports and Recreation

OBS@Coney Island

Punggol 21 CC

A variety of civic and recreational spaces are provided within the town to foster active and cohesive communities such as:

- **Town Square**

A large-scale town square is built at the town centre, providing a place for residents to gather, enjoy activities and foster community ties. Together with grassroots organisations, a variety of programmes are organised that enliven the town centre.

- **Community Nodes**

These community nodes are strategically distributed across the town, with facilities for residents to frequent and meet one another.

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Planning Principles

4b. Great Places for the Community – Commercial Spaces

Northshore Plaza

The Punggol Settlement

Market Village

Waterway Point

Future Commercial Centre

Oasis Terraces

Future Commercial Space

Interim F&B Cluster at Crescent District

Punggol Plaza

Legend

- Town Centre
- Commercial Centre
- Precinct Shop Cluster
- Other Commercial Space
- MRT/ LRT Network
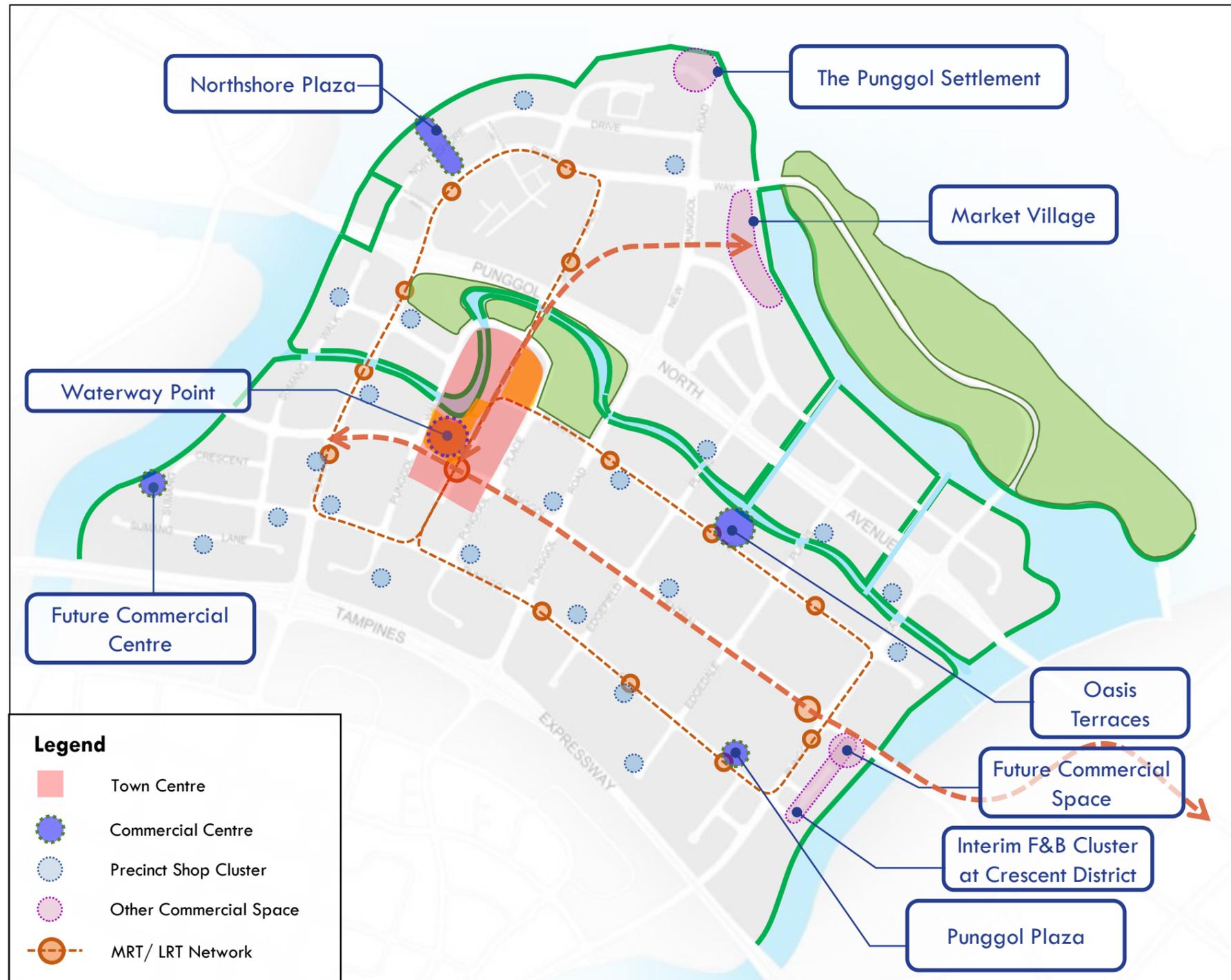
A range of commercial spaces have been planned for and developed strategically within the town. They help to build active and cohesive communities by drawing residents together for activities and interactions, while providing for their daily needs.

- **Town Centre**

The Town Centre, at the heart of Punggol, houses a main shopping mall, which serves the commercial needs of the residents.

- **Commercial Centres**

Commercial centres are strategically located within the town, to serve as localised retail spaces for residents living nearby to shop at.

- **Precinct Shop Clusters**

Local shop clusters at the void deck of several developments in the town were planned within proximity of each LRT station, providing convenience and access to eating houses and super-marts for residents living within these estates.

Planning Principles

5. Punggol Downtown – A New Destination for the North-East Region

Punggol's vibrant Town Centre will be expanded to the North-East, turning this area into a key destination for the North-East region.

Market Village

Campus Boulevard

Town Centre

Sports and Recreation

Legend

Commercial/ Regional Centres

Legend

Town Centre

Expanded Town Centre

Punggol Digital District
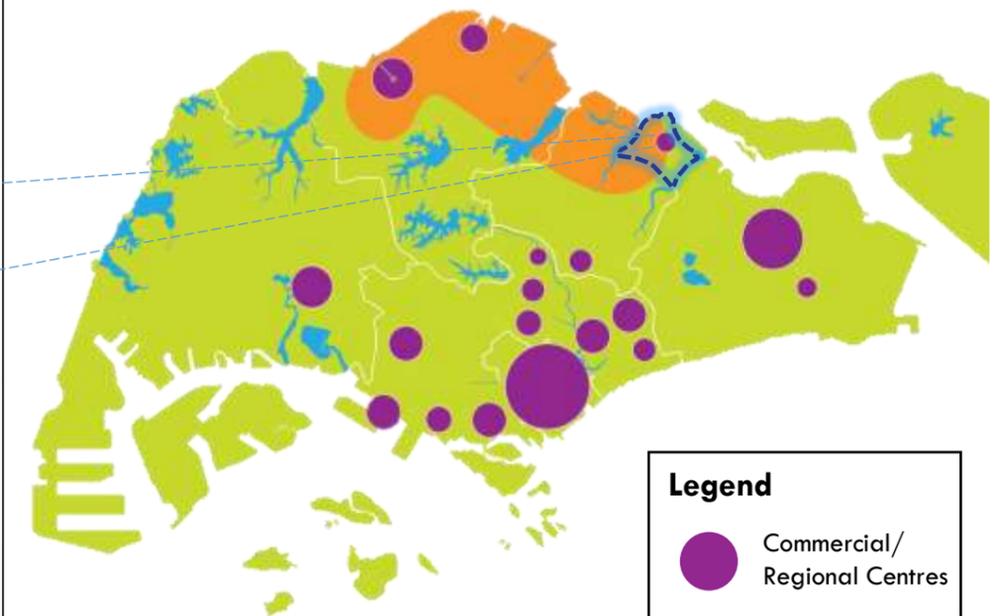
Planning Principles

5. Punggol Downtown – A New Destination for the North-East Region

Aerial perspective of Punggol Digital District

Punggol Digital District

Situated within Punggol Downtown, the Punggol Digital District (PDD) will be a vibrant mixed-use business district, integrated with the new Singapore Institute of Technology (SIT) campus. Housing key growth industries such as digital and cyber security, PDD aims to foster strong collaborations between industry and academia, as well as facilitate test-bedding and prototyping of new innovations. PDD will also feature green links to the waterfront and public spaces for the community, providing an attractive work-live-play-learn environment.

Legend

● Commercial/ Regional Centres
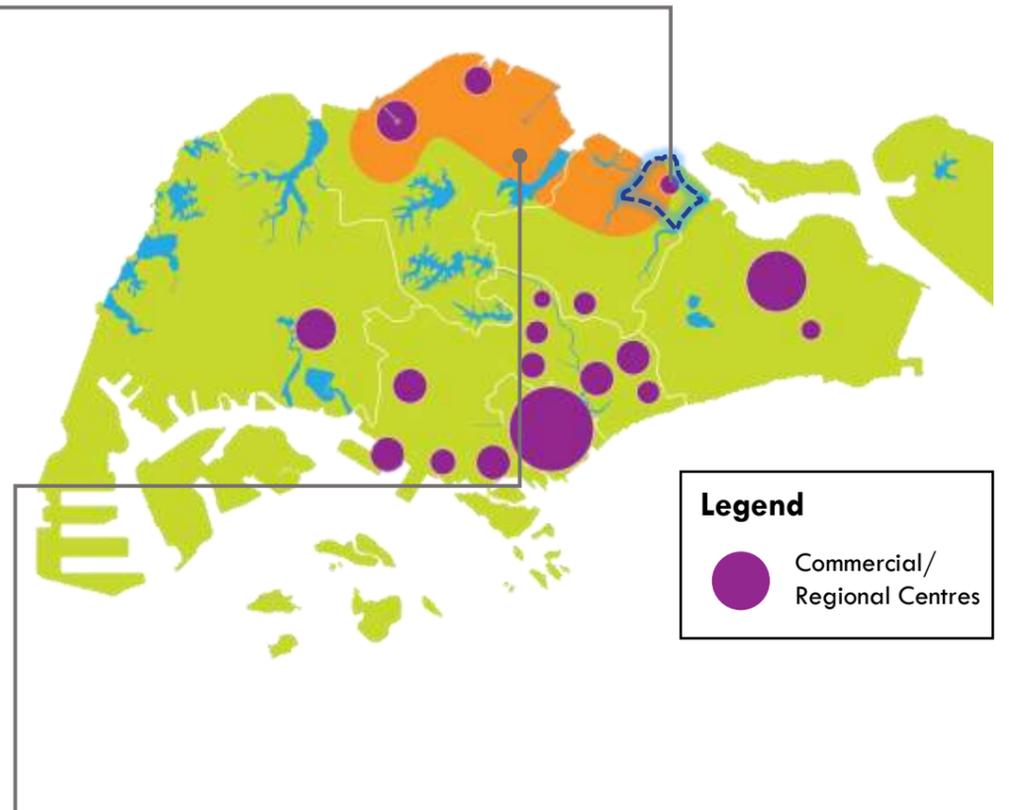
North Coast Innovation Corridor

The North Coast Innovation Corridor, an economic corridor stretching from Woodlands Regional Centre to the Punggol Digital District will provide ample employment opportunities. It will house the first business hub in Singapore's northern area.

Key Corridors

Legend

- ▭ MRT Station and Line
- ▭ LRT Station and Line
- ◀▶ Punggol Waterway Corridor
- ◀▶ Heritage Trail Corridor
- ◀▶ Punggol Promenade Corridor
- ◀▶ Campus Boulevard Corridor
- ◀▶ Mobility Corridor

This map depicts the following key corridors in the town:

1. **Punggol Waterway** that runs through Punggol, connecting Punggol Reservoir to Serangoon Reservoir;
2. **Punggol Heritage Trail** at Old Punggol Road that serves as one of the major green links from the Town Centre to the northern tip of Punggol;
3. **Punggol Promenade** along the coast of Punggol;
4. **Campus Boulevard** connecting Punggol Town Centre to the Punggol Promenade waterfront through Punggol Digital District; and
5. **Mobility Corridors** for vehicles along Punggol Central and the future east-west road connecting Seletar to Pasir Ris.

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: Punggol Waterway

Pulau Punggol Timor

Seletar

STRAITS OF JOHOR

PUNGGOL RESERVOIR

PUNGGOL WATERWAY

CONEY CHANNEL

Coney Island

SERANGOON RESERVOIR

Dams were constructed to create 2 new reservoirs (i.e Punggol Reservoir and Serangoon Reservoir)

The waterway was refined to take on a meandering and organic form, and capitalised on the existing terrains along the waterway corridor to resemble a natural river.

Recreational activities along Punggol Waterway, with Heartwave Wall in the background

Punggol Waterway takes on a meandering and organic form to resemble a natural river

Birth of the Waterway

The National Need for Water

The opportunity to bring a waterway closer to the heart of the town arose with the plans to dam up Sungei Serangoon and Sungei Punggol, to create freshwater reservoirs that would increase Singapore's water catchment.

Instead of a functional pipeline to balance the waters of the new reservoirs, a 4.2km long landscaped waterway meandering through Punggol was created, transforming its functional purpose into a recreational outdoor facility for the community.

An Engineering Feat

During the design and construction stages, many challenges were encountered, and HDB had to come up with innovative and green solutions to maximise efficiency and yield cost savings. For instance, to safeguard the integrity of nearby rail transit structures, diaphragm walls were constructed prior to excavation works. The diaphragm wall was eventually transformed into the Heartwave Wall – a 280m long scenic retaining wall with vertical greenery, water features and educational heritage panels reflecting Punggol's history.

Key Corridor: Punggol Waterway

The waterway corridor is activated through a variety of uses such as waterfront housing, sports and recreation facilities, community nodes as well as spaces for learning more about biodiversity and green technology.

Currently, there are 7 pedestrian bridges across the waterway connecting developments across the waterway.

URBAN | UNDULATING | RUSTIC

ADVENTURE BRIDGE

PEDESTRIAN FOOTBRIDGE

PEDESTRIAN FOOTBRIDGE

SUNRISE BRIDGE

LRT Station (NIBONG)

LRT Station (SAM KEE)

KELONG BRIDGE

WAVE BRIDGE

MRT Station (PUNGGOL)

JEWEL BRIDGE

PUNGGOL ROAD

EDGEFIELD PLAINS

EDGEDALE PLAINS

PUNGGOL RESERVOIR

SERANGOON RESERVOIR

PUNGGOL EAST

Floating Wetland System
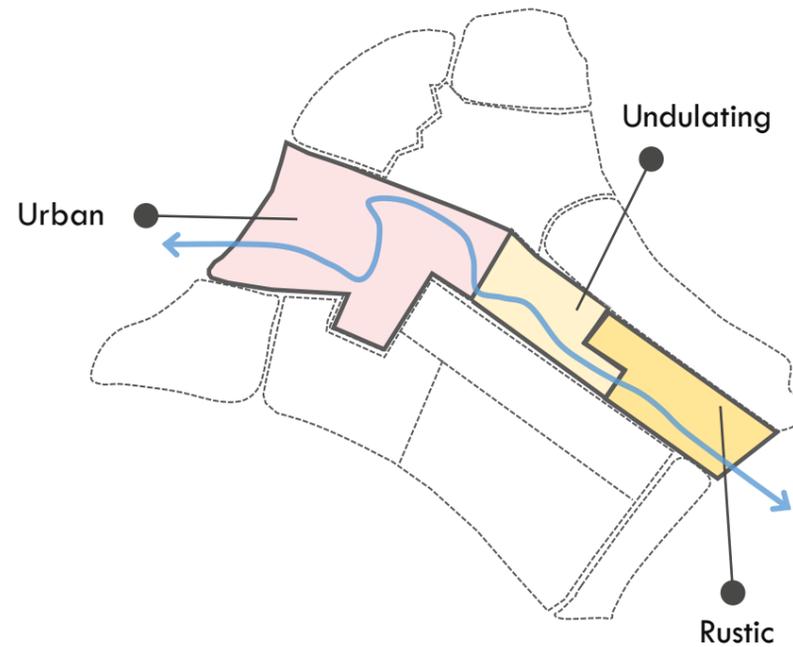
N
0 50 100 150 200 250 300m

Legend
1. Waterway Terraces
2. Waterway Ridges
3. Waterway Woodcress
4. Punggol Town Square
5. Eco Learning Journey at Punggol Discovery Cube
6. Waterway Point
7. Punggol Waterway Park
8. SAFRA Clubhouse
9. Oasis Terraces

Key Corridor: Punggol Waterway

10m wide landscaped promenade along the waterway


Urban

Undulating

Rustic

Urban Design Theme

The waterway corridor is divided into 3 zones, each guided by an urban design theme, namely 'Urban', 'Undulating' and 'Rustic', which relate correspondingly to their respective sub-themes. The urban forms are encouraged to step down towards the waterway to create a harmonious transition in scale.

Each theme is expressed in the architectural design and finishes, enriched by the street furniture and landscaping design. This gives a unique identity to each zone along the waterway.

A 10m wide landscaped promenade running along both banks of the waterway also provide a great place for residents to enjoy their recreational activities. Different water edge treatments along the waterway responding to the theme should also be provided to bring people closer to the water.
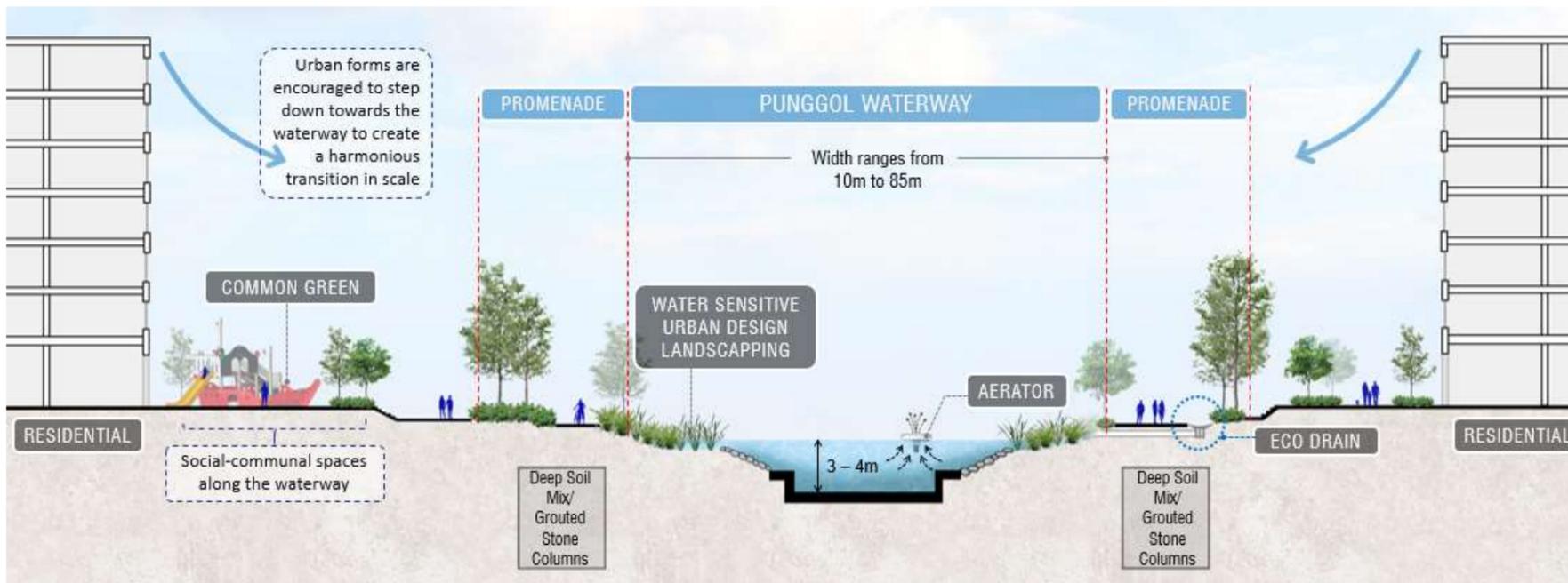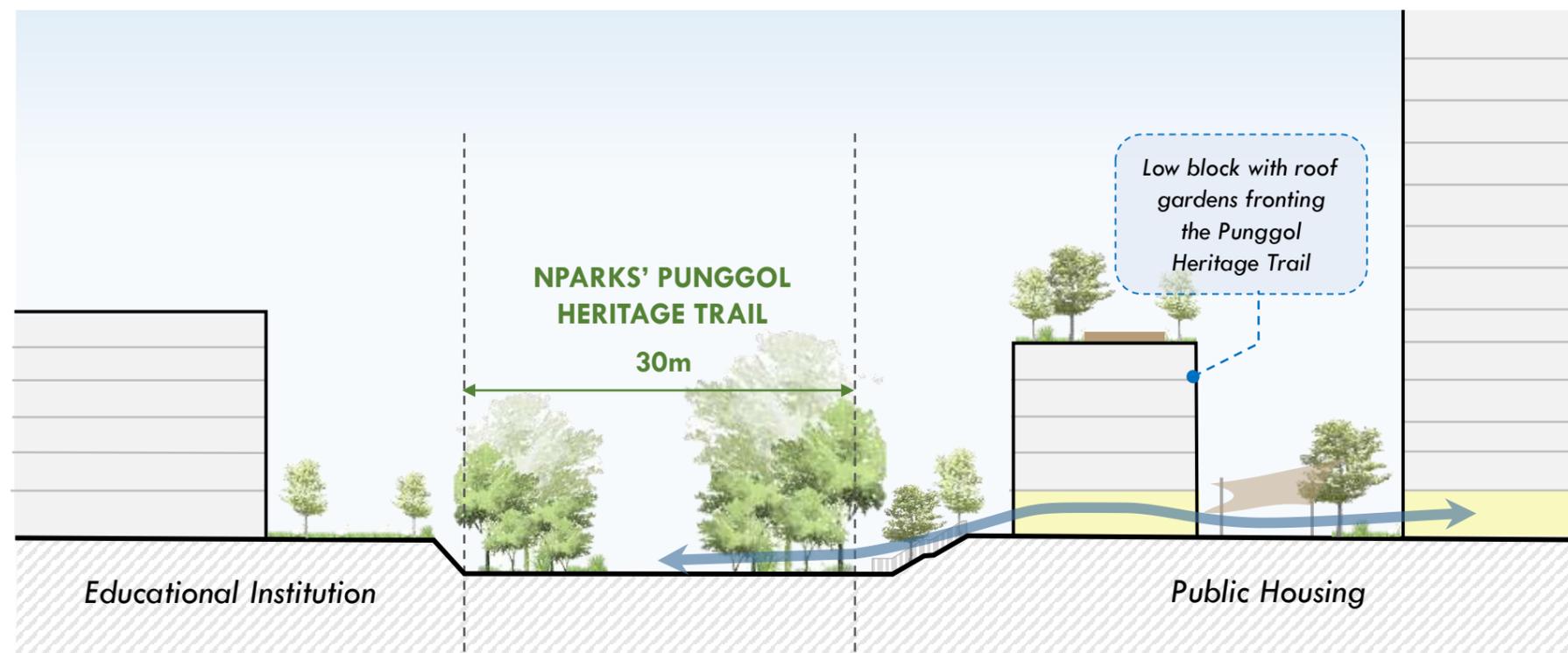

Schematic section across the Punggol Waterway showing the relationship with the waterfront housing developments

Key Corridor: Punggol Heritage Trail

Characteristics of Old Punggol Road – rustic ambience, green tunnel effect, and an undulating terrain stretching across 1.3km

One of the key historical landmarks is the Old Punggol Road, which used to be a key transportation route for farm and fishing goods, serving the many farms and *kampungs* in the area.

A short stretch of the Old Punggol Road has already been pedestrianised within the existing Punggol Waterway Park. Some of the interesting features along this completed stretch includes the Kelong Bridge, heritage wall and an old bus stop.

The remaining stretch of the Old Punggol Road leading to Punggol Point will be progressively pedestrianised as a Heritage Trail, where all can enjoy leisurely strolls, jogging and cycling amidst lush greenery. The Punggol Heritage Trail will also be well-integrated with adjacent developments, such as the future SIT campus, JTC's business parks as well as residential developments.

Schematic section across the Punggol Heritage Trail

Low block with roof gardens fronting the Punggol Heritage Trail

NPARKS' PUNGGOL HERITAGE TRAIL

30m

Educational Institution

Public Housing

Punggol Point Jetty

Old Punggol Road

Punggol Point District

Kelong Bridge

Punggol MRT Station

My Waterway@Punggol

Key Corridor: Punggol Heritage Trail

Connecting all the way to Upper Serangoon Road, Old Punggol Road used to be the key transportation route for farm and fishing goods.

In addition to the existing Punggol Point Park, residents can anticipate more facilities such as a nature-themed playground inspired by Punggol's history and sheltered public spaces with seating.
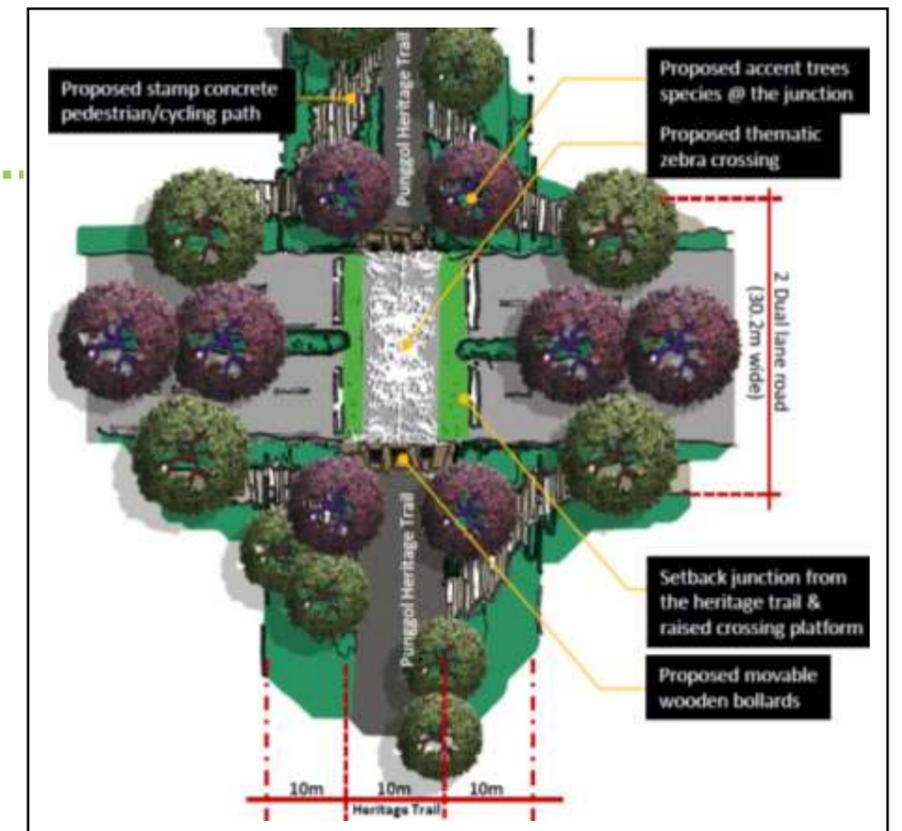
Residents and visitors alike will be able to enjoy the rustic charms of the pedestrianised Punggol Heritage Trail when it is completed. Educational information boards providing details on the types of flora and fauna will be installed. Users of the Punggol Heritage Trail will be able to pause and play at the different activity nodes.

Key Corridor: Punggol Promenade

PUNGGOL PARK CONNECTOR

PUNGGOL POINT WALK

NATURE WALK

RIVERSIDE WALK

The Punggol Promenade is a key recreational corridor that wraps along the coast of Punggol. It is designed to be 15m wide to ensure accessibility to the waterfront areas, and that there is ample space for walking, cycling and other recreational activities. Different thematic treatments have been applied across the promenade to give it a unique character and varied experience.

It is also part of the larger Coastal Adventure Corridor segment of the Round Island Route (RIR) network that enhances connectivity between various recreational destinations across Singapore.

Punggol Park Connector

Punggol Point Walk

Nature Walk

Riverside Walk

Key Corridor: Campus Boulevard

The Campus Boulevard is an 800m long pedestrianised street which will be integrated with the developments in the Punggol Digital District. It is a key corridor in Punggol as it provides seamless connectivity from the Punggol Town Centre to the Punggol Promenade waterfront through Punggol Digital District.

It will be designed as a lushly landscaped key gathering space with various retail and F&B offerings, and also designed for walking and cycling.

Artist's impression of Campus Boulevard

Key Corridor: Campus Boulevard
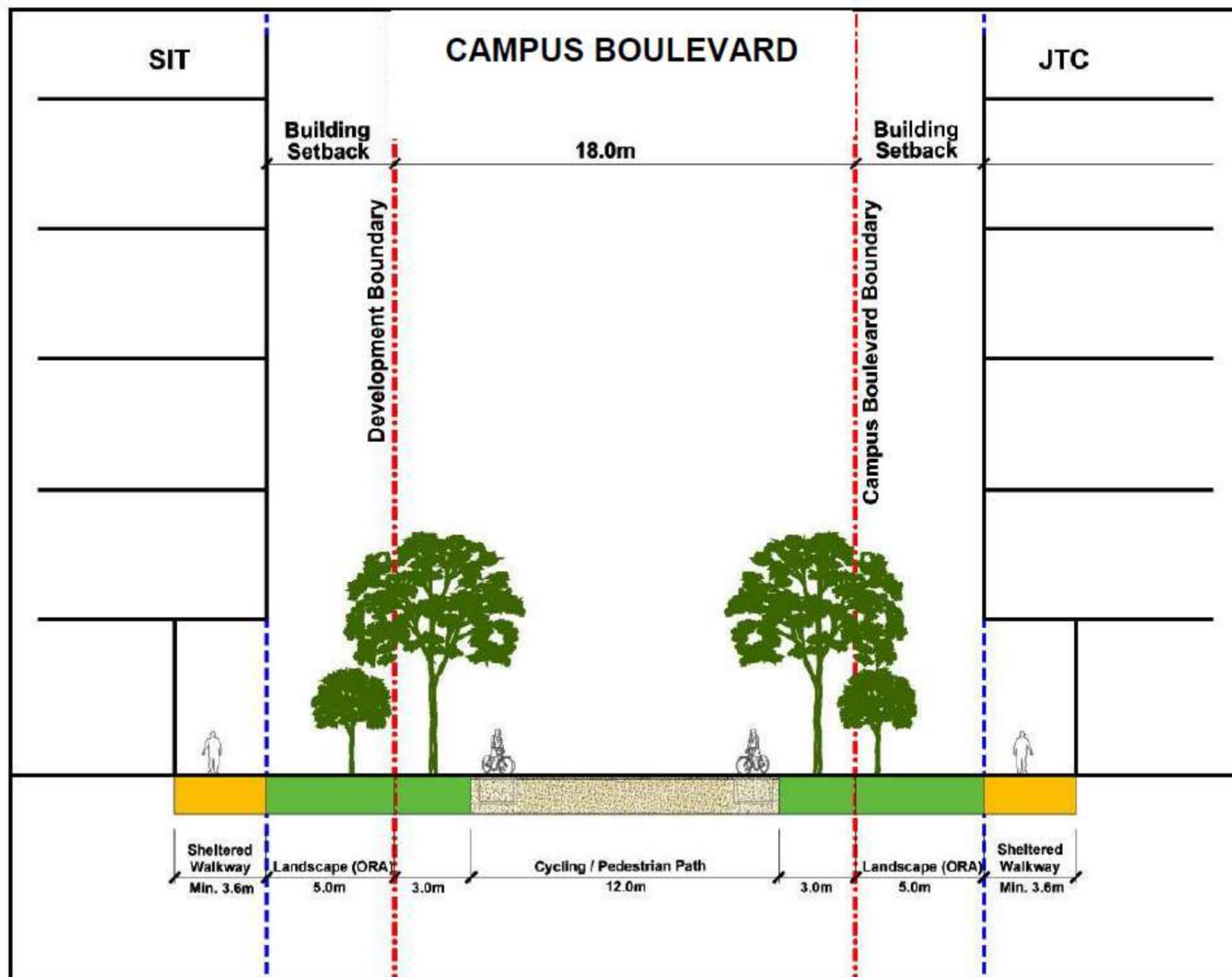
Typical section of the Campus Boulevard

Some of the key urban design guidelines set out by URA to guide the streetscape along the Campus Boulevard are as follows:

- A minimum 18m wide pedestrian mall named Campus Boulevard (minimum 12m wide pedestrian/ cycling path + 3m wide landscaping on both sides), shall be provided as the primary public thoroughfare connecting the Punggol Coast MRT Station to the waterfront

- Developments shall be set back 5m from the Campus Boulevard to create spaces for spill-out activities as an extension of the adjacent developments. Landscaping, seating areas, retail kiosks and outdoor refreshment areas, etc. shall be incorporated within this 5m building setback zone

- To provide an active street edge along the key pedestrian thoroughfares, developments shall provide a minimum 4-storey high building edge abutting the building setback lines along the Campus Boulevard

For more details, please refer to URA's Urban Design Guidelines for Punggol Digital District which are available on URA's website.

Key Corridor: Mobility Corridor

Street view along Punggol Central

Mobility corridors are major avenues with at-grade cycling and pedestrian paths that bring the community conveniently to various key nodes and landmarks within the town. These also include potential corridors identified for transit priority to encourage Walk-Cycle-Ride and support public transport travel. More mobility corridors could be identified as the town develops and evolves. Where possible, the streetscape of these corridors can be further enhanced with thematic planting to improve the town-wide green network. Additional entrance and exit markers can also be introduced at the start and end of major avenues for orientation references and to enhance the identity of Punggol Town.

One of the key mobility corridors in Punggol is Punggol Central, which was designed to be a green boulevard that will serve as a formal vehicular approach to the town centre. It has been specially treated as an urban street to give it a distinctive character, thereby providing a strong reference for orientation. The absence of the LRT viaducts along Punggol Central provides good opportunities for tree plantings to create a unique character for this boulevard.
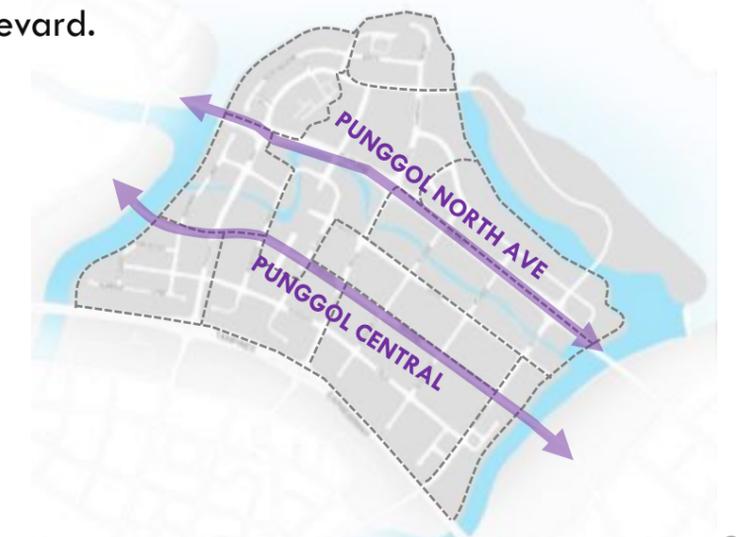
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Key Nodes and Junctions

1 Waterway Point

2 Punggol Plaza

3 Waterway Terraces I & II

4 SAFRA Punggol

5 MyWaterway@Punggol

6 Coney Island

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 Punggol, such as MyWaterway@Punggol, Waterway Point and One Punggol. 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.

Legend

- 🟠 Major Junction
- 🟠 Minor Junction
- 🟩 Common Green/ Park
- 🟦 Commercial Centre
- 🟥 Community Centre
- ✳️ Existing Landmark
- ✳️ Future Landmark
- ▭ MRT Station and Line
- ▭ LRT Station and Line

7 Oasis Terraces

8 Northshore Plaza I & II

9 SIT Campus

10 One Punggol

11 Regional Sport Centre

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Heritage Elements

The design of the Punggol Walk Bridge derives its inspiration from Punggol's heritage as a seaside village. The shape of the bridge is designed to echo a "crab net", a commonly used equipment used in Punggol's yester-years which residents/ visitors used for crab fishing.

Murals depicting Punggol's 'kampung' past, at Blk 105C Edgedale Plains

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

An art sculpture at Punggol Waterway Point

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.
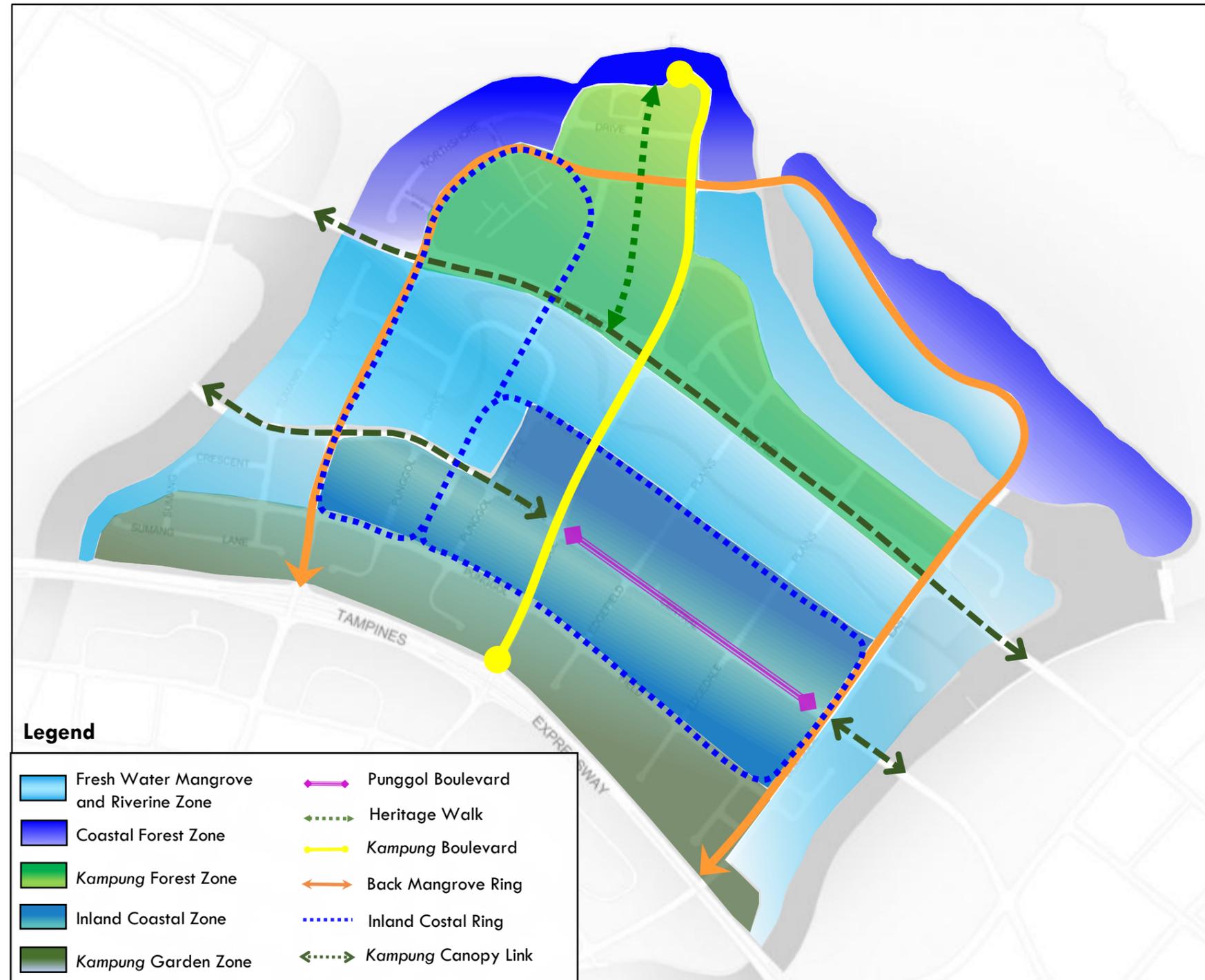

From left: Existing sail structures to mark the entrance into Punggol along Punggol Road; a basketball court painting inspired by Punggol's identity as a waterfront town, behind Blk 305B

An art mural depicting Punggol Town displayed in Punggol Waterway Point

Broad Landscape Theme

Legend

Fresh Water Mangrove and Riverine Zone		Punggol Boulevard	
Coastal Forest Zone		Heritage Walk	
Kampung Forest Zone		*Kampung* Boulevard	
Inland Coastal Zone		Back Mangrove Ring	
Kampung Garden Zone		Inland Costal Ring	
		Kampung Canopy Link	

The 'Water and Nature' town theme and identity is aligned with NParks' Landscape masterplan, and the planting concept of *Kampung* Fruit-tree Plantation and Mangrove Forest with coastal plant species.

In response, the overall landscape is divided into 5 zones with subtle differences for plant selection to enhance the landscape character of each zone.

The overall streetscape planting approach and palette also follows the masterplan concept to create a clearer street identity for the primary and secondary arteries of the town.

One key planting method is to use coastal tree species that adapt to non-coastal areas as a base palette in the five landscape zones, while each individual zone has its dominating datum trees. In this way, there is consistency of the planting for the whole town while the identity of each zone remains distinctive. *Kampung* fruit-tree species are also incorporated in the relevant zones where suitable, to correspond to NParks' streetscape masterplan.

For all developments in each zone, the planting shall be designed in relation to the context.

Broad Landscape Theme: Fresh Water Mangrove and Riverine Zone

Planting along My Waterway@Punggol

From left: *Melaleuca cajuputi* (Paperbark); *Hopea odorata* (Chengal Pasir); *Leptospermum brachyandrum* (Weeping Tea-Tree)

Landscape Approach

Vegetation along the waterways and the waterfront park connectors in Punggol town weave together naturally and spread out to form an interesting riverine landscape. The riverine landscape is enhanced with additional mangrove plants that can adapt to freshwater.

At the waterway banks, water-tolerant species dominate and form the first-tier planting. Along the promenade, trees with broad canopies create the second planting tier and also provide shade. The landscape of HDB precincts serves as the third tier planting of the waterway. This planting approach complements the waterway planting and allows views towards the water through the tree canopy. The trees at housing precincts along the waterway form a more uniform green canopy against the diverse waterfront planting at the first two tiers.

- **Planting Concept:** Tiers of vegetation towards the waterfront

- **Planting Strategies:** Tall trees with open canopy along development boundary and feature sub-canopy trees to echo the waterfront vegetation

- **Proposed Datum Trees:** *Melaleuca cajuputi, Hopea odorata, Fagraea fragrants, Podocarpus rumphii, Gymnostoma sumatrana, Leptospermum brachyandrum*

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Broad Landscape Theme: Coastal Forest Zone

Planting in front of Punggol Bayview

From left: *Gymnostoma rumphianum* (Weeping Ru); *Barringtonia asiatica* (Sea Putat); *Talipariti tiliaceum* (Sea Hibiscus)

Landscape Approach

The north of Punggol is along the coastal line where the seaside vegetation dominates and naturally spreads into the town.

The planting approach is to retain the coastal landscape and bring in more plant species to enhance bio-diversity.

Along the coastal edges, existing vegetation mix with layers of added coastal plants to form a lush green buffer along the waterway. At the promenade, trees with broad canopies are provided to ensure a comfortable ambient temperature for users. In HDB precincts, coastal tree species echo coastline plantings to create a coastal forest landscape.

- **Planting Concept:** Tiers of coastal vegetation towards the sea

- **Planting Strategies:** Layers of coastal trees within the housing developments to reflect the coastal forest landscape

- **Proposed Datum Trees:** *Casuarina junghuhniana, Barringtonia asiatica, Calophyllum inophyllum, Peltophorum pterocarpum, Coccoloba unifera, Intsia bijuga, Gymnostoma sumatrana, Talipariti tiliaceum, Terminalia catappa*

Broad Landscape Theme: *Kampung* Forest Zone

Planting concept for *kampung* forest zone

From left: *Peltophorum pterocarpum* (Yellow Flame); *Barringtonia racemose* (Putat Kampong); *Artocarpus heterophyllus* (Jackfruit)

Landscape Approach

Behind the coastal forest zone, the vegetation is mixed with some common *kampung* plants, which were originally brought in by residents and then gradually spread out by natural succession.

The planting approach is to create a more distinctive forest imbued with the character of *kampung* plants. *Kampung* fruit tree species and community garden plants are introduced to blend in with coastal forest species. Organic and random arrangements of trees with layers of under canopy shrubs form a natural forest setting. Within housing precincts, natural planting with forest vegetation density is encouraged for areas without human traffic.

- **Planting Concept:** Layers of vegetation with natural planting arrangement

- **Planting Strategies:** Mixture of coastal forest tree species with *kampung* plants to create a secondary forest environment

- **Proposed Datum Trees:** *Barringtonia asiatica, Barringtonia racemose, Peltophorum pterocarpum, Calophyllum inophyllum, Terminalia catappa, Caryota mitis, Pometia pinnata, Artocarpus elasticus, Artocarpus heterophyllus, Garcinia atrviridis, Syzygium jambos, Myristica fragrans, Muntingia calabura, Manikara zapota*

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Broad Landscape Theme: Inland Coastal Zone

Punggol Oceanus precinct garden

From left: *Sterculia foetida* (Indian Almond); *Millettia pinnata* (Seashore Mempari); *Pouteria obovate* (Sea Gutta)
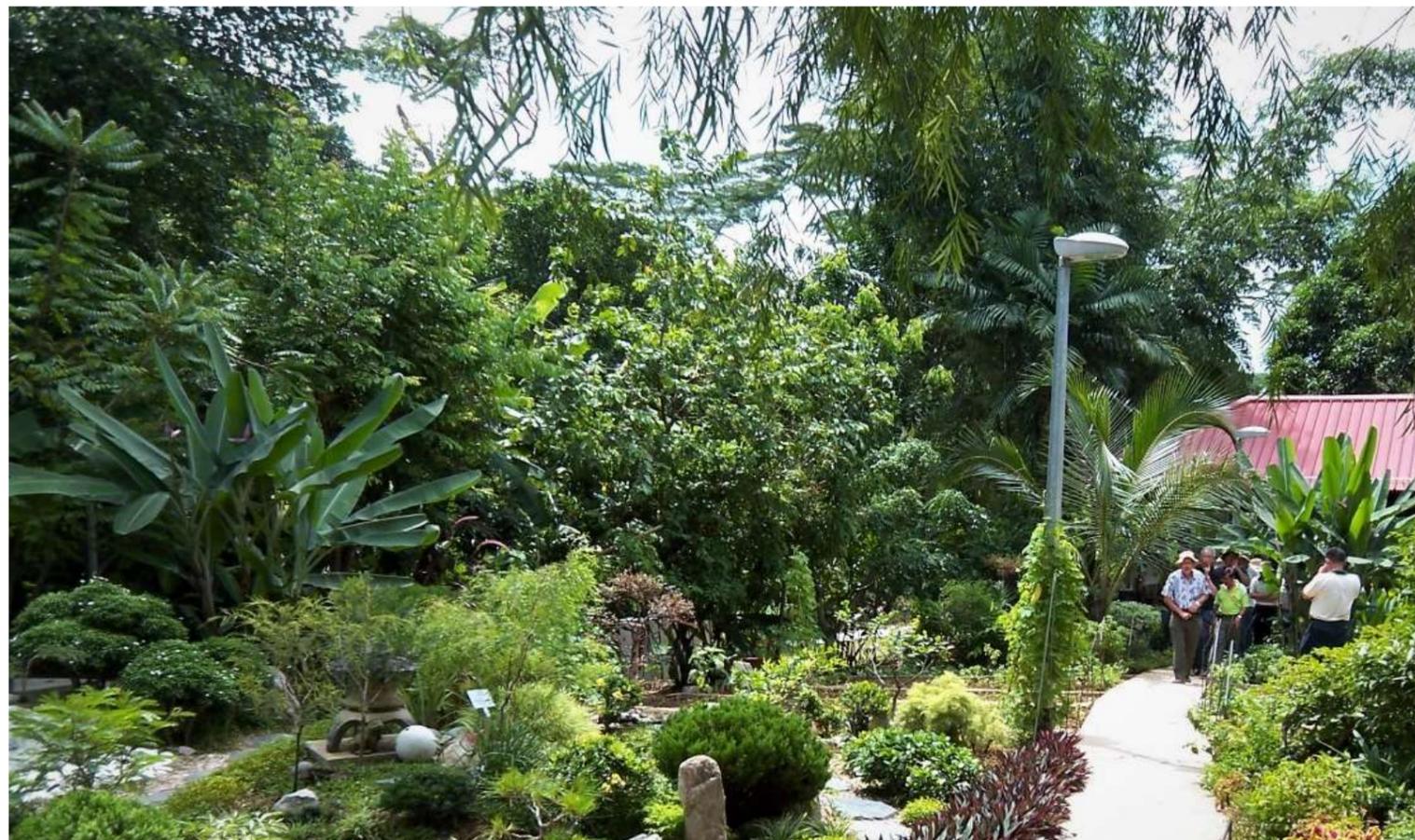
Landscape Approach

Away from the waterfront, the seaside planting takes on a different character at the inland landscape. Nevertheless, coastal species that adapt well to non-coastal areas thrive in this zone.

The planting approach is to relate to the coastal landscape in terms of plant species. The arrangement of plants is encouraged to reflect a forest environment in response to the coastal forest and *kampung* forest landscape. However, sub-canopy planting can be minimised to allow more lawn spaces for activities and open views.

- **Planting Concept:** Tall coastal trees with good canopy and simple sub-canopy planting

- **Planting Strategies:** Tall trees with closer planting spacing and clustering of sub-canopy trees to create a forest landscape with clearer sub-canopy planting

- **Proposed Datum Trees:** *Sterculia foetida, Millettia pinnata, Pouteria obovate, Coccoloba uvifera, Podocarpus rumphii, Gymnostoma sumatrana, Cordia sebestena, Talipariti tiliaceum*

Broad Landscape Theme: *Kampung* Garden Zone

Planting concept for *kampung* community garden

From left: *Sterculia parviflora* (Common Sterculia); *Hopea odorata* (Chengal Pasir); *Gnetum gnemon* (Belinjau)

Landscape Approach

The south boundary of Punggol borders the Tampines Expressway (TPE) with a 5m wide green buffer, forming a dense vegetation belt. Lush planting serves as a green screen along this major traffic artery to protect the environmental quality of the town.

In this *Kampung* Garden zone, the suggested landscape approach is to encourage resident participation in community gardening. With various plant species, the rich bio-diversity of the town is maintained, and a stronger *kampung* spirit can be forged. Passive landscape spaces such as precinct boundary green buffers offer oppertunity for community gardening.

- **Planting Concept:** Dense buffer planting along driveways with community garden plants at precinct landscape

- **Planting Strategies:** Layers of screening species along TPE and green buffers, organic arrangement of community garden plants behind dense green buffers where suitable

- **Proposed Datum Trees:** *Sterculia parvifolia, Hopea odorata, Fagraea fragrants, Gnetum gnemon, Flacourtia inermis, Dillenia suffruticosa, Manilkara zapota, Spondias cytherea, Averrhoa bilimbi*

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Contents

Town Scale

- Context and History

- Planning Principles

- Town Vision, Theme and Concept

- Key Corridors

- Key Nodes and Junctions

- Heritage Elements

- Art Elements

- Broad Landscape Theme

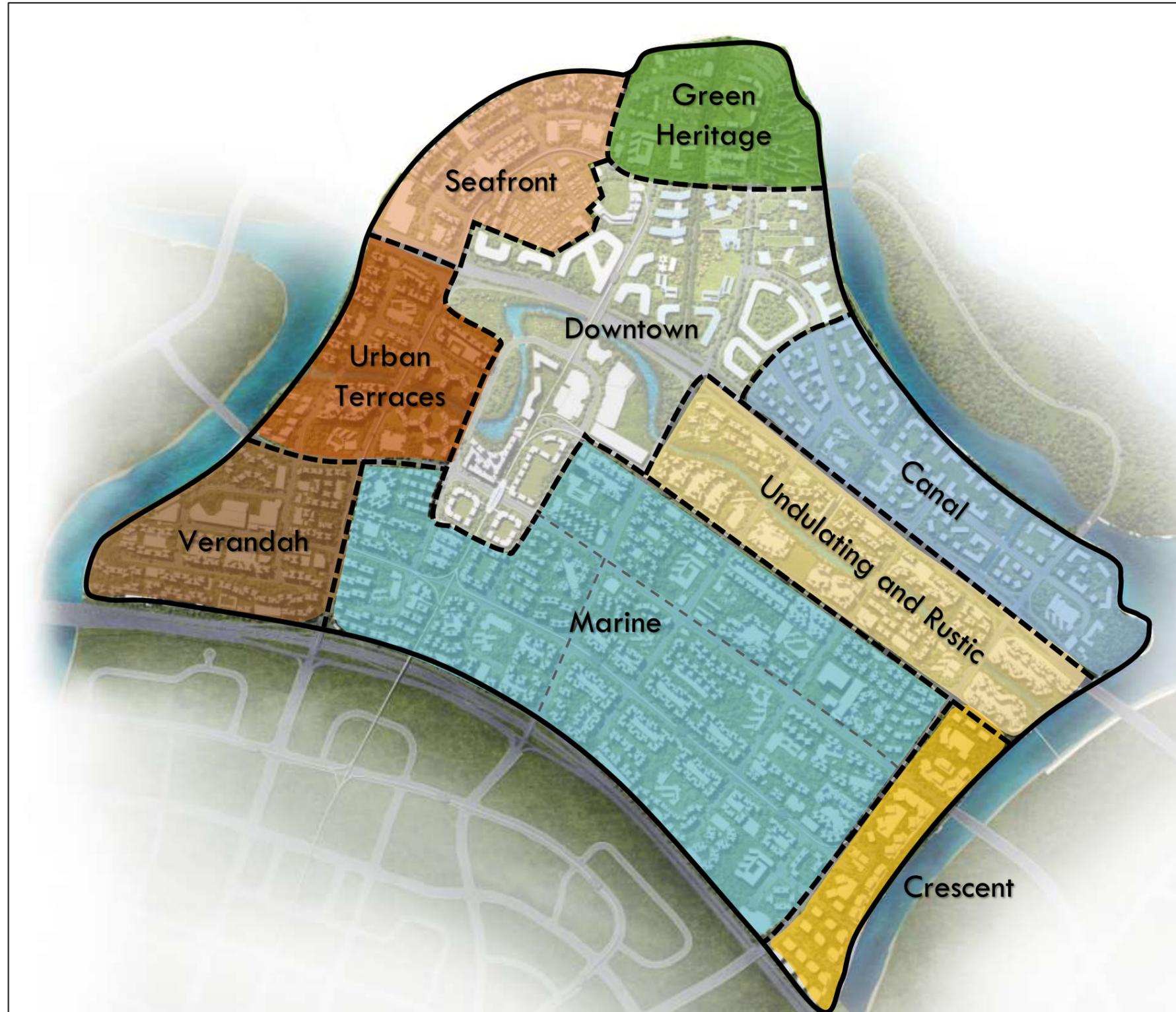## District Scale

- Sub-themes and Concepts

  - Form and Massing

  - Public Spaces

  - Streetscape and Urban Edge

  - Colour Palette

  - Facade and Roofscape

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.

9 Distinct Sub-Themes

Based on the prevalent characteristics, the 9 areas are given specific sub-themes which also relate to the overall Punggol town theme of 'Water and Nature'.

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

District	Sub-theme
Downtown District	– Downtown
Waterway West District	– Urban Terraces
Waterway East District	– Undulating and Rustic
Matilda District	– Verandah
Northshore District	– Seafront
Punggol Point District	– Green Heritage
Canal District	– Canal
Crescent District	– Crescent
Central District	⎫
Punggol Field West District	⎬ Marine
Punggol Field East District	⎭

District Scale Layers

Each of the district 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.

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

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

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

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

Primary Colour

Secondary Colours

Accent Colour

Primary Colour

Secondary Colour

Accent Colours

Examples of the application of colour palettes on facades

District Scale Layers

Summary of Colour Palettes for Punggol

Based on the '**Water and Nature**' town theme, the suggested colour palettes of the 9 distinct areas in Punggol are inspired by the history and character of each district. Please refer to each area for the details of its suggested colour palette.
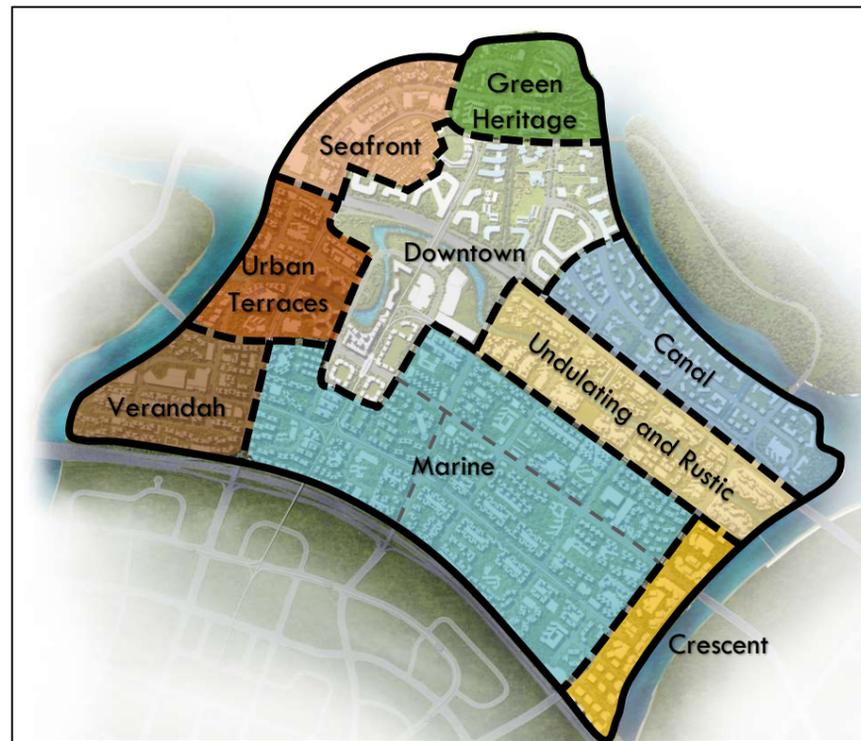
	Primary Colours	Secondary Colours	Accent Colours
Punggol Downtown Downtown			
Waterway West District Urban Terraces			
Waterway East District Undulating and Rustic			
Northshore District Seafront			
Punggol Point District Green Heritage			
Matilda District Verandah			
Central, Punggol Field West and East Districts Marine			
Crescent District Crescent			
Canal District Canal			

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Punggol Downtown – Downtown

Aerial perspective of Punggol Digital District

Panorama of Punggol Waterway at the Town Centre, showcasing waterfront living and recreational spaces

Sub-theme and Concept

Downtown

Punggol Downtown consists of the town centre and extends to the North-East to link up with Punggol Digital District, a vibrant mixed-use business district. It is also integrated with the new SIT campus, creating an exciting live-work-play-learn environment.

ENTERTAINMENT   INNOVATION

VIBRANT   MODERN   URBAN

TRENDY   **DOWNTOWN**

BUSINESS CENTER   COMMERCIAL HUB

DIVERSITY   PLACE FOR

COMMUNITY SPACE   GATHERING

Punggol Downtown – Downtown

Downtown

## Sub-theme and Concept

Planning and Design Considerations

- To create an attractive waterfront living environment

- To enhance the living environment for residents through the use of smart technology, connecting residents to greenery as well as providing seamless connectivity towards the waterfront

- Park spaces fronting the sea are linked by a park connector which runs along the promenade

Punggol Downtown – Downtown
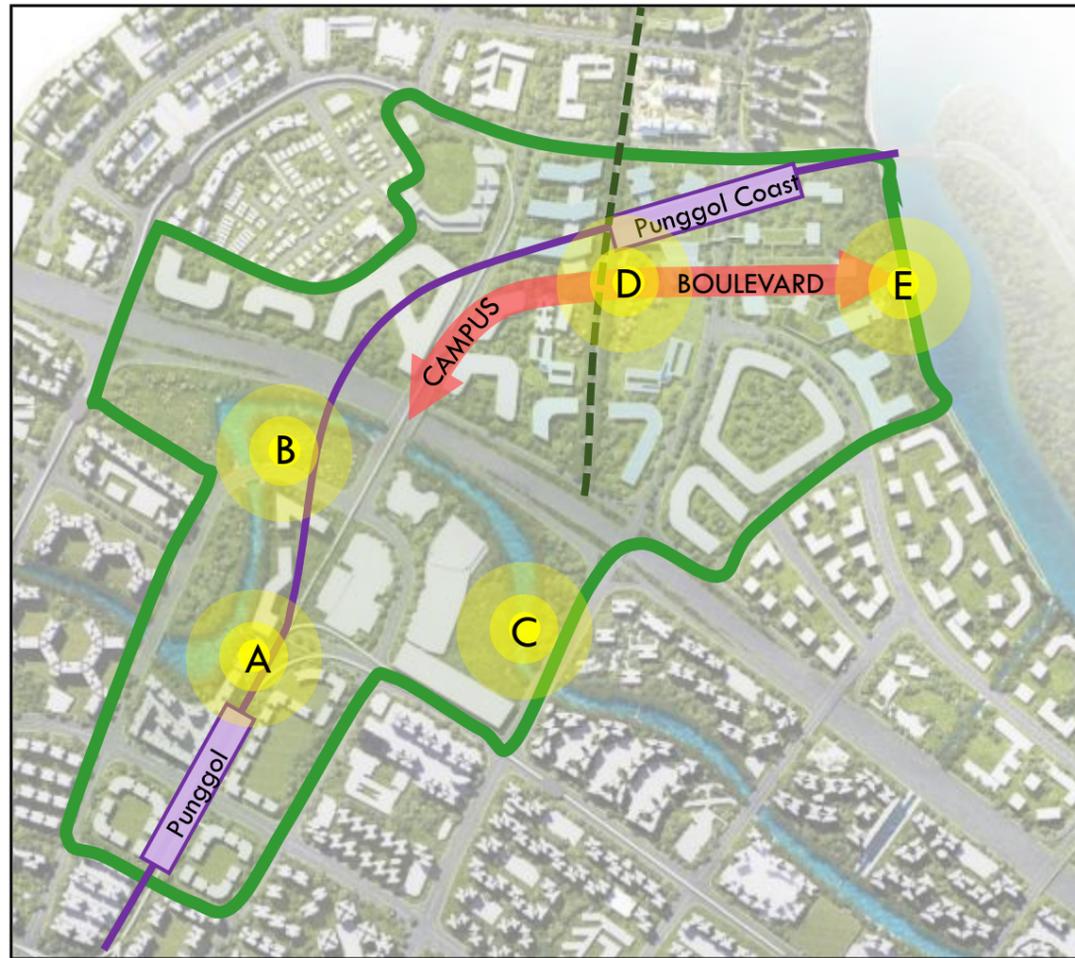
A. Aerial view of Punggol Town Square

B. Punggol Waterway Park

Public Spaces

- With plans for Downtown to be an extension of the Town Centre, various large-scale activity nodes with varied uses, such as sports and recreation, community bonding, and education, are planned for Punggol residents to gather and enjoy.

- Public spaces are designed to connect and respond to either the Punggol Waterway or the reservoir

C. Water sports along the Punggol Waterway

D. Artist's impression of Campus Boulevard – interface between JTC and SIT

E. Artist's impression of Market Village – commercial and leisure facilities for the community

Punggol Downtown – Downtown

Colour Palette

The suggested colour palette uses neutral light greys and brown as the base, with dark grey and browns as accent colours to harmonise with the rest of the Downtown area.

Facade and Roofscape

- Vertical lines and clean geometric forms for contemporary and timeless facade designs

Primary Colours
Unify the identity of the area, and form the main base of the colour scheme
(choose both primary colours)
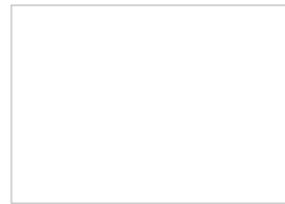
BS 00 E 55   BS 22 B 15

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

BS 00 A 05   BS 08 B 21

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)

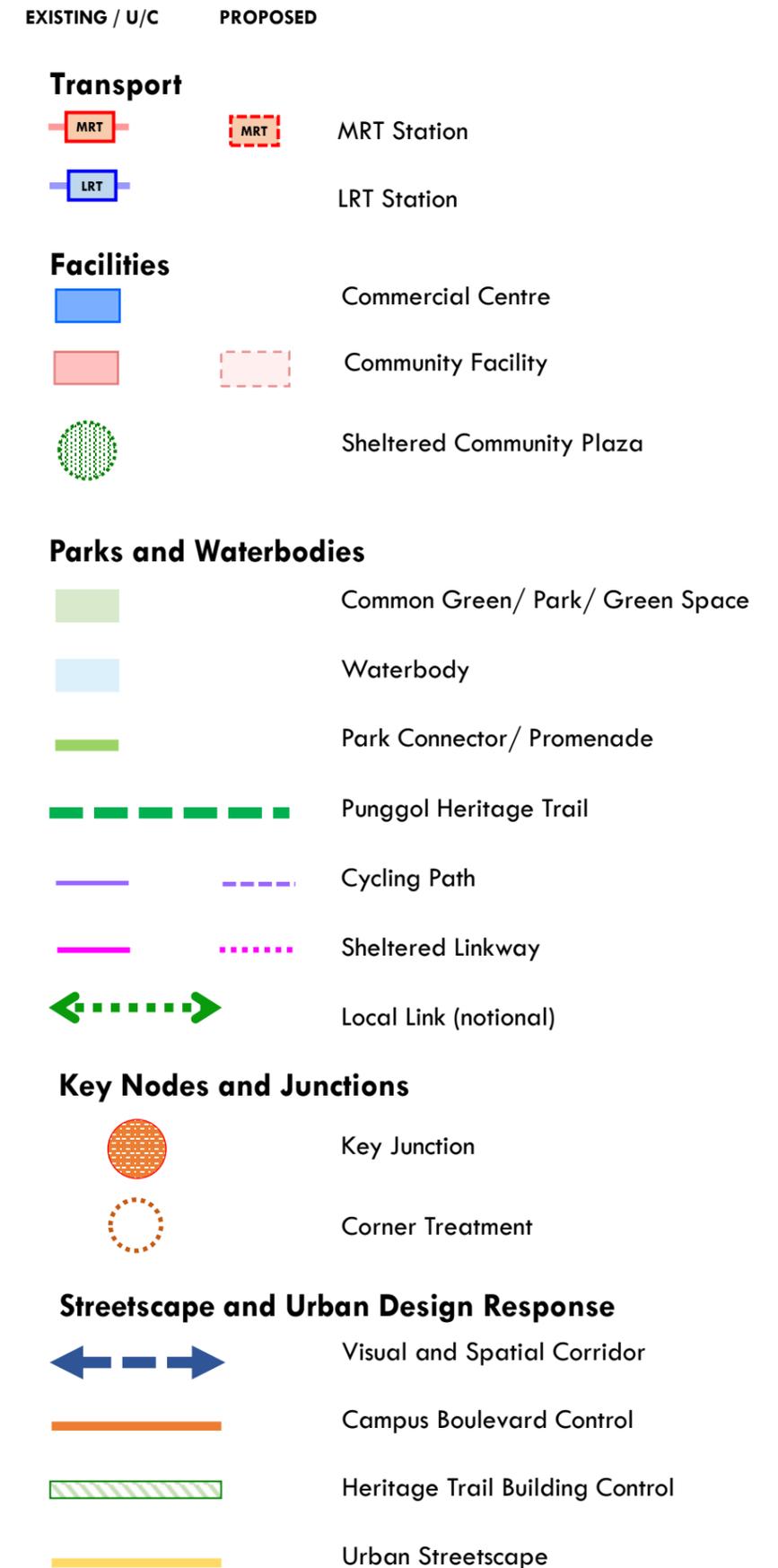BS 08 C 37   BS 06 C 39   BS 00 A 13

Grey and brown tones on the facade of the residential towers above Waterway Point

Contemporary facade design with clean geometric forms (example from SkyResidence @ Dawson)

Punggol Downtown – Downtown
Overview of Key Urban Design Considerations
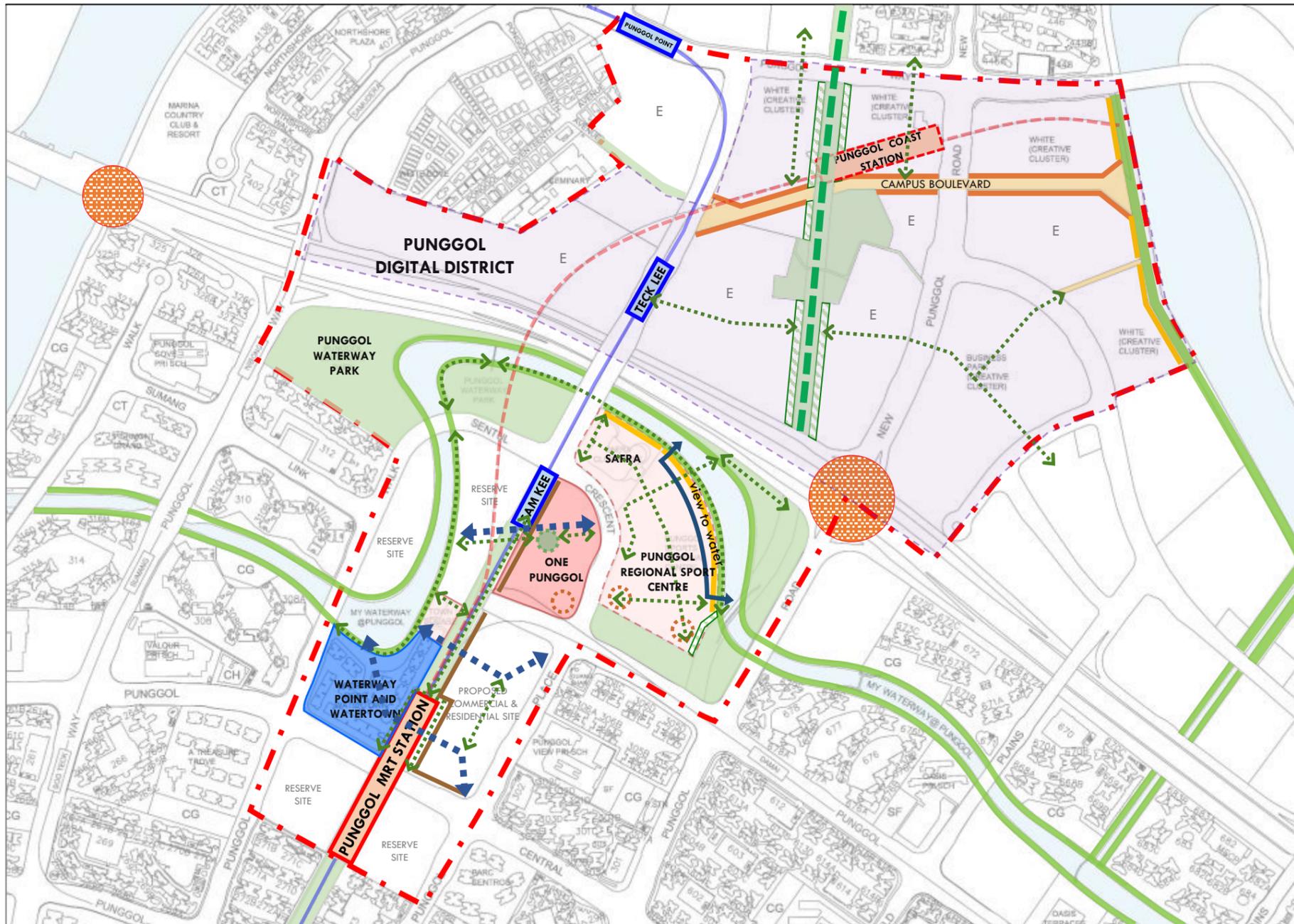
For more details regarding the Urban Design Guidelines for Punggol Digital District, please refer to URA's website.

EXISTING / U/C   **PROPOSED**

Transport

- MRT — MRT — MRT Station
- LRT — LRT — LRT Station

Facilities

- Commercial Centre
- Community Facility
- Sheltered Community Plaza

Parks and Waterbodies

- Common Green/ Park/ Green Space
- Waterbody
- Park Connector/ Promenade
- Punggol Heritage Trail
- Cycling Path
- Sheltered Linkway
- Local Link (notional)

Key Nodes and Junctions

- Key Junction
- Corner Treatment

Streetscape and Urban Design Response

- Visual and Spatial Corridor
- Campus Boulevard Control
- Heritage Trail Building Control
- Urban Streetscape

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Waterway West District – Urban Terraces

Waterway Terraces I and II

Waterway Cascadia

Sub-theme and Concept

Urban
Terraces
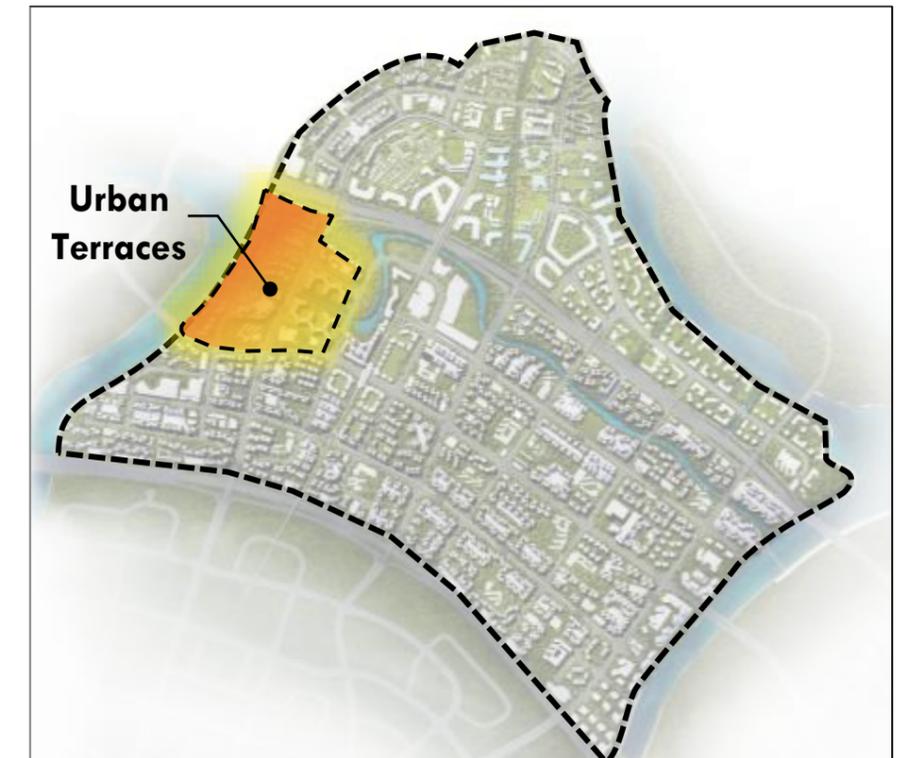
Waterway West District located west of the town centre, fronting Punggol Reservoir, and is characterized by the concept of terraces as its key feature, as can be seen in the first housing developments there, namely Waterway Terraces I and II. The developments within this district enjoy porous and easy access to the garden-like environment along the waterway.

SLEEK AND CLEAN LINES   MODERN   TERRACING FORMS

URBAN TERRACES

GEOMETRIC   MAXIMUM VIEWS TOWARDS WATERWAY

MODULAR
DISTINCTIVE SHAPE/ FORM   STEPPED SKYLINE
LANDSCAPING   54

Waterway West District – Urban Terraces

Sub-theme and Concept

Planning and Design Considerations
- To create an attractive waterfront living environment within the 'urban' zone of the Punggol Waterway

- Enhance the living environment for residents by connecting residents to greenery, as well as providing seamless connectivity towards the waterfront

- Park spaces fronting the Punggol Reservoir are linked by a park connector which runs along the promenade
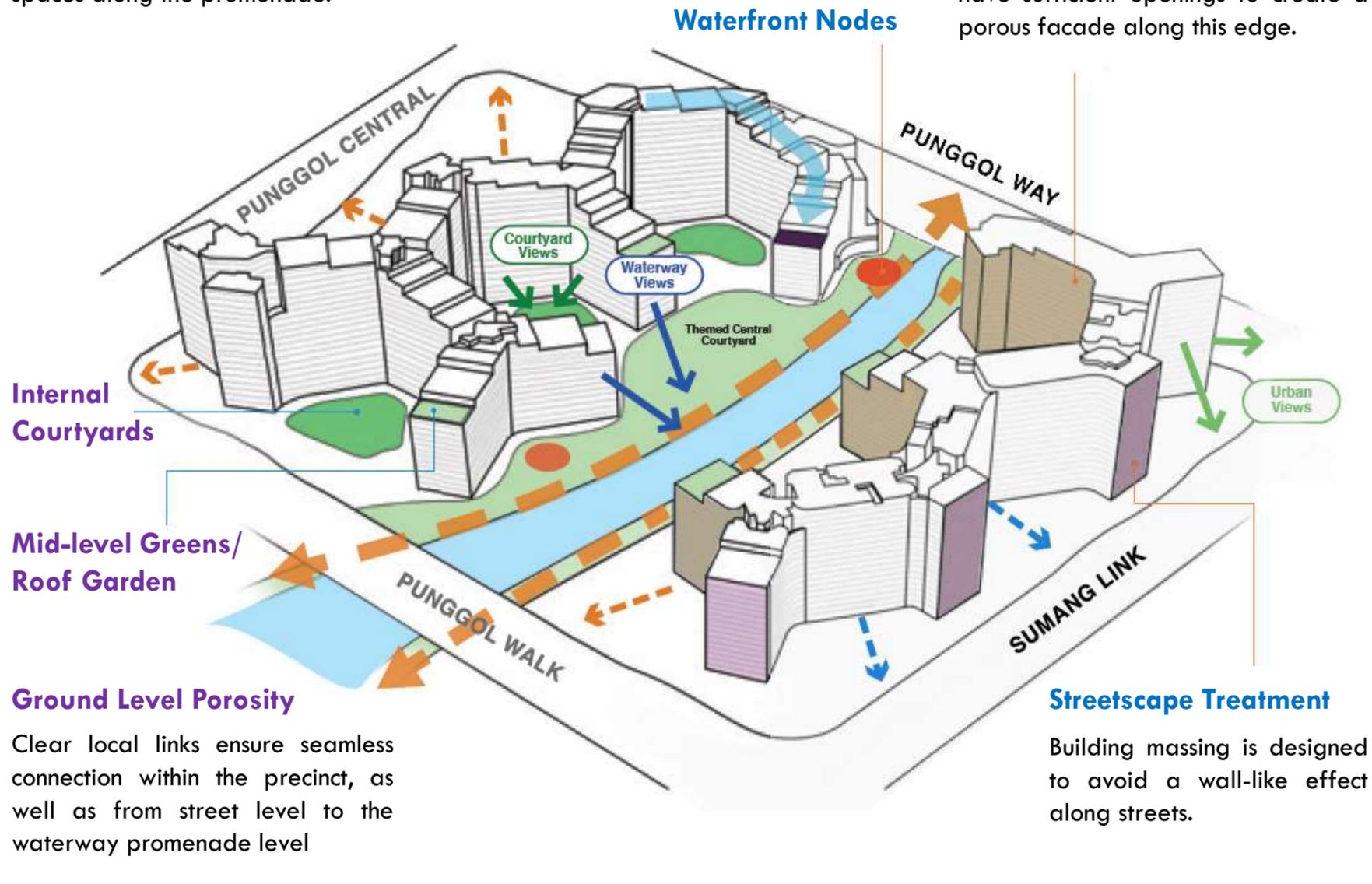
Waterway West District – Urban Terraces

Form and Massing

Stepping forms with terraced gardens and roofscape, maintaining a human scale to public spaces along the promenade.

Waterfront Nodes

Riverscape/ Canal Treatment

Buildings are encouraged to front the promenade and the elevation should have sufficient openings to create a porous facade along this edge.

PUNGGOL CENTRAL

PUNGGOL WAY

Courtyard Views

Waterway Views

Themed Central Courtyard

Urban Views

SUMANG LINK

PUNGGOL WALK

Internal Courtyards

Mid-level Greens/ Roof Garden

Ground Level Porosity

Clear local links ensure seamless connection within the precinct, as well as from street level to the waterway promenade level

Streetscape Treatment

Building massing is designed to avoid a wall-like effect along streets.

Waterway Terraces I & II – blocks are designed as stepped terraces that cascade down towards Punggol Waterway

Form and Massing

- Terracing building forms that step down towards the waterway as well as towards the Punggol Reservoir, to create a human-friendly scale along the promenade, and a cascading skyline

- Layout of blocks and design of courtyards and roof garden spaces to maximise views towards the waterway/ reservoir

Punggol Bayview – Terracing forms towards Sungei Punggol Reservoir creating a cascading skyline

Waterway West District – Urban Terraces

Courtyard spaces in Waterway Terraces I & II extend seamlessly into the common greens and waterfront promenade


The distinctive dome-shaped trellis of Jewel Bridge serves as a focal point to mark the western entrance to Punggol Waterway

Public Spaces

- Spatial connection between landscaped spaces within developments to the waterfront promenade

- Distinctive geometric forms, to reflect the contemporary nature of the 'Urban Terraces' sub-theme

Waterway West District – Urban Terraces
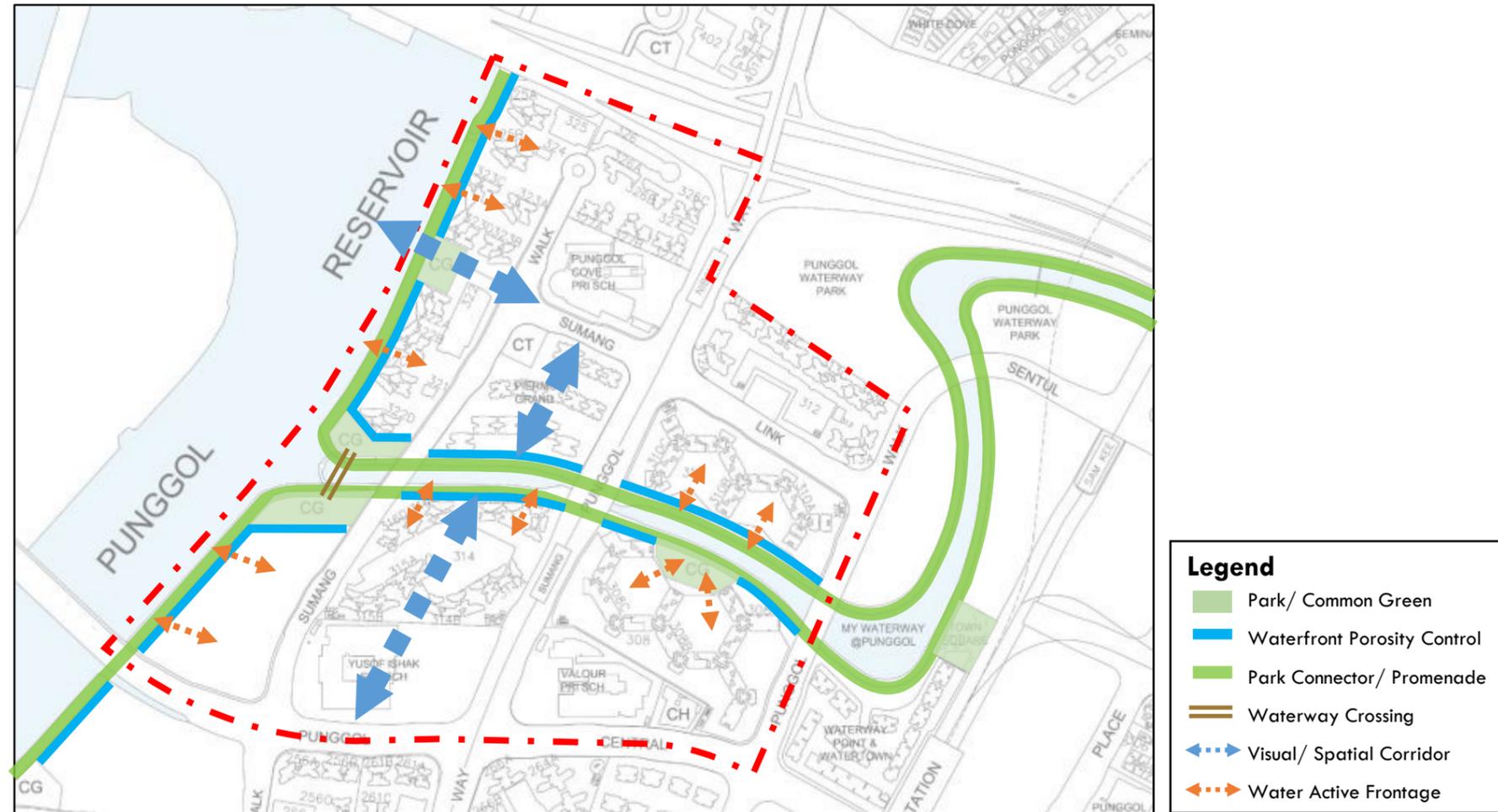
Streetscape and Urban Edge

- Waterfront Porosity Control – Building elevations fronting the waterway should have sufficient openings to avoid wall-like effect

- Building fronts should face the promenade

Legend

▮	Park/ Common Green
▬	Waterfront Porosity Control
▬	Park Connector/ Promenade
▬	Waterway Crossing
◄┈►	Visual/ Spatial Corridor
◄┈►	Water Active Frontage

Park connectors along the Punggol Reservoir

Cascading building forms fronting the promenade

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Waterway West District – Urban Terraces

Colour Palette

Inspired by the 'Urban Terraces' sub-theme, the suggested colour palette for the Waterway West District has light grey and beiges as the base colours. Darker browns and green accents are recommended to bring out the contemporary nature-inspired character of the area.

Facade and Roofscape

- Facade with clean and sleek lines

- Terraced roof gardens to strengthen the connection with the surrounding nature

Primary Colours
Unify the identity of the area, and form the main base of the colour scheme
(choose this primary colour)
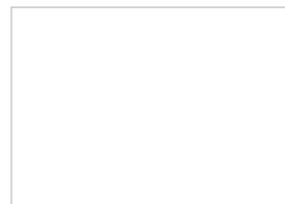
BS 00 E 55

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

BS 10 B 15   BS 10 A 03

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 12 E 53   BS 16 C 37   BS 20 C 37   BS 08 B 21   BS 10 A 11
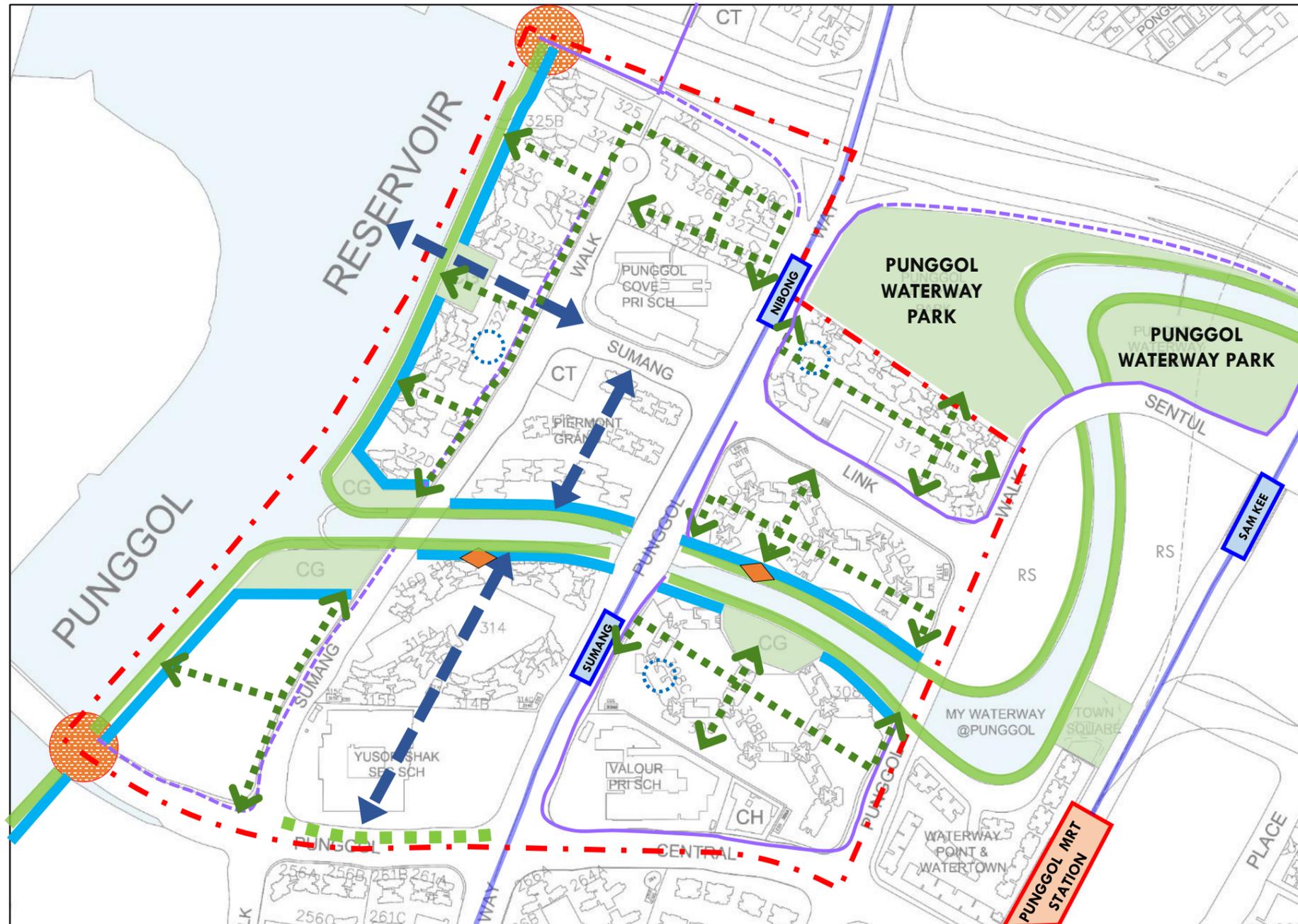

Facade design with sleek horizontal bands and green accents at Waterway Terraces I & II

Green accents in the facade of Punggol ParcVista, inspired by the surrounding nature elements

Waterway West District – Urban Terraces
Overview of Key Urban Design Considerations

EXISTING / U/C   **PROPOSED**

Transport

| MRT | MRT Station |
| LRT | LRT Station |

Facilities

Commercial Cluster

Parks and Waterbodies

Common Green/ Park/ Green Space

Waterbody

Park Connector/ Promenade

Cycling Path

Local Link (notional)

Key Nodes and Junctions

Junctions

Streetscape and Urban Design Response

Visual and Spatial Corridor

Waterfront Porosity Control

Water Active Frontage

Precinct Entrance

Waterway East District – Undulating and Rustic

Waterway View

Oasis Terraces

Sub-theme and Concept

Undulating and Rustic
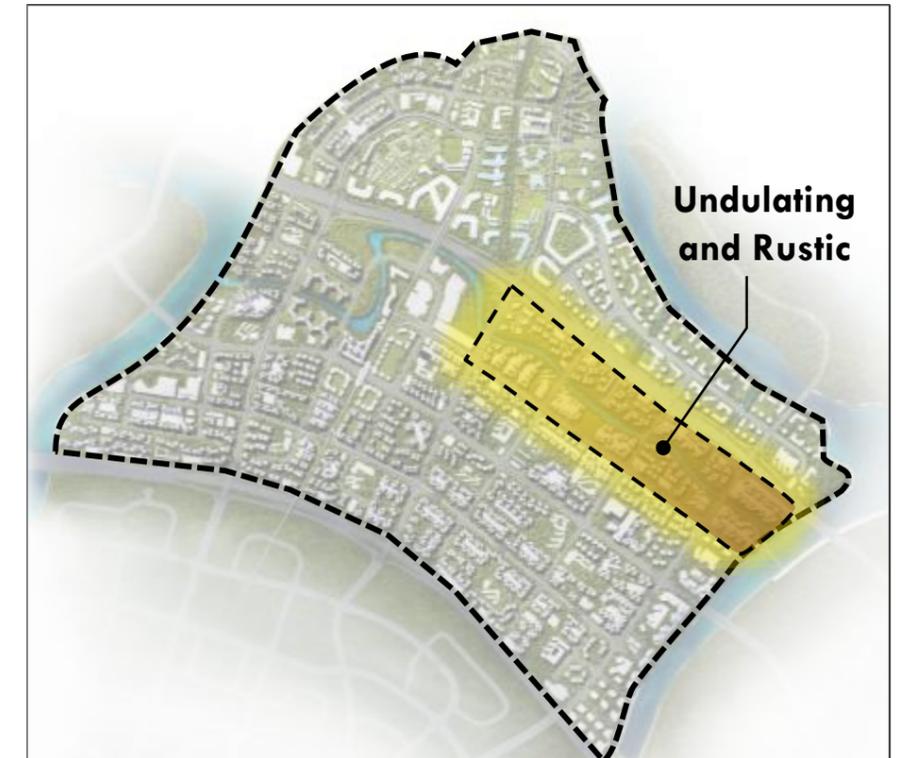
Waterway East District is located east of the town centre, and within the 'undulating' and 'rustic' zones of the Punggol Waterway. The sub-theme is reflected in the design of the projects, and the landscaping along the Punggol Waterway, providing an interesting transition in scenery and ambience for residents to enjoy.

EARTHY TONES   CURVILINEAR TERRAIN

SOFT LANDSCAPING   VERANDAHS

MOTION   **UNDULATING**

BALCONIES   **AND RUSTIC** WOOD

MEANDERING   COURTYARD HOUSING

PUNGGOL WATERWAY   61

Waterway East District – Undulating and Rustic

Sub-theme and Concept

Planning and Design Considerations

- To create an attractive waterfront living environment within the 'undulating' and 'rustic' zones of the Punggol Waterway

- Enhance the living environment for residents through connecting residents to greenery as well as providing seamless connectivity towards the waterfront

- Park spaces fronting the Serangoon Reservoir are linked by a park connector which runs along the promenade

- To create an intimate, human-scale environment along the tributary promenade

Waterway East District – Undulating and Rustic

Contrasting high-low block typology

The blocks in Waterway Ridges are designed as undulating ridges that step down towards the waterway

Low-rise 'canal housing' blocks at Waterway Ridges facing the tributary promenade

Form and Massing

- Stepped blocks that maximise views towards the Punggol Waterway

- Optimising the undulating topography to seamlessly connect to the waterfront promenade

- Terraces, courtyards and roof gardens with lush greenery

- Low-rise 'Canal housing' block typology facing the tributary promenade

Waterway East District – Undulating and Rustic

Rustic meandering boardwalk between Sunrise Bridge and Lorong Halus Bridge in the 'Rustic' zone

Curvilinear forms used in the landscaping design along the 'Undulating' zone

Sunrise Bridge, with its *kelong*-inspired design, marks the eastern gateway to Punggol Waterway

ABC Waters features meander through Waterway Ridges' undulating landscape, creating vibrant communal spaces
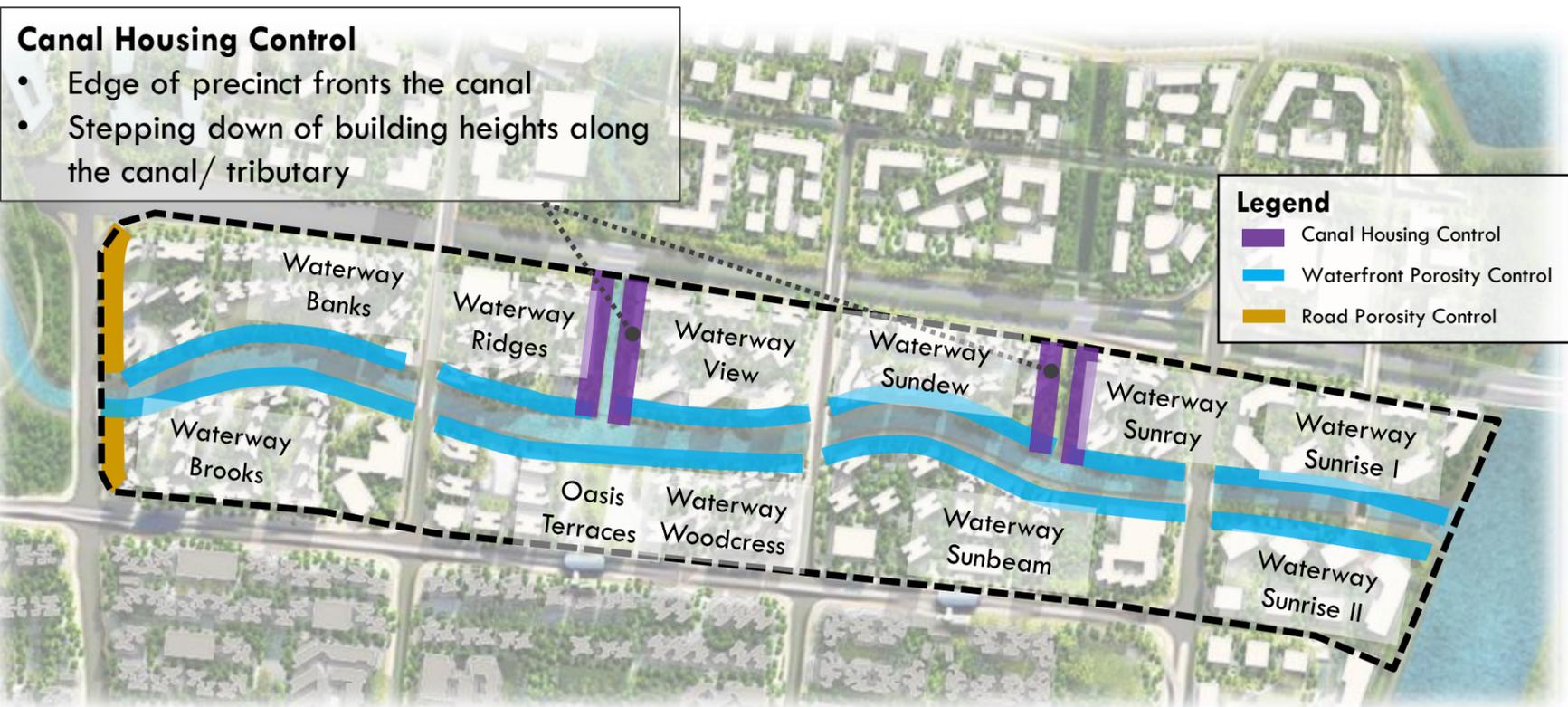
Public Spaces

- 'Undulating' zone – Use of curvilinear forms and meandering terrains

- 'Rustic' zone – Use of organic designs and earthy tones to reflect a natural quality

Waterway East District – Undulating and Rustic

Streetscape and Urban Edge

Canal Housing Control
- Edge of precinct fronts the canal
- Stepping down of building heights along the canal/ tributary

Waterway Banks

Waterway Ridges

Waterway View

Waterway Sundew

Waterway Sunray

Waterway Sunrise I

Waterway Brooks

Oasis Terraces

Waterway Woodcress

Waterway Sunbeam

Waterway Sunrise II

Legend
- Canal Housing Control
- Waterfront Porosity Control
- Road Porosity Control

Building height controls along the waterway

- Waterfront Porosity Control – Building elevations fronting the waterway should have sufficient openings to avoid wall-like effect

- Building fronts should face the promenade

- Building height controls introduced along the canals to emphasize visual-spatial corridor

Artist's impression of Waterway Sunrise I, with lower blocks fronting the waterway

The Wave Bridge provides pedestrian connectivity across Punggol Waterway

Low-rise blocks facing the canal create an intimate human-scale environment along the tributary promenade

Waterway East District – Undulating and Rustic

Colour Palette

Inspired by the 'Undulating and Rustic' sub-theme, the suggested colour palette for the Punggol Waterway East district has warm white, light brown and light orange with accents of earthy colours such as brown, brick red, steel blue and dark sea green.
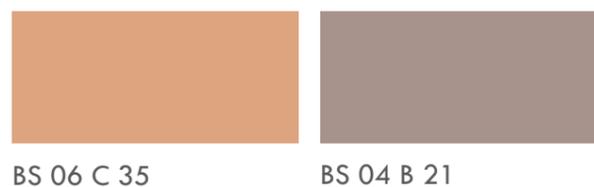
Facade and Roofscape

- To bring out the rustic character of the area, textured facade elements could be considered

- Organic and undulating forms could be used in roof and facade design features

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 06 C 35   BS 04 B 21

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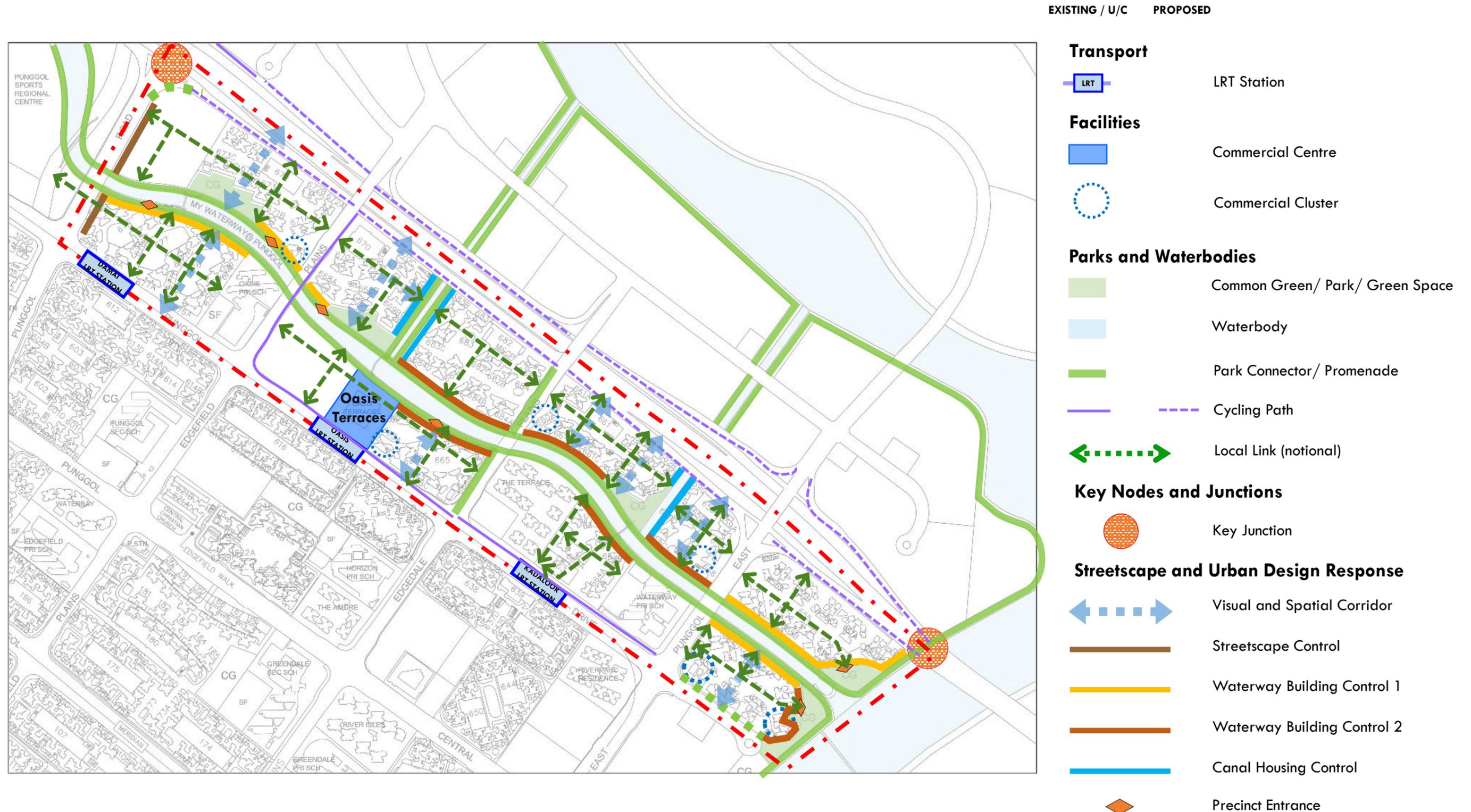*(choose 1 or more accent colours)*

BS 18 C 35   BS 16 C 37   BS 06 E 56   BS 04 D 45

Undulating roof forms in Waterway Sundew

Orange and brown tones on the facade of Waterway View

Waterway East District – Undulating and Rustic
Overview of Key Urban Design Considerations

EXISTING / U/C   PROPOSED

Transport

| | LRT | LRT Station |

Facilities

Commercial Centre

Commercial Cluster

Parks and Waterbodies

Common Green/ Park/ Green Space

Waterbody

Park Connector/ Promenade

Cycling Path

Local Link (notional)

Key Nodes and Junctions

Key Junction

Streetscape and Urban Design Response

Visual and Spatial Corridor

Streetscape Control

Waterway Building Control 1

Waterway Building Control 2

Canal Housing Control

Precinct Entrance

Northshore District – Seafront

View of several seafront public housing developments in Northshore District

Northshore Plaza II, along the seafront promenade

Sub-theme and Concept

Northshore District, which faces the Straits of Johor, is HDB's first smart and sustainable district. It aims to capitalise on its seafront location and rich biodiversity. It will offer a distinctive high-density living, integrating a rich mix of public amenities with its natural surroundings. The district's design concepts focus on the use of smart technologies and a biophilic approach, to enhance the living environment for residents.

STRAITS OF JOHOR
SUSTAINABLE
ENHANCED CONNECTIVITY
GREEN LINKS
SMART
SEAFRONT
BREEZY
OCEAN WAVE
INTEGRATION WITH TECHNOLOGY
WATERFRONT VIEWS

Northshore District – Seafront

Seafront

Sub-theme and Concept

Planning and Design Considerations

- Integration of high-density housing, community-centric spaces and commercial facilities, with direct connections to transportation nodes

- Enhanced biodiversity through lush landscaping and biophilic design principles

- Park spaces fronting the sea are linked by a park connector which runs along the promenade

- Varying building heights to create a distinctive sculpted skyline, and to maximise sea views

Northshore District – Seafront

Varying building heights to maximise sea views

Greenery and community spaces on the ground level and roof gardens

Form and Massing

- Varying building heights to create a distinctive sculpted skyline, and to maximise sea views

- Basement car parks to create more community spaces at the ground level

- Residential blocks organised around verdant semi-private community spaces

- Roof gardens and sky terraces in residential blocks

Northshore District – Seafront

Legend
- **Commercial Centre**
- **Commercial Cluster**
- **Park Connector/ Promenade**
- **Park/ Common Green**

Public Spaces

- Northshore Plaza I & II, the commercial centre serving Northshore District is integrated with the surrounding public housing developments and designed with a variety of community spaces

- A two-level sheltered community spine provides a seamless connection from Samudera LRT station through Northshore Plaza I & II to the adjacent housing precincts and towards the seafront

- The community spine is lined with shops, dining and community spaces

Section A-A' across the community spine

Community spine along Northshore Plaza I

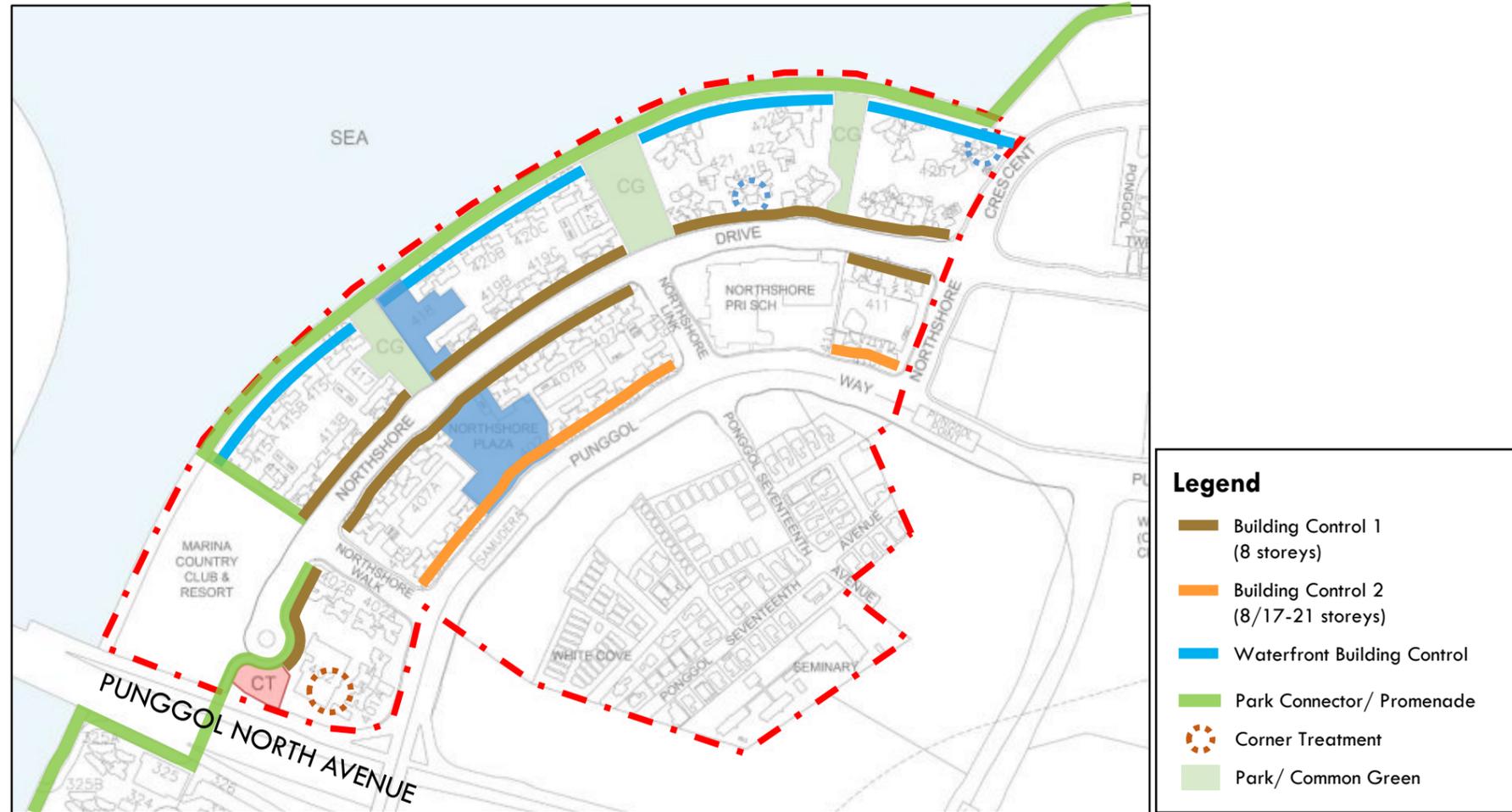# Northshore District – Seafront

Public Spaces

- Common greens are small parks that flank the seafront housing precincts, and serve as green fingers connecting the adjacent developments to the coastal promenade

- Roof gardens, sky terraces and common spaces to optimise sea views where feasible

Legend

- ◄··► Green Finger
- ▉ Commercial Centre
- ⬭ Commercial Cluster
- ▬ Park Connector/ Promenade
- ▮ Park/ Common Green

Common green next to Northshore Plaza II, with pods along the community spine overlooking into it

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Northshore District – Seafront

Legend

Building Control 1 (8 storeys)	
Building Control 2 (8/17-21 storeys)	
Waterfront Building Control	
Park Connector/ Promenade	
Corner Treatment	
Park/ Common Green	

Streetscape and Urban Edge

- Building controls along Northshore Drive and Punggol Way – low-rise blocks to create a more intimate streetscape along these boulevards

- Waterfront building control – building elevations along the Johor Straits should have sufficient openings to avoid wall-like effect

- Corner treatment at the intersection of the proposed Punggol North Avenue and proposed road to create a distinctive reference point for both motorists and pedestrians

Low-rise blocks along Northshore Drive

Northshore StraitsView – waterfront skyline

Artist's impression of Northshore Edge, showing the corner treatment of roof gardens

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Northshore District – Seafront

Colour Palette

In line with the 'Seafront' sub-theme, the suggested colour palette for Northshore is inspired by colours of the sea and shore. It consists of light greys and blue as the base, with accents of various ocean blues and sandy yellows.

Facade and Roofscape

- To bring out the sense of water and movement, facade designs could be articulated with rhythms and waves

- Sea-related patterns or motifs could be incorporated in the design of facade elements

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 18 C 31

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

BS 18 E 50	BS 18 B 21

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)

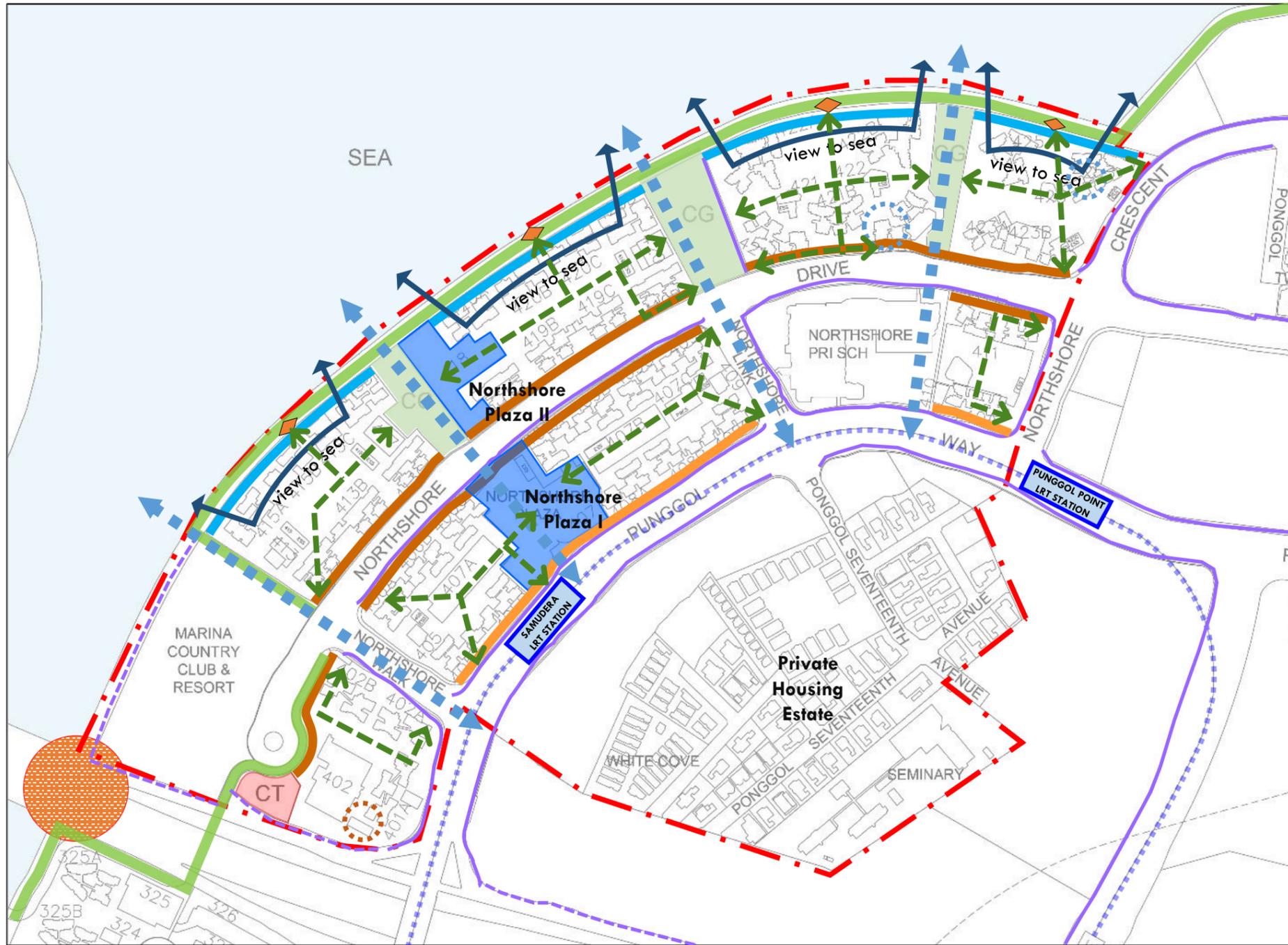|				
BS 10 E 49	BS 10 E 53	BS 20 E 51	BS 20 E 56	BS 20 D 45

Sea waves-inspired facade design with blue tones at Northshore Cove

Shades of sandy yellows and light greys on the facades of blocks in Northshore District

Northshore District – Seafront
Overview of Key Urban Design Considerations

EXISTING / U/C   PROPOSED

Transport

LRT   LRT Station

Facilities

Commercial Centre

Commercial Cluster

Community Facility

Parks and Waterbodies

Common Green/ Park/ Green Space

Waterbody

Park Connector/ Promenade

- - - - Cycling Path

Local Link (notional)

Key Nodes and Junctions

Key Junction

Corner Treatment

Precinct Entrance

Streetscape and Urban Design Response

Visual and Spatial Corridor

Waterfront Building Control

Building Control 1 (8 storeys)

Building Control 2 (8/17-21 storeys)

Punggol Point District – Green Heritage
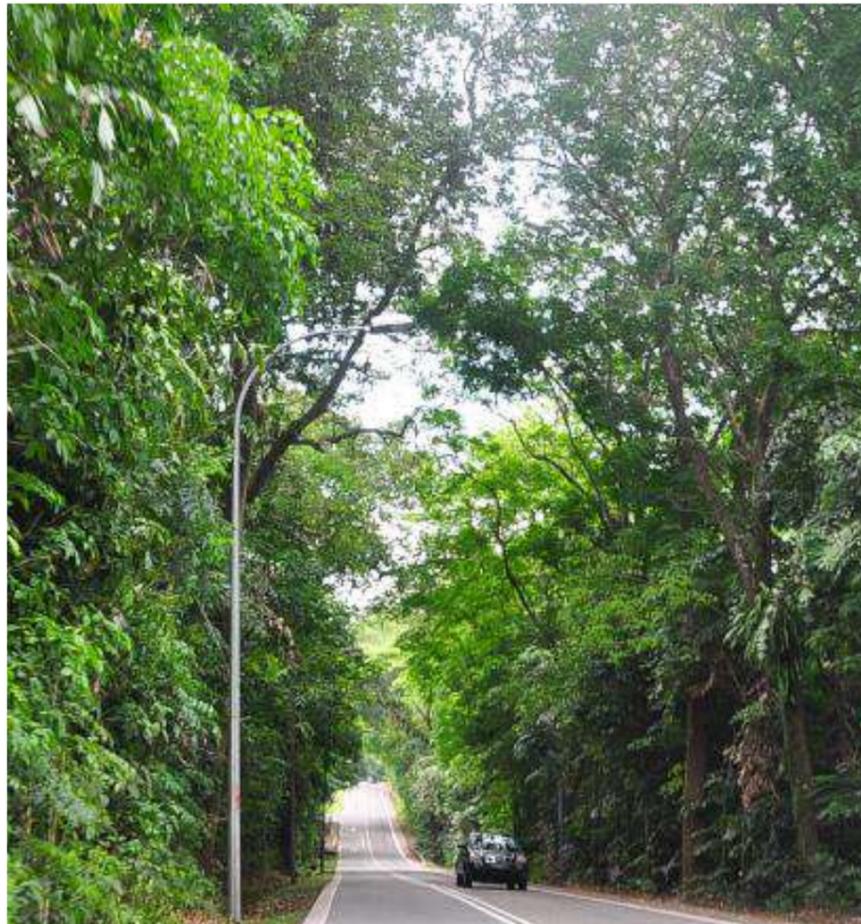
Clockwise from top left: Old Punggol Road, map showing Ponggol Zoo and Singapore Zoo, fishing village, seafood restaurants, tiger at the zoo

Sub-theme and Concept

Green Heritage

Punggol Point District, located at the northern most tip of Punggol, fronting the sea, is envisioned as having a 'Green Heritage' theme, that embraces nature and heritage through the use of tropical and vernacular elements in its design approach. It takes inspiration from its past as a fishing settlement, as well as the zoos which were located in the area, back in the 1920s. The key attraction is the Punggol Heritage Trail which offers a linear, nature walk that connects Punggol's 'Green Heart' to the seafront at Punggol Point. Various recreational facilities and educational elements will be distributed along its length.

HISTORICAL   SEAMLESS CONNECTIVITY
MARKERS 1ST SINGAPORE ZOO RECREATION
NATURE GREEN HERITAGE
WOODED ENVIRONMENT   RUSTIC LANDSCAPING
FISHING VILLAGE   PUNGGOL JETTY
SEAFOOD RESTAURANT   FOREST

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Punggol Point District – Green Heritage

Green
Heritage

Sub-theme and Concept

Planning and Design Considerations

- Weave in heritage and nature elements into the district to create a unique identity

- Varying building heights along the southern frontage of Punggol Point District to avoid creating a wall-like effect, to create a distinct entrance for the district

- Park spaces fronting the sea are linked by the park connector which runs along the promenade, and developments along the seafront are to be integrated with Punggol Promenade to create an attractive waterfront living experience

Punggol Point District – Green Heritage

Artist's impression of Punggol Point Crown, with low-rise blocks and precinct facilities fronting the Punggol Heritage Trail

Artist's impression of Punggol Point Woods, with low-rise community facilities serving as the interface to the Punggol Heritage Trail

Artist's impression of Punggol Point Cove, with blocks stepping down towards the seafront

Form and Massing

- Semi-courtyard or courtyard housing typology for developments along the Punggol Heritage Trail, to create intimate spaces that connect sensitively to the low-rise uses there

- Play of contrasting building heights for sea-facing developments, with blocks stepping down towards the seafront to maximise views

Punggol Point District – Green Heritage

Public Spaces

Responding to Punggol Heritage Trail and Nodes

- Experiential trails with play elements that respond to the history and sub-theme of the area could be incorporated to create a unique identity

- Activity-generating uses such as commercial facilities and community spaces are to be located along the Punggol Heritage Trail / spatial corridors leading towards the waterfront

Responding to the Waterfront

- Roof gardens and common greens should be designed to face the waterfront

- A series of public spaces and shelters are located along the waterfront promenade and at The Punggol Settlement
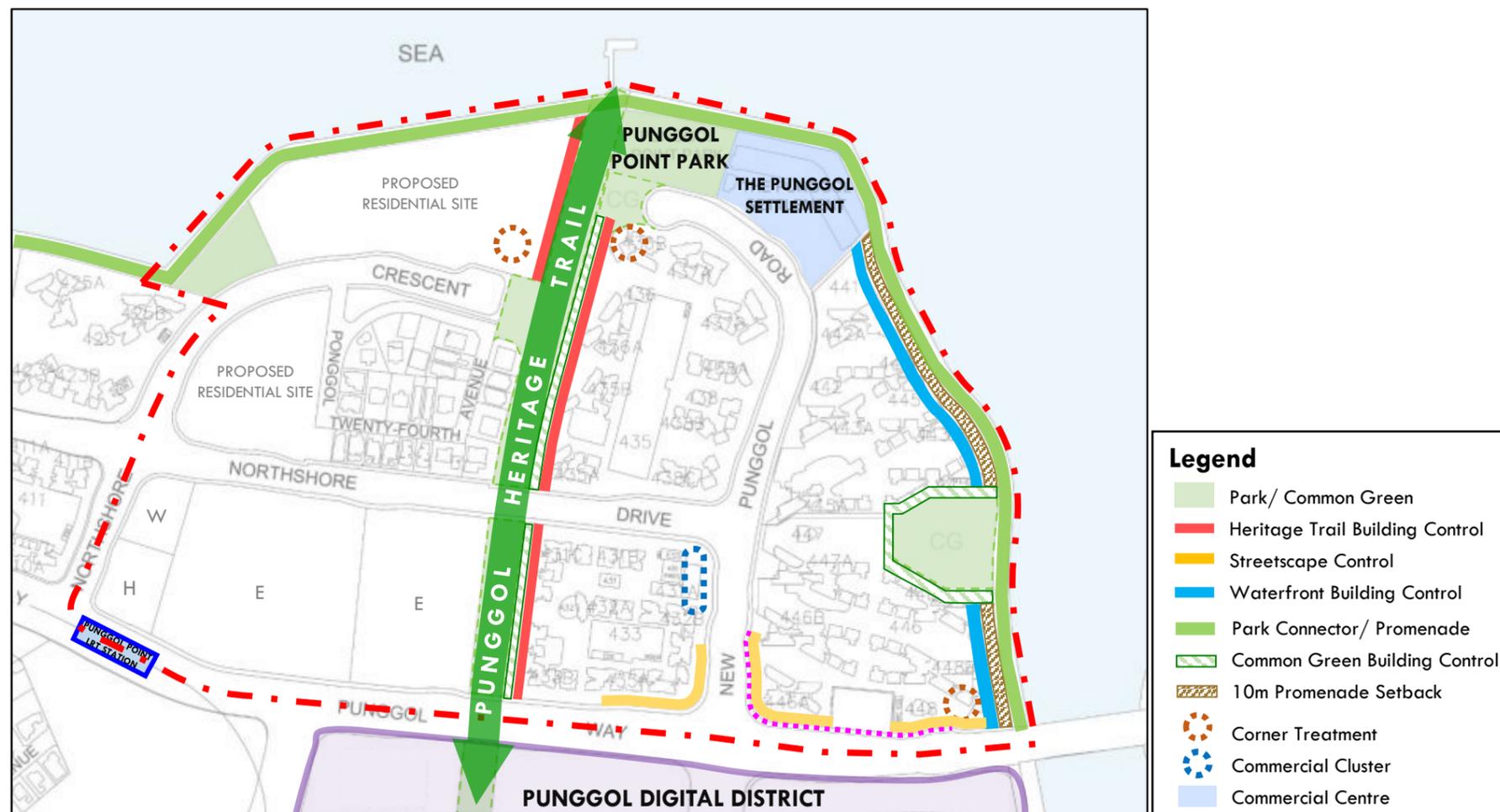
Legend

🟩	Park/ Common Green
🟩	Park Connector/ Promenade
🔶	Heritage Nodes/ Marker
⭕	Commercial Cluster
🟦	Commercial Centre

The Punggol Settlement

Artist's impression of Punggol Heritage Trail

Punggol Point Park

Punggol Point District – Green Heritage

Legend
- Park/ Common Green
- Heritage Trail Building Control
- Streetscape Control
- Waterfront Building Control
- Park Connector/ Promenade
- Common Green Building Control
- 10m Promenade Setback
- Corner Treatment
- Commercial Cluster
- Commercial Centre

Streetscape and Urban Edge

Heritage Trail Building Control
- Retain a 'Green Boulevard' environment along the Punggol Heritage Trail
- Height control to create a more human-scale experience along the Punggol Heritage Trail

Waterfront Building Control
- Heights of blocks to step down towards the promenade to create a low-rise waterfront environment and maximise views towards the sea
- Porosity Control along the waterfront to ensure accessibility to the promenade

Streetscape Control
- Blocks fronting Punggol Way to be designed to create a distinct entrance for the district, and to respond to the building clusters at Punggol Digital District

Artist's impression of Punggol Point Crown, showing the streetscape in response to the Heritage Trail Building Control

Artist's impression of Punggol Point Woods, showing the corner junction treatment at the Punggol Road and Punggol Way intersection

Punggol Point District – Green Heritage

Colour Palette

In line with the 'Green Heritage' sub-theme, the suggested colour palette consists of a base of cool white, light earthy beige and green, with different shades of browns and vivid greens as accent colours.
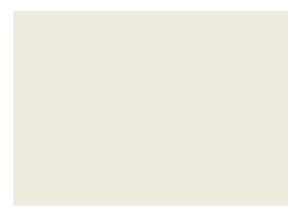
Facade and Roofscape

- Vertical patterns could be used to express the form and growth of a lush forest

- Nature-inspired forms, patterns or motifs could be reflected in the facade and roof design

Primary Colours
Unify the identity of the area, and form the main base of the colour scheme
(choose both primary colours)
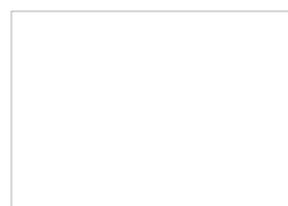
BS 00 E 55   BS 12 B 15

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

BS 14 E 49   BS 08 B 17

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 12 E 51   BS 12 E 55   BS 14 E 53   BS 10 D 45   BS 10 A 11

Vertical bands in various shades of greens in artist's impression of Punggol Point Woods

Forest-inspired green and brown tones in artist's impression of Punggol Point Crown

Punggol Point District – Green Heritage
Overview of Key Urban Design Considerations

SEA

PUNGGOL POINT PARK

THE PUNGGOL SETTLEMENT

view to sea

PROPOSED RESIDENTIAL SITE

CRESCENT

PROPOSED RESIDENTIAL SITE

PUNGGOL AVENUE

TWENTY-FOURTH

NORTHSHORE

NORTHSHORE

PUNGGOL ROAD

PUNGGOL

DRIVE

view to sea

view to sea

NEW

PUNGGOL POINT LRT STATION

PUNGGOL

WAY

PUNGGOL DIGITAL DISTRICT

Legend

EXISTING / U/C   PROPOSED

Transport
- LRT — LRT Station

Facilities
- Commercial Centre
- Commercial Cluster

Parks and Waterbodies
- Common Green/ Park/ Green Space
- Waterbody
- Park Connector/ Promenade
- Punggol Heritage Trail
- Cycling Path
- Sheltered Linkway
- Local Link (notional)

Key Nodes and Junctions
- Key Junction
- Corner Treatment

Streetscape and Urban Design Response
- Visual and Spatial Corridor
- Waterfront Porosity Control
- Heritage Trail Building Control
- Urban Streetscape
- Common Green Building Control
- 10m Promenade Setback
- Heritage Node/ Marker

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Matilda District – Verandah

The Urban Verandah along Punggol Field

Matilda House surrounded by open lawns and plantations

A verandah-inspired shelter in the common green at Matilda Edge

Sub-theme and Concept

Verandah

Fronting the Punggol Reservoir, the character of Matilda District takes inspiration from the conserved Matilda House and the plantations that once occupied the site. Tropical architecture and landscape features such as verandahs and open lawns are adapted into the new residential developments and public spaces to give Matilda District its distinctive identity.

LANDSCAPE DECKS AND LAWNS

DISTINCT STREETSCAPE

FORMER PLANTATION   MATILDA HOUSE

VERANDAH

COLONIAL

TROPICAL ARCHITECTURE   WOODEN GRID PATTERN

LINEAR WALKWAYS

Matilda District – Verandah

Sub-theme and Concept

Planning and Design Considerations

- Designs can draw inspiration from the area's heritage, in particular the plantations and tropical architecture of the conserved Matilda House (e.g. courtyard verandahs, terraced lawns and landscaped forecourts)

SPATIAL TYPOLOGY
INSPIRED BY MATILDA HOUSE

Greenery

Pavilion (social space)

Courtyard Verandah

Lawn

Grove
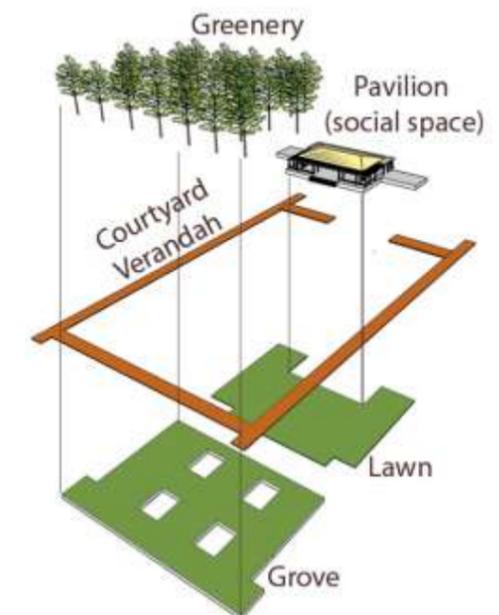
- Green links should be developed to create seamless and shaded connections across adjacent developments, towards the waterfront promenade

- Developments facing the Punggol Reservoir should be designed sensitively to retain a low-rise waterfront living environment

Matilda District – Verandah

Artist's impression of a section through The Verandah @ Matilda, showing the landscaped deck car park

Form and Massing

- Variation in building heights, with stepping toward the waterfront

- Roof gardens, sky terraces and balconies to optimise views towards the Punggol Reservoir

The landscaped deck houses play facilities and social spaces

Artist's impression of roof gardens in residential blocks with views towards Punggol Reservoir

Matilda District – Verandah

Public Spaces

The key public spaces in Matilda District consist of:

- **A Community Street** along Punggol Avenue leading to the waterfront, anchored by a future waterfront commercial centre and precinct cluster; major spine connecting residents to the waterfront

- An **Urban Verandah** along the community street, a two-storey sheltered walkway connecting residents to the waterfront, with outdoor living rooms for social interaction
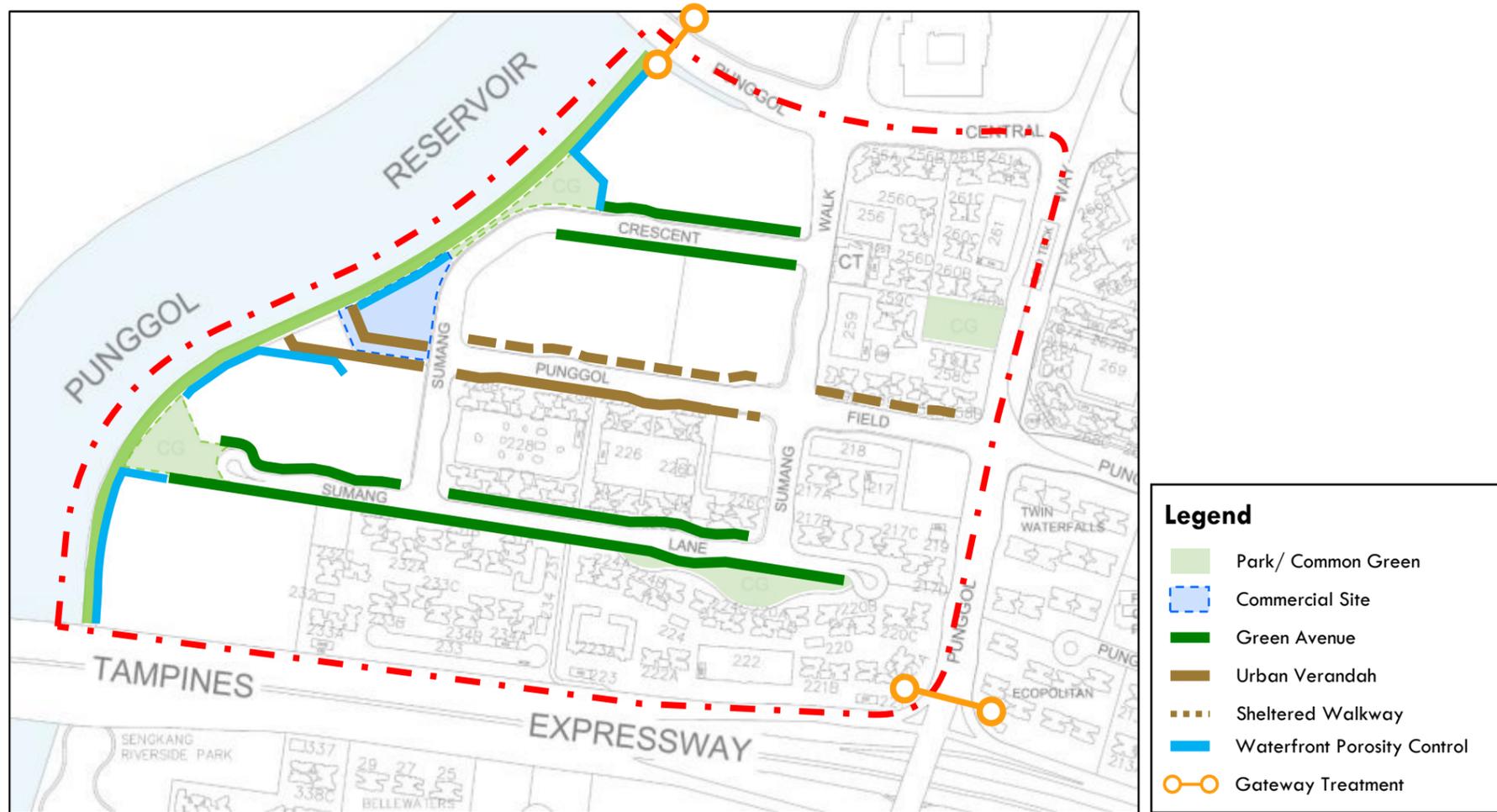
Legend

▢	Park/ Common Green
▢	Commercial Site
▬	Green Avenue
▬	Community Street
⬤	Green Landscape Node

Artist's impression of waterfront nodes and activities at Matilda District

Outdoor community living room for social interaction along the Urban Verandah

Matilda District – Verandah

Streetscape and Urban Edge

- Gateway treatment at the intersection of Punggol Way/ Tampines Expressway and at the northern tip of the district fronting the future Seletar South Link/ Punggol Central

- The two-storey Urban Verandah on southern side of Punggol Field provides seamless pedestrian connectivity to the waterfront, and serves as a good transition from block to human scale

- Green Avenues along Sumang Lane and Sumang Crescent are planned as tree-lined boulevards that are safeguarded with lush roadside greenery that provide shade for pedestrians and connect the district to the waterfront

- Waterfront Porosity Control – Building elevations along Punggol Reservoir should have sufficient openings to avoid wall-like effect

Legend

Park/ Common Green
Commercial Site
Green Avenue
Urban Verandah
Sheltered Walkway
Waterfront Porosity Control
Gateway Treatment

The Urban Verandah along Punggol Field offers a transition to human scale

Lush tree groves in the common green along the Sumang Lane green avenue

Matilda District – Verandah

Colour Palette

Inspired by the timber materiality of the Matilda House and the warm colours of the spice plantations that used to be in the area, the suggested colour palette for Matilda District has warm beiges and grey with rich accents of dark yellow, orange and browns.

Facade and Roofscape

- Taking inspiration from the Matilda House, verandah features and lattice patterns can be adopted for the facade and roof design

- Linear elements can be used to express the verticality of the old rubber plantation that used to be in the area

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 10 B 15

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

BS 22 B 17   BS 08 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 10 E 53   BS 08 E 55   BS 04 B 21

BS 06 E 56   BS 04 E 53   BS 04 D 45

Roof crowns with lattice patterns in The Verandah @ Matilda

Rich accents of yellows, oranges and browns on the facade of Matilda Edge, with linear patterns inspired by the rows of former rubber plantations in the area

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Matilda District – Verandah
Overview of Key Urban Design Considerations
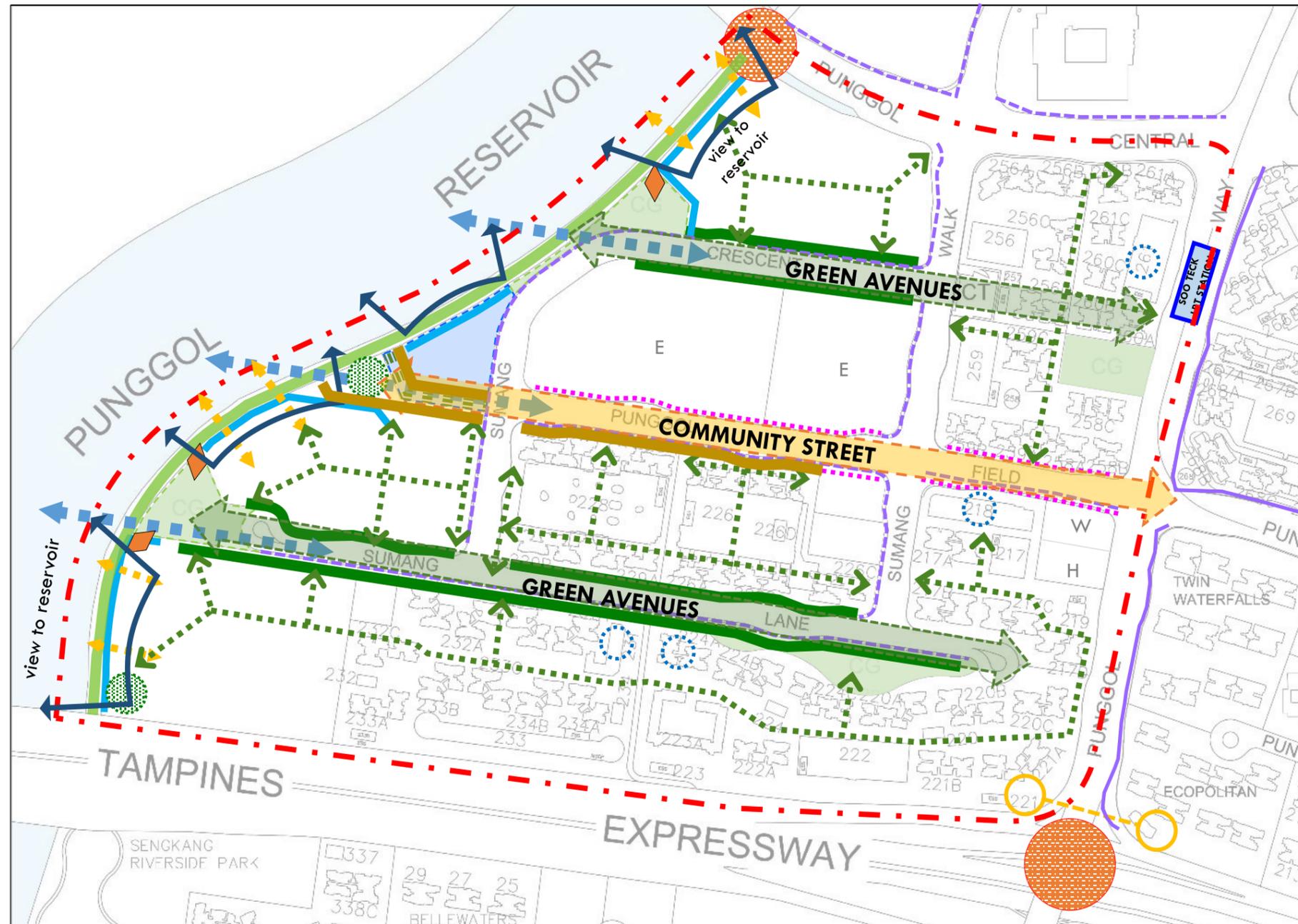
EXISTING / U/C   **PROPOSED**

Transport

LRT LRT Station

Facilities

Commercial Centre

Commercial Cluster

Sheltered Community Plaza

Parks and Waterbodies

Common Green/ Park /Green Space

Waterbody

Park Connector/ Promenade

Cycling Path

Sheltered Linkway

Local Link (notional)

Key Nodes and Junctions

Key Junction

Streetscape and Urban Design Response

Visual and Spatial Corridor

Waterfront Building Control

Water Active Frontage

Urban Verandah

Green Avenue

Precinct Entrance

Gateway Treatment

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Central, Punggol Field West, Punggol Field East Districts – Marine

Sub-theme and Concept

Marine

Clockwise from top: The entrance gateway to Punggol is marked by a sailboat sculpture; lush car park roof gardens at Punggol Oceanus; a marine-themed mosaic mural at a block in Edgedale Plains

GREEN BOULEVARDS
VIBRANT COLOURS   STREET ARCHITECTURE
SEASHELLS   MARINE
SIGNATURE STREETS   GREEN-TINTED WINDOWS
SAILBOAT SCULPTURE
ROOF GARDENS ON CAR PARKS   LANDSCAPE DECKS

Located at the southern edge of Punggol, the Central, Punggol Field West and Punggol Field East Districts shares a sub-theme inspired by the prevalent marine elements within the area. Home to the first HDB precincts in Punggol, these block designs are characterised by the use of larger windows with green tinted glass. Early examples of car park roof gardens and landscape decks are also found here. The theme for the Central District reflects the prevalence of marine-inspired design elements in the area. This is also seen in the names of some HDB precincts there, such as Coralinus, Punggol Sails and The Nautilus @ Punggol.

Central, Punggol Field West, Punggol Field East Districts – Marine

Marine

Sub-theme and Concept

Planning and Design Considerations

- Green boulevards and special planting to create prominent streets

- The common green concept was first introduced here, where smaller housing estates are planned around a localised park with recreational facilities

- Early examples of roof gardens on multi-storey car parks and landscape decks were introduced here

- Use of marine-related elements, such as sea shells and corals, and colourful, playful designs in public spaces and housing

Central, Punggol Field West, Punggol Field East Districts – Marine

Wave motifs and sail-like roofs of Punggol 21 Community Club

Public Spaces

- The key public spaces in the Central, Punggol Field West and Punggol Field East Districts include Punggol Plaza, Punggol 21 Community Club, and common greens

- Common greens are small pocket parks surrounded by the housing precinct they serve

- Use of marine and nautical motifs and forms in the design of public spaces


A common green nestled between Punggol Vista, Punggol Lodge, Punggol Spring and Damai Grove

Central, Punggol Field West, Punggol Field East Districts – Marine
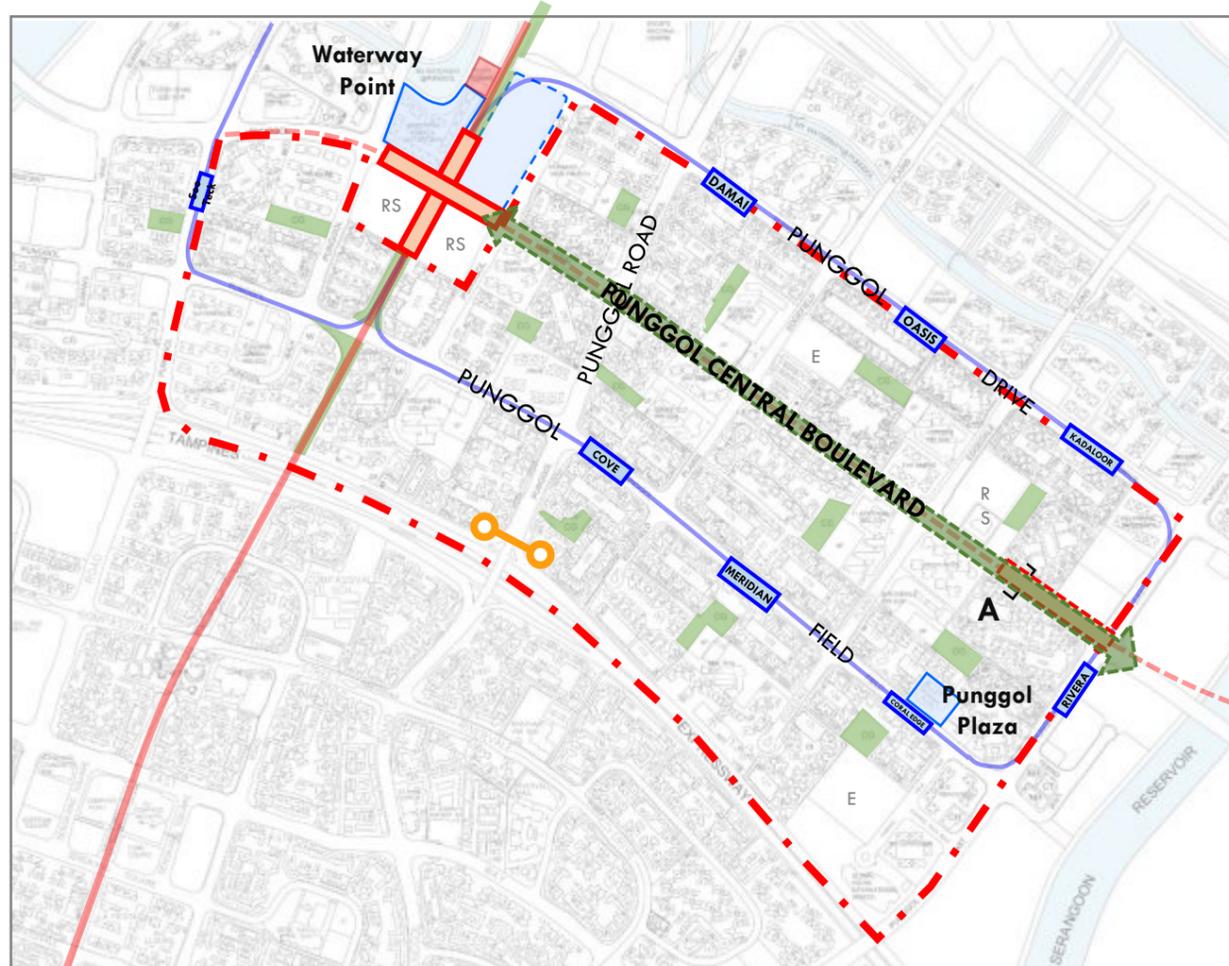
Streetscape and Urban Edge

- The key arterial roads running through the Central, Punggol Field West and Punggol Field East Districts are Punggol Central, Punggol Field, Punggol Drive and Punggol Road. Each road is designed with a different streetscape to relate to the surroundings and to help in orientation within the district

- **Punggol Central** is a key corridor in Punggol. Free of LRT viaducts, it is designed as a signature boulevard leading to the Town Centre

Legend

- Park/ Common Green
- Commercial Centre
- Punggol Central Boulevard
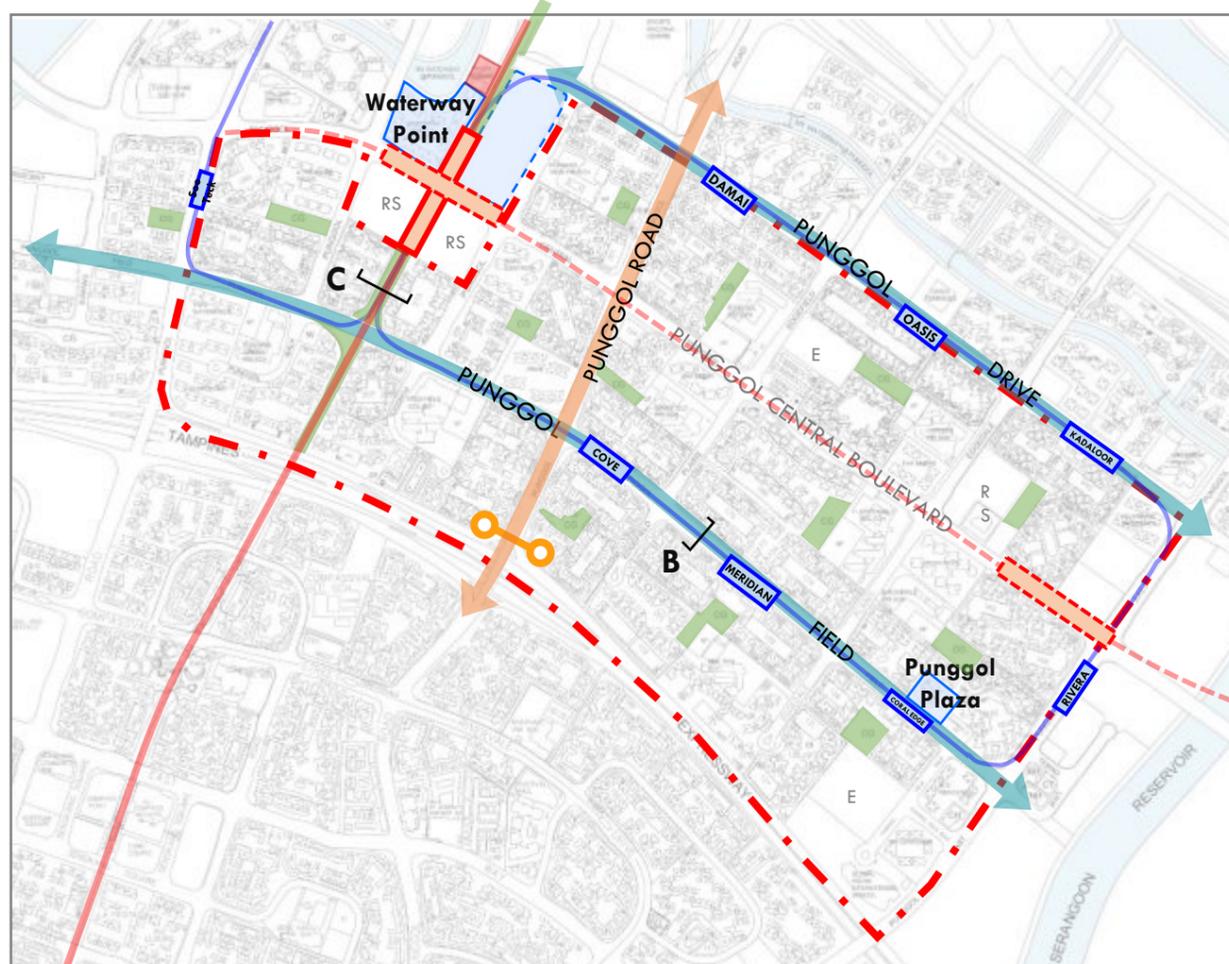- Gateway Treatment
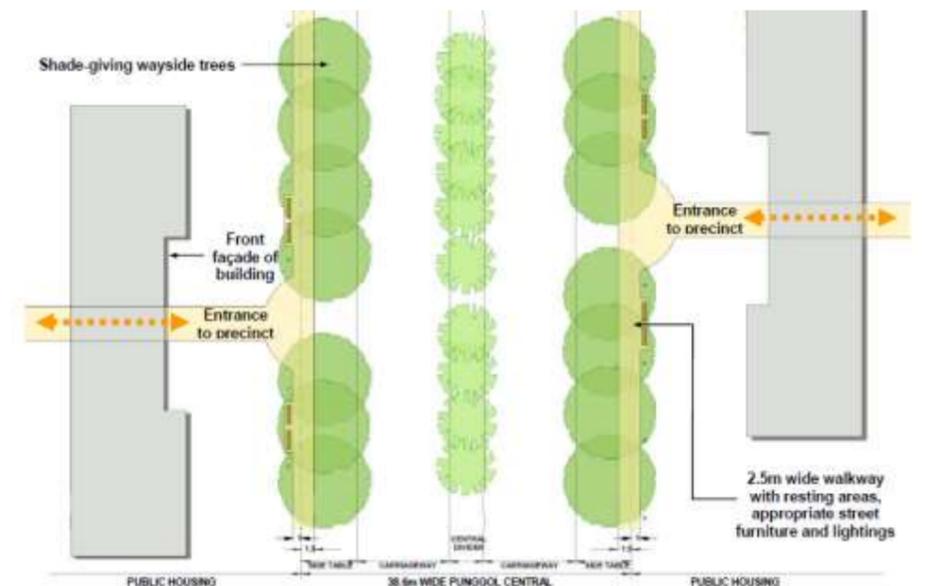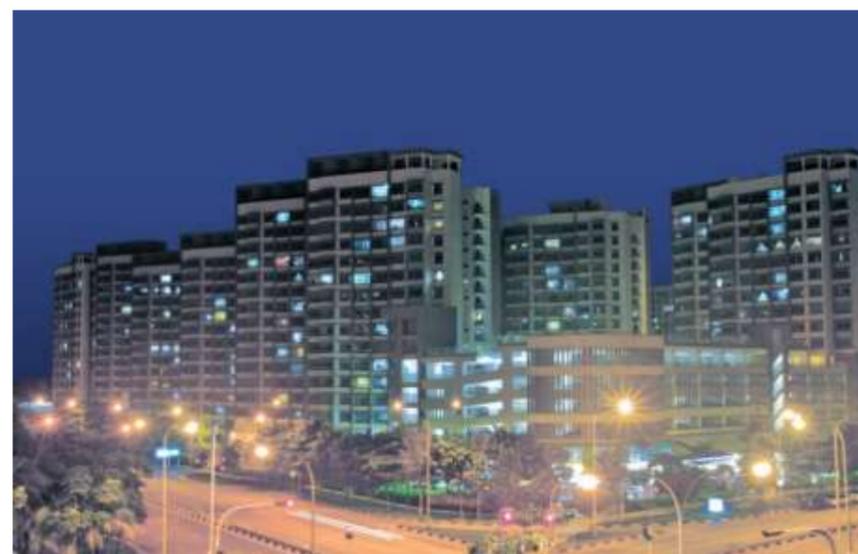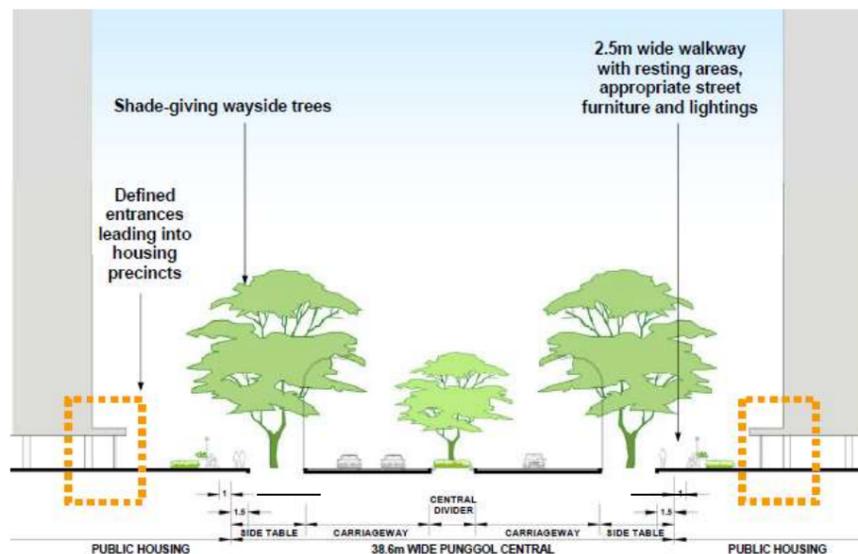
Schematic section A across Punggol Central

Streetscape along Punggol Central at the intersection with Punggol Road
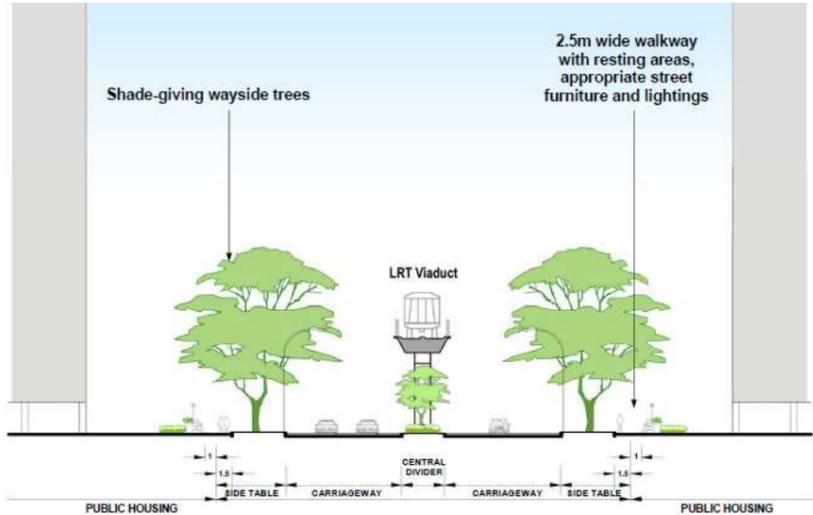

Schematic plan of streetscape along Punggol Central

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Central, Punggol Field West, Punggol Field East Districts – Marine


Streetscape and Urban Edge

- **Punggol Field and Punggol Drive** have LRT viaducts running in the middle, and thus have a different streetscape from Punggol Central. Lush planting under the viaducts soften the look of hard concrete structures

- For car-free segments under the LRT viaduct that are between housing precincts, the space is designed as a linear park that connects the precincts and serves as a social and recreational space for the community

- **Punggol Road** is one of the main entry points leading into Punggol. It is designed as a gateway, with a sail sculpture and a welcoming junction to mark this entrance into Punggol

Legend

🟩	Park/ Common Green
☐	Commercial Centre
▬	Punggol Field/ Punggol Drive
▬	Punggol Road
⊶	Gateway Treatment

Schematic section B across Punggol Field

Streetscape along Punggol Central at the intersection with Punggol Road
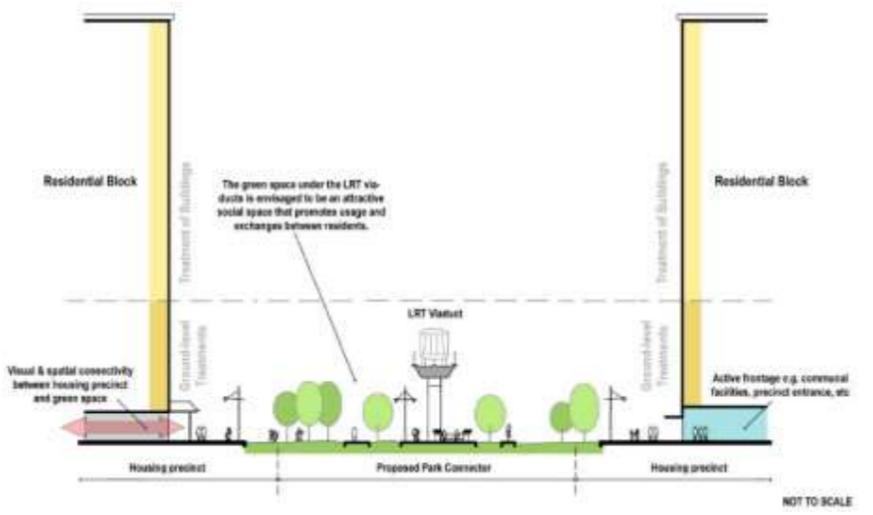
Schematic section C – Linear park space under the LRT viaduct

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# Central, Punggol Field West, Punggol Field East Districts – Marine

Colour Palette

Inspired by the 'Marine' sub-theme, the recommended colour palette has light blue and green as its base. A variety of ocean blues, sea green and sepia tones are suggested as accent colours to bring out the vibrant character of the 'Marine' sub-theme.

Primary Colours
Unify the identity of the area, and form the main base of the colour scheme
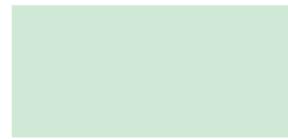*(choose both primary colours)*
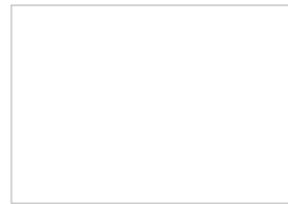
BS 00 E 55	BS 18 C 31

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

BS 14 E 49	BS 18 E 50

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)

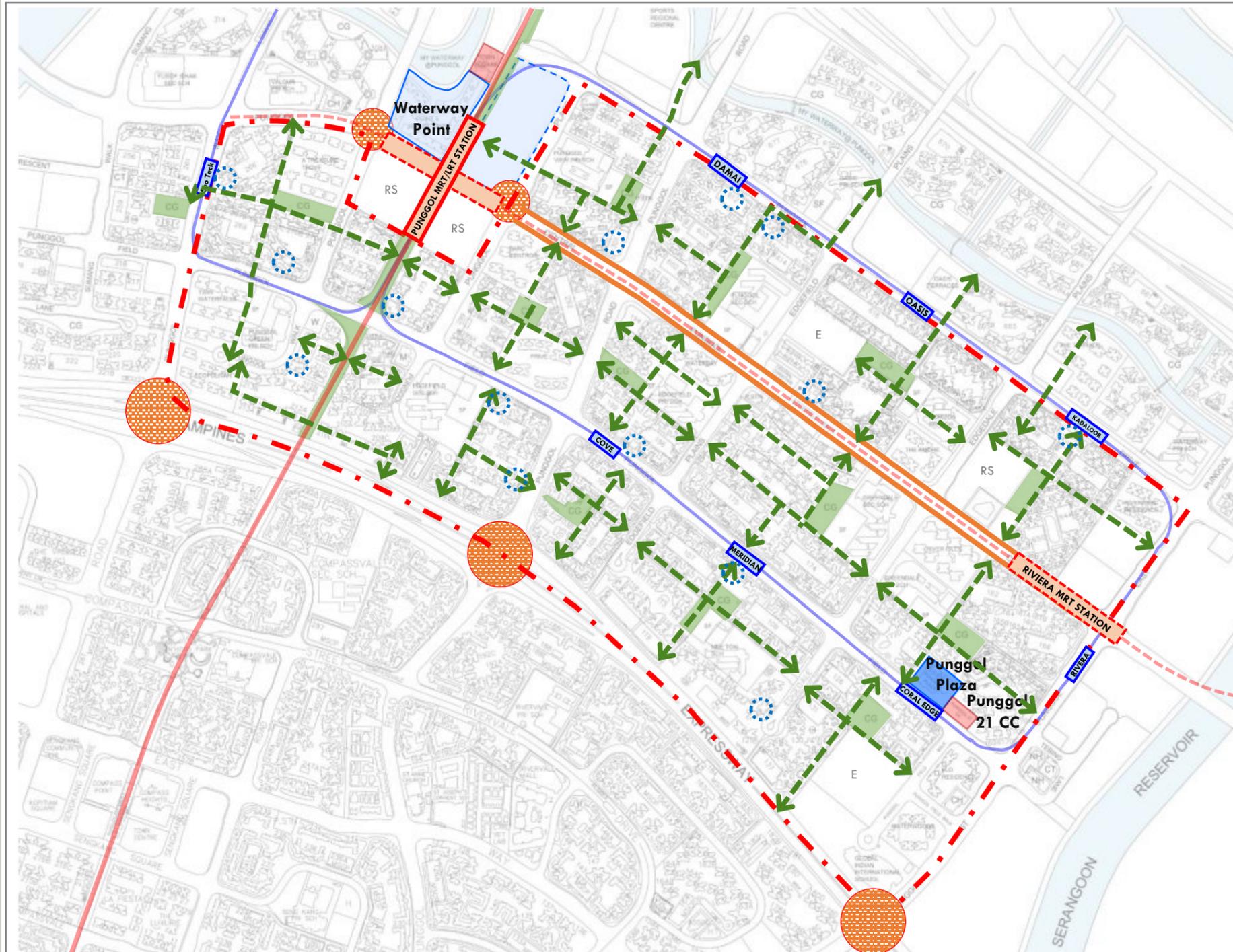| BS 10 C 33	BS 14 C 35	BS 16 E 53	BS 18 E 51	BS 18 E 53

Sepia accents in the facade of The Nautilus @ Punggol

Blue and green tones in the facades of Punggol Waves and Punggol Ripples

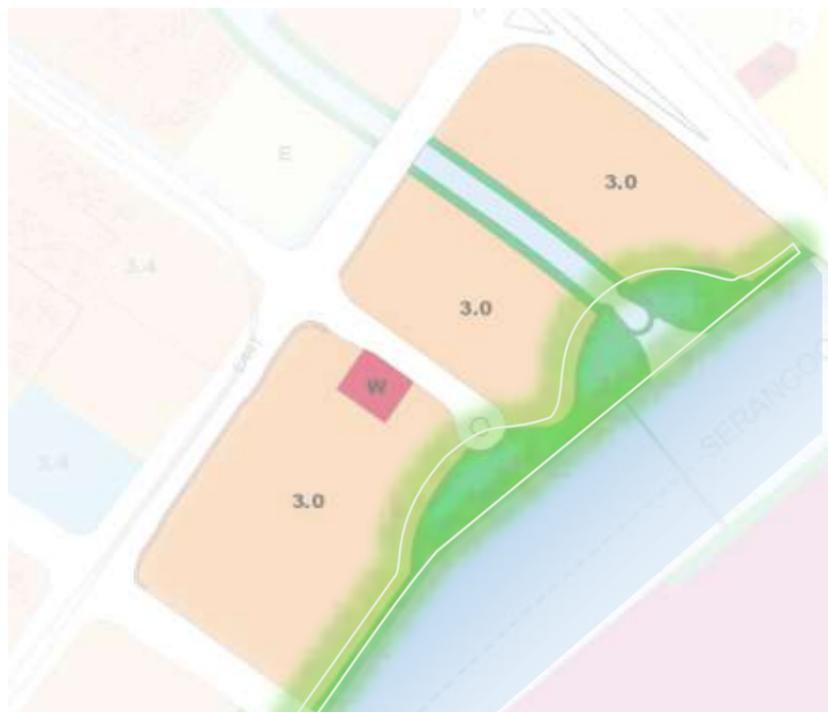# Central, Punggol Field West, Punggol Field East Districts – Marine
Overview of Key Urban Design Considerations

EXISTING / U/C   **PROPOSED**

Transport

| MRT | MRT | MRT Station |
| LRT | | LRT Station |

Facilities

Commercial Centre

Commercial Cluster

Community Facility

Parks and Waterbodies

Common Green/ Park/ Green Space

Waterbody

Park Connector/ Promenade

Cycling Path

Local Link (notional)

Key Nodes and Junctions

Key Junction

Streetscape and Urban Design Response

Punggol Central Boulevard Treatment

Crescent District – Crescent

Artist's impression of Crescent District

Crescent-shaped parks along Serangoon Reservoir

Sub-theme and Concept

Crescent

Crescent District is located along Serangoon Reservoir and is to be planned with crescent-shaped parks, that would provide a broader esplanade between the district and the water's edge, to form lively community spaces. It is envisioned that roof decks on the second storeys will further enliven the waterfront promenade.

CRESCENT SHAPES/ FORMS   WATERFRONT AMENITIES

LIGHT   **CRESCENT**

VIEWING DECKS   VIBRANT ACTIVITIES

RIVERINE   PROMENADE   **CURVILINEAR**

ROMANTIC   **QUAYSIDE LIVING**

Crescent District – Crescent

Crescent

Sub-theme and Concept

Planning and Design Considerations

- Common Green spaces are planned to be located along the promenade of Serangoon Reservoir

- Retain visual and spatial corridors towards the reservoir

Crescent District – Crescent

Colour Palette

Inspired by the esplanade planned in front of the entire district along the water edge, the suggested colour palette for the Crescent district features off-white with light brown and light steel blue as the base. Browns, bud green and ocean blue are suggested as accents to render the relaxing, soothing and peaceful atmosphere of a promenade.

Facade and Roofscape

- To reflect the vibrant yet relaxing ambience of the district, facade and roof designs could take inspirations from resort buildings with a contemporary tropical style

Primary Colours
Unify the identity of the area, and form the main base of the colour scheme
(choose both primary colours)
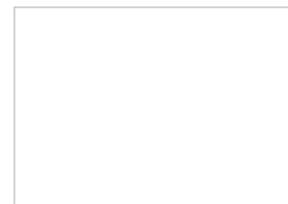
BS 00 E 55   BS 10 B 15

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

BS 20 C 33   BS 08 B 21

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 14 C 35   BS 20 C 37   BS 08 C 35   BS 08 B 25

Artist's impression of Crescent District, showing waterfront-facing facades in a contemporary tropical style

Canal District – Canal

Canal

Sub-theme and Concept

Canal District is located along Serangoon Reservoir with the two tributary canals passing through it. The district is envisioned for housing with prime views towards the reservoir and Coney Island. It could take inspiration from waterside villages and canal style housing.

CANAL HOUSING   WATERSIDE VILLAGES

STONE   **CANAL**   MODULAR

BRIDGE   WATER
     BLUE   TRANSPORTATION
CORRIDORS

Planning and Design Considerations

- Building forms should respond sensitively to the tributaries and reservoir

- Maximise views towards the waterfront

- Retain visual and spatial corridors towards the reservoir

Canal District – Canal

Colour Palette

In line with the 'Canal' sub-theme, the suggested colour palette has light greys and light brown as the base colours. Muted pebble, blue greys, and dark clay browns are recommended as accents to create an earthy and solid look.

Facade and Roofscape

- Taking inspiration from the intimate scale of water villages, facades could be articulated in modular forms to break down the scale and to create a staggering effect

Primary Colours
Unify the identity of the area, and form the main base of the colour scheme
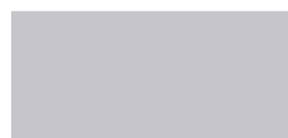*(choose this primary colour)*
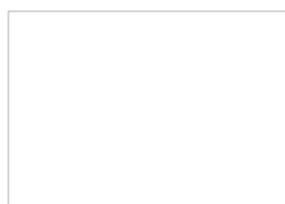
BS 00 E 55

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

BS 10 A 03   BS 22 B 17

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 20 C 37   BS 18 B 25   BS 08 B 25   BS 10 B 29

Facades that are articulated as modules break down the large scale of the buildings (example from Forest Spring @ Yishun)

Contents

Town Scale

- Context and History

- Planning Principles

- Town Vision, Theme and Concept

- Key Corridors

- Key Nodes and Junctions

- Heritage Elements

- Art Elements

- Broad Landscape Theme

District Scale

- Sub-themes and Concepts

  - Form and Massing

  - Public Spaces

  - Streetscape and Urban Edge

  - Colour Palette

  - Facade and Roofscape

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.

Downtown District

Downtown

Design Considerations
- Use of dynamic/ parametric forms with innovative and creative concepts

Pavilion with a parametric design (example from Future of Us exhibition pavilion)

Waterway West District

Urban Terraces

Design Considerations
- Clean and sleek design
- Expression of terracing effect by creating layers

Drop-off porch with clean lines and layered roofs in Waterway Cascadia

Precinct Facilities

Waterway East District

Undulating and Rustic

Design Considerations
- Rustic designs with rich textures and organic forms
- Use of natural-looking materials

A rustic fishing basket-inspired pergola in Waterway View

Northshore District

Seafront

Design Considerations
- Use of rhythmic patterns and wave-like forms
- Use of sea-inspired motifs and patterns

Landscape deck with wave-like forms and patterns at Northshore StraitsView

Punggol Point District

Green Heritage

Design Considerations
- Use of nature–inspired forms and motifs such as trees, leaves and flowers
- Use of animal-inspired motifs and designs

Animal sculptures and motifs as well as a pavilion with abstract leaf patterns, in artist's impression of Punggol Point Crown

Precinct Facilities

Matilda District

Verandah

Design Considerations
- Verandah-inspired design elements
- Use of lattice or louvred patterns

Pavilion with lattice screen patterns in The Verandah @ Matilda

Central, Punggol Field West and Punggol Field East Districts

Marine

Design Considerations
- Organic and fractal forms
- Marine and nautical motifs and elements

Boat-like seating at the common green between Punggol Vista, Punggol Lodge, Punggol Spring and Damai Grove

Crescent District

Crescent

Design Considerations
- Undulating and sculptural forms
- Use of materials with warm tones

Wooden deck with lighting sculptures along the river bank at Punggol Promenade

Precinct Facilities

Canal District

Canal

Design Considerations

- Use of stone-like textures to add a sense of solidity and timelessness
- Use of modular designs such as precinct pavilion designed with modular screen

Stone-like textured feature wall (example from Meadow Spring @ Yishun)

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

Downtown District
Downtown

Design Ideas
Contemporary elements, sculptural structures, soft soothing colours, trendy artistic forms

Use of articulated design forms and sculptural elements (example from a playground in Mall of Medini, Johor, Malaysia)

Waterway West District
Urban Terraces

Design Ideas
Urban elements, compact play space, bright cheerful colours, clean geometric forms

Use of clean design form and bright cheerful colours (example from a playground in Mall of Medini, Johor, Malaysia)

Waterway East District
Undulating and Rustic

Design Ideas
Soft elements (e.g. timber-lookalike materials), terrains and levels, adventurous and fun, earthy colours, organic forms

Use of levels with organic forms for adventurous play in a playground at Waterway Brooks

Playgrounds

Northshore District
Seafront

Design Ideas
Seaside and sea-related elements, figurative elements, bold graphics

A ship playground at the common green next to Waterfront I @ Northshore

Punggol Point District
Green Heritage

Design Ideas
Soft elements (e.g. timber-lookalike materials), adventure, animal figures or habitats, nature colour tones

Use of natural-looking materials and animal figures such as birds, in an artist impression of a playground at Punggol Point Crown

Matilda District
Verandah

Design Ideas
Timber-lookalike finishes, pitch roof, explorative space evoking curiosity, earthy colours

Use of verandah design elements like wood textures and pitched roofs in a playground at The Verandah @ Matilda

Playgrounds

Central, Punggol Field West and Punggol Field East Districts

Marine

Design Ideas
Ocean elements, mimetic objects, educational and imaginative play, natural ocean tones

Use of architectural structures to form mimetic objects (example from a playground in Australia)

Crescent District

Crescent

Design Ideas
Sculptural and playful elements, art expression, earthy colours with contrasting highlights

Use of interesting art expressions and playful elements (example from SkyPeak @ Bukit Batok)

Canal District

Canal

Design Ideas
Meandering water patterns, nature elements, bridge, mix of natural and earthy colours

Use of adventure and imaginative play elements (example from a playground in Australia)

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
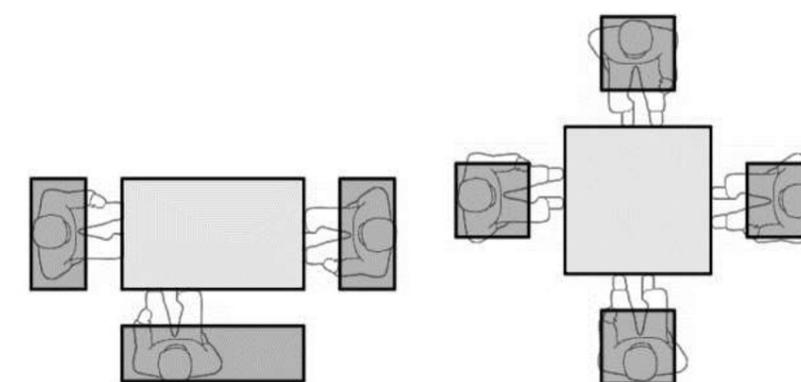- Space for wheelchair users

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
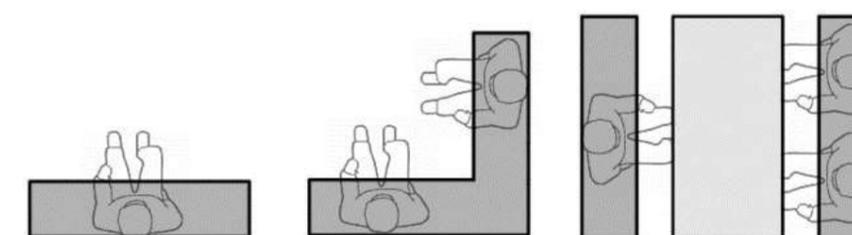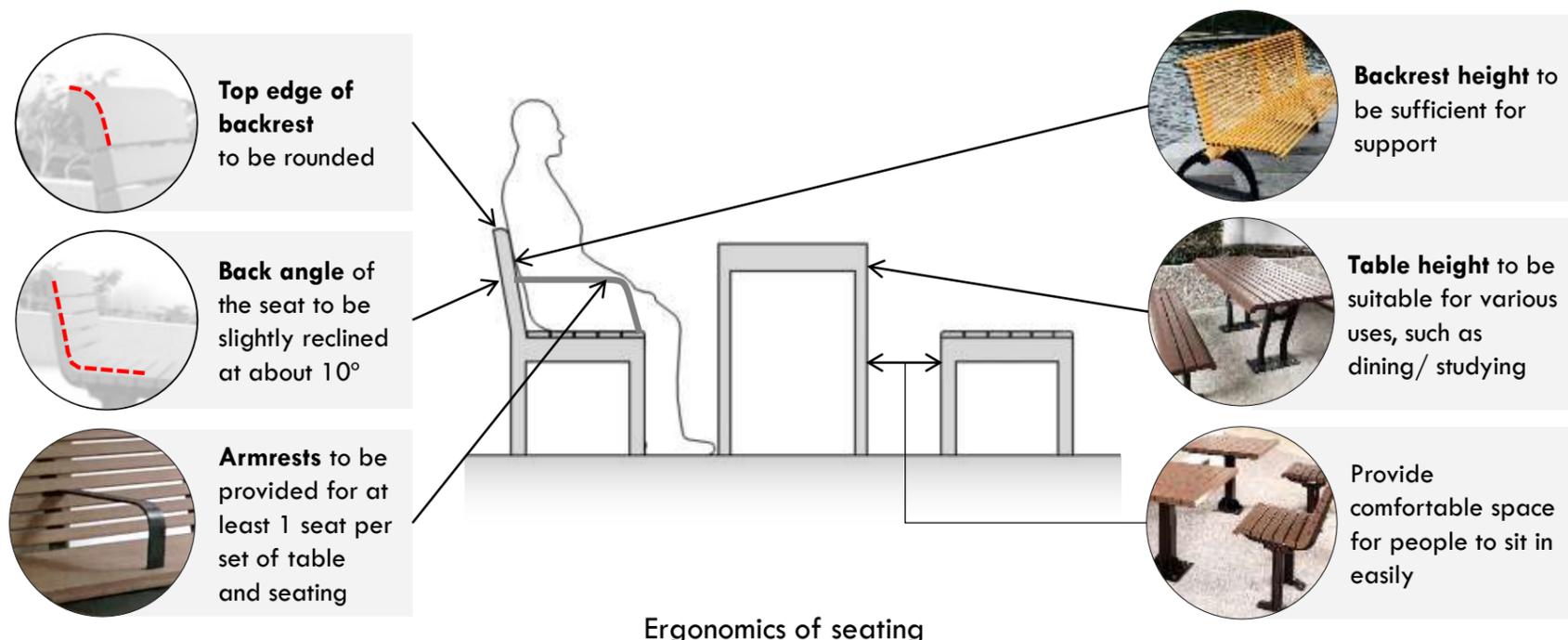
Individual seating for resting and solitary moments

L-shape seating for views and small group conversation

Face-to-face seating for conversation

Top edge of backrest to be rounded

Back angle of the seat to be slightly reclined at about 10°

Armrests to be provided for at least 1 seat per set of table and seating

Backrest height to be sufficient for support

Table height to be suitable for various uses, such as dining/ studying

Provide comfortable space for people to sit in easily

Ergonomics of seating

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

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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.
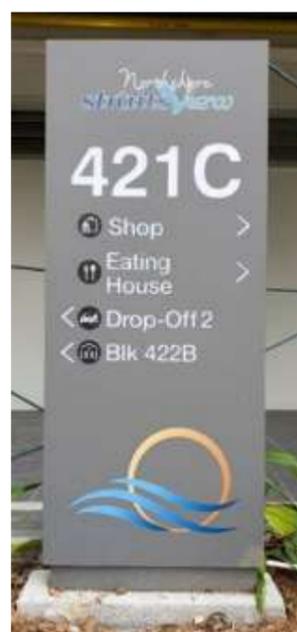
Maintenance

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 ≥ 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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JTC Corporation
- Page 24, left: Aerial perspective of Punggol Digital District.
- Page 32, right: Artist's impression of Campus Boulevard.
- Page 49, top left: Aerial perspective of Punggol Digital District.
- Page 51, bottom second from right: Artist's impression of Campus Boulevard – interface between JTC and SIT.
- Page 51, bottom right: Artist's impression of Market Village – commercial and leisure facilities for the community.

National Archives of Singapore
- Page 30, top left: Historical map of Punggol.

National Parks Board
- Page 29, top: Characteristics of Old Punggol Road – rustic ambience, green tunnel effect, and an undulating terrain stretching across 1.3km.
- Page 30, bottom right: Schematic plan of Punggol Heritage Trail.
- Page 31, bottom second from left: Punggol Point Walk.
- Page 35, Image 6: Coney Island.
- Page 43, bottom left: *Sterculia parvofolra* (Common Sterculia), Photographer: Boo Chih Min, NParks Flora&Fauna Web.

People's Association
- Page 35, Image 10: One Punggol.

Singapore Armed Forces
- Page 35, Image 4: SAFRA Punggol.

Singapore Institute of Technology
- Page 35, Image 9: SIT Campus.

Sport Singapore
- Page 35, Image 11: Regional Sport Centre.

Urban Redevelopment Authority
- Page 10, top left and top middle: Fishing villages, poultry farms.
- Page 10, bottom left and right: Seafood restaurants.
- Page 33: Typical section of the Campus Boulevard.

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- Page 54, bottom left: Waterway Cascadia. Photographer: Albert Lim KS.
- Page 58, bottom right: Cascading building forms fronting the promenade. Photographer: Albert Lim KS.
- Page 103, right: Drop-off porch with clean lines and layered roofs in Waterway Cascadia. Photographer: Albert Lim KS.
- Page 104, left: A rustic fishing basket-inspired pergola in Waterway View.

China Construction (South Pacific) Development Co Pte Ltd
- Page 95, bottom: Blue and green tones in the facades of Punggol Waves and Punggol Ripples.

JYHa LLP
- Page 114, 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 31, bottom second from right: Nature Walk.
- Page 79, right: Punggol Point Park.
- Page 105, right: Wooden deck with lighting sculptures along the river bank at Punggol Promenade.

P&T Consultants Pte Ltd
- Page 66, top: Undulating roof forms in Waterway Sundew.

Surbana Jurong Consultants Pte Ltd
- Page 27, Image 2 and Page 63, bottom left: The blocks in Waterway Ridges are designed as undulating ridges that step down towards the waterway.
- Page 52, bottom: Contemporary facade design with clean geometric forms (example from SkyResidence @ Dawson). Photographer: Darren Soh.
- Page 63, bottom right: Low-rise 'canal housing' blocks at Waterway Ridges facing the tributary promenade.
- Page 87, right: Lush tree groves in the common green along the Sumang Lane green avenue.
- Page 88, bottom: Rich accents of yellows, oranges and browns on the facade of Matilda Edge, with linear patterns inspired by the rows of former rubber plantations in the area.
- Page 92, right: A common green nestled between Punggol Vista, Punggol Lodge, Punggol Spring and Damai Grove.
- Page 93, middle: Streetscape along Punggol Central at the intersection with Punggol Road.

Surbana Jurong Consultants Pte Ltd and Rich Construction Company Pte Ltd
- Page 73, middle: Northshore StraitsView – waterfront skyline.

SUTD Advanced Architecture Laboratory
- Page 103, left: Pavilion with a parametric design (example from Future of Us exhibition pavilion). Photographer: Koh Sze Kiat, Oddinary Studios.

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Chantalle Goh
- Page 35, Image 1: Waterway Point.
- Page 65, bottom right: Low-rise blocks facing the canal create an intimate human-scale environment along the tributary promenade.

Chin Ming Li
- Page 31, bottom left: Punggol Park Connector.
- Page 34: Street view along Punggol Central.
- Page 35, Image 2: Punggol Plaza.
- Page 36, bottom left: Murals depicting Punggol's '*kampung*' past, at Blk 105C Edgedale Plains.
- Page 37, top: An art sculpture at Punggol Waterway Point.
- Page 37, bottom right: An art mural depicting Punggol Town displayed in Punggol Waterway Point.
- Page 79, bottom left: The Punggol Settlement.

Hoo Xin Yu
- Page 90, bottom right: Lush car park roof gardens at Punggol Oceanus.
- Page 110, left: Use of architectural structures to form mimetic objects (example from a playground in Australia).
- Page 110, right: Use of adventure and imaginative play elements (example from a playground in Australia).

Lye Pok Min
- Page 114, middle: A covered linkway added to an existing HDB precinct has block numbers to help in wayfinding (example from Blk 618 Yishun Ring Road).

Nurul Ain Saadon
- Page 108, right: Use of levels with organic forms for adventurous play in a playground at Waterway Brooks.

Rebecca Sng
- Page 83, bottom right: A verandah-inspired shelter in the common green at Matilda Edge.

Xu Xiaoqi
- Page 105, middle: Boat-like seating at the common green between Punggol Vista, Punggol Lodge, Punggol Spring and Damai Grove.

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