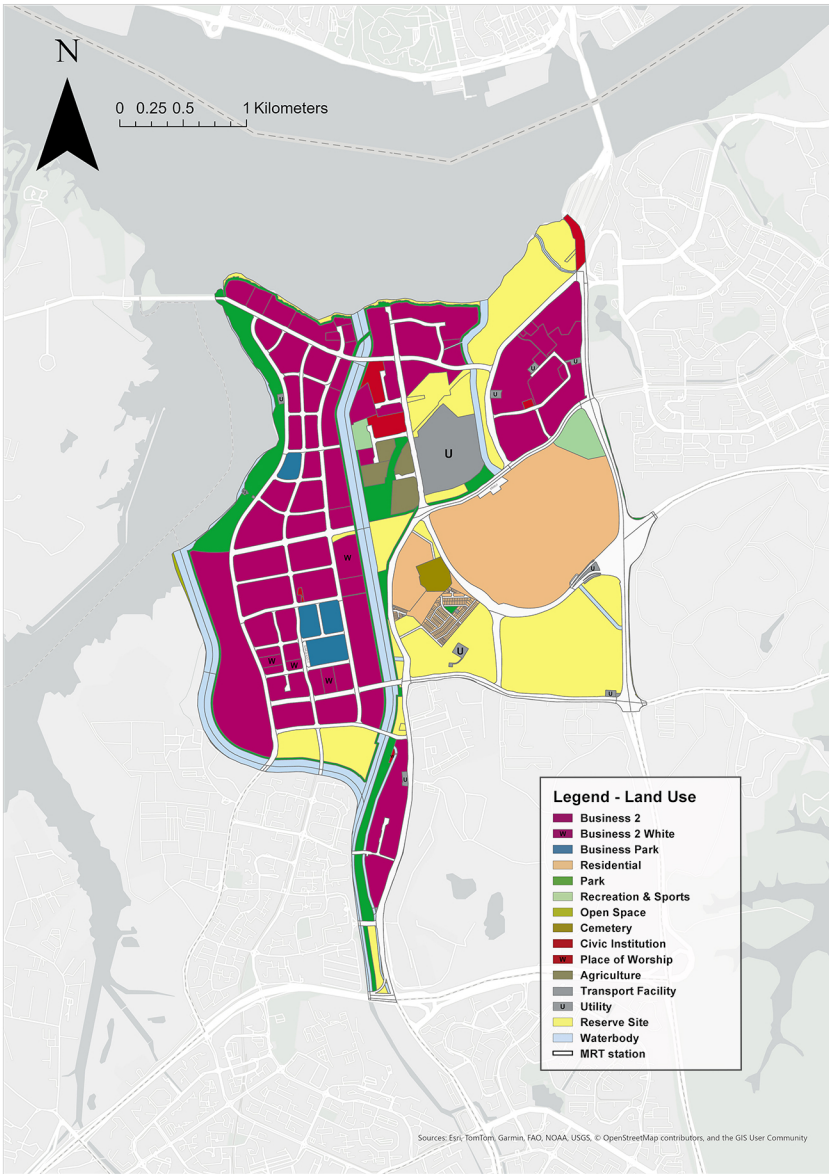
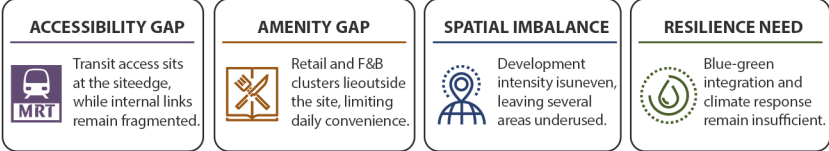


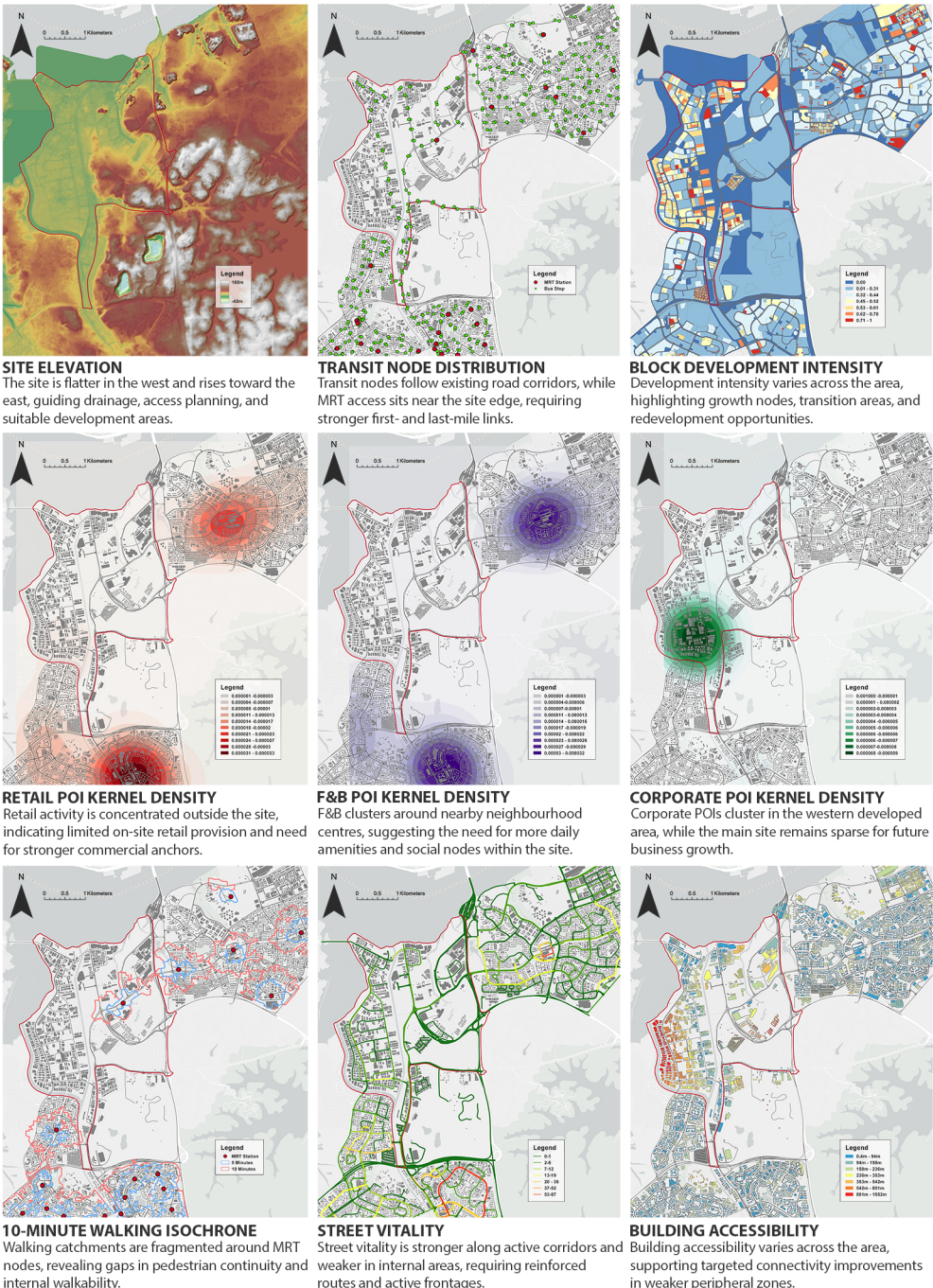
URA MASTER PLAN 2025



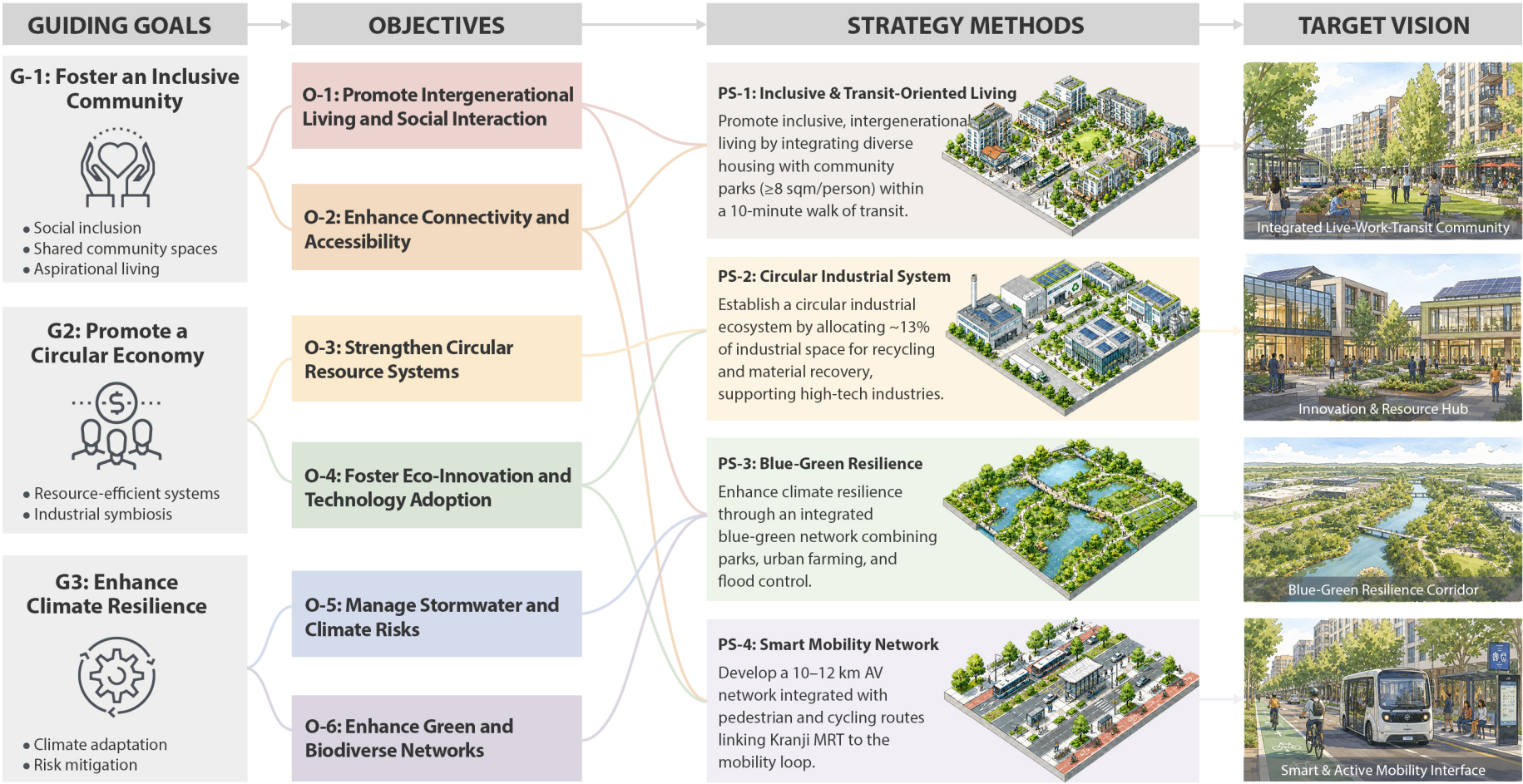
KEY ISSUES IDENTIFIED



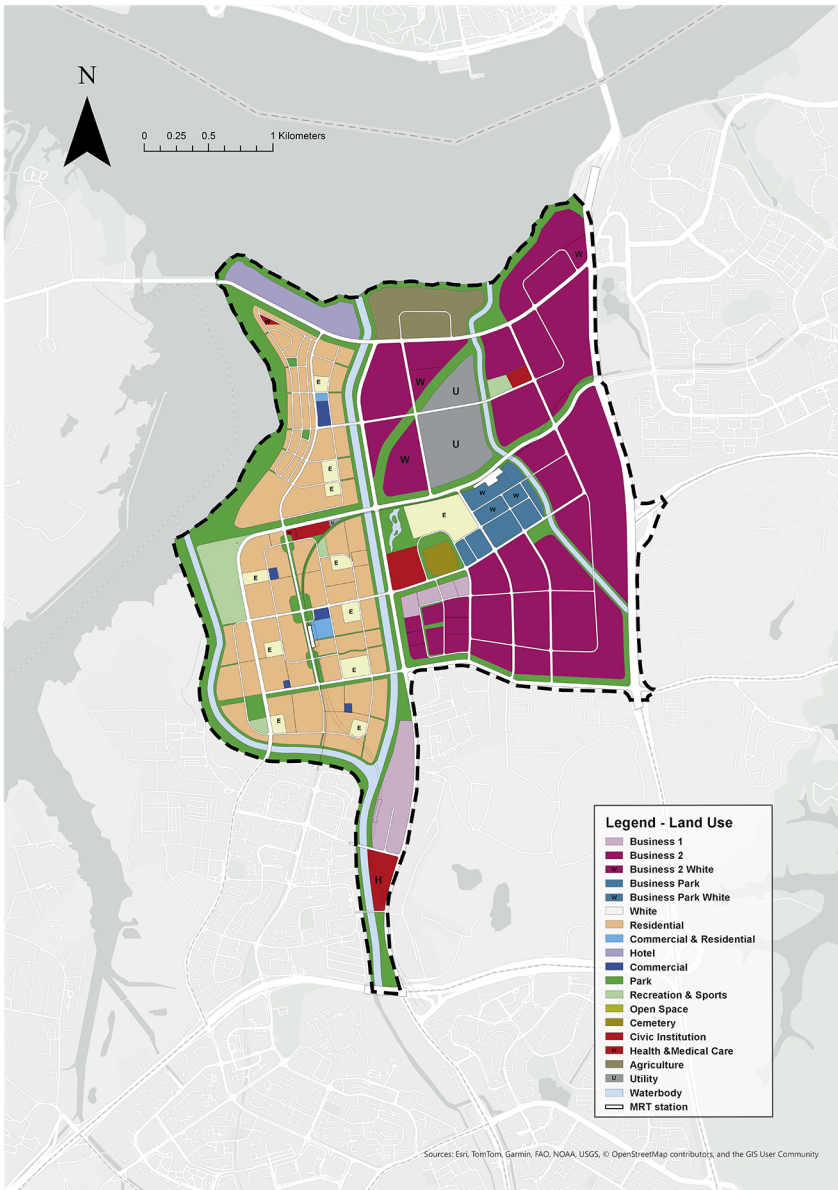
SITE CONTEXT & PRELIMINARY ANALYSIS



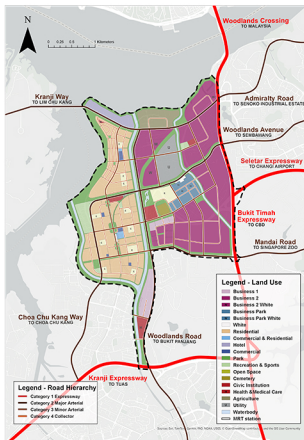
By 2050, Sungei Kadut will be a **resilient** and **inclusive Eco-Innovation Hub**, uniting future industries with sustainable community lifestyles.



STRUCTURE PLAN

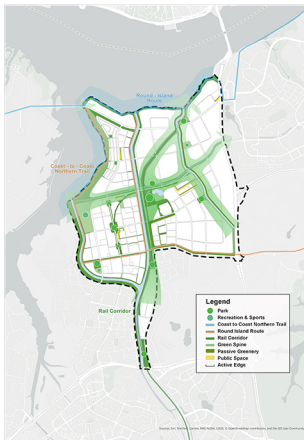


SUPPORTING ANALYSIS FRAMEWORK



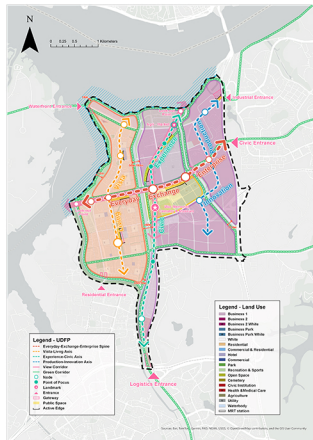
ROAD HIERARCHY

The road hierarchy separates logistics and community traffic, distributes movement across the site, and provides local access anchored by a central spine connected to the MRT hub.



GREEN & BLUE PLAN

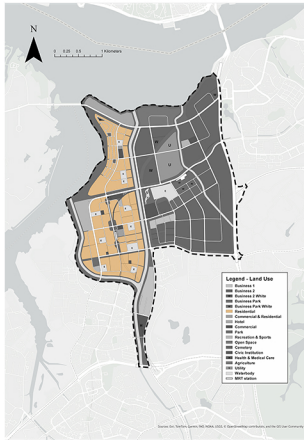
The green network connects the Coast-to-Coast Trail, Round Island Route, and Rail Corridor into a continuous system. A central spine links key parks and public spaces, with greenery extending across the site.



URBAN DESIGN FRAMEWORK PLAN

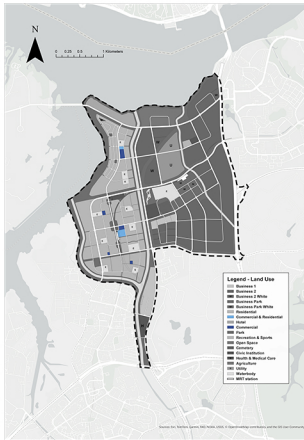
The framework organises the site through three spines - Everyday, Exchange, Enterprise - linking the MRT hub, Rail Corridor, and key nodes. Together, they structure movement and support a transit-oriented district.

DEVELOPMENTS CRITERIA



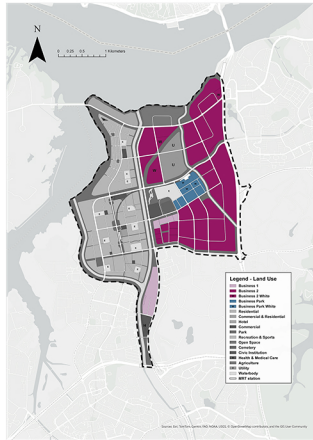
RESIDENTIAL

The residential area is concentrated along the western edge, buffered from industrial zones by road corridors and setbacks. Development intensity varies with location, with lower GPR near the waterfront to enhance livability and environmental quality.



COMMERCIAL

Commercial uses are concentrated at key nodes and along primary routes to maximise visibility and accessibility. Development intensity varies by typology, with higher GPR for malls and more open, lower-density retail plazas to support public activity.



INDUSTRIAL

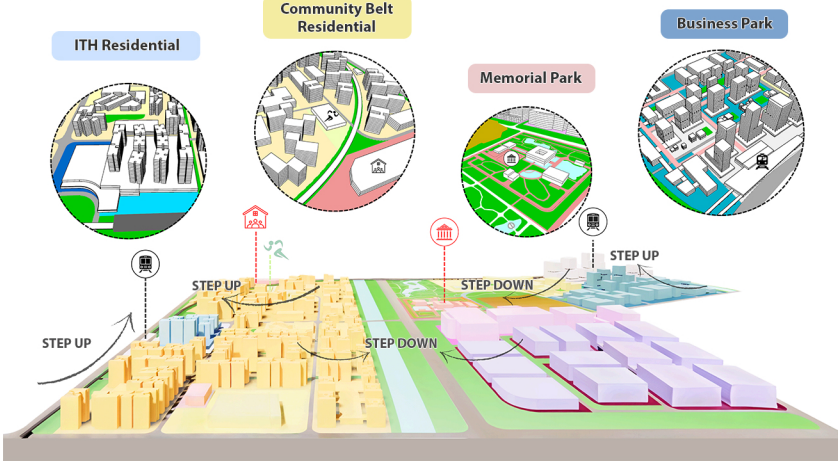
Industrial uses are located in the eastern zones, organised by road hierarchy and buffered from residential areas. Development intensity varies across typologies, with higher GPR in business parks to support innovation and advanced production.

MASTER PLAN

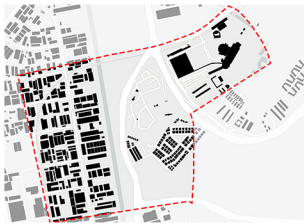


OVERALL SPATIAL STRUCTURE

The overall spatial structure strategically organises the site into distinct zones, from transit-oriented residential areas to industrial and business park clusters. Building massing and heights carefully transition across the site, creating a gradual shift in scale while reinforcing functional relationships.

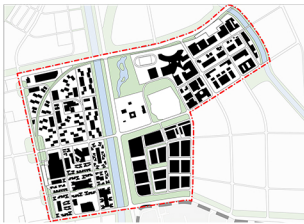


SUPPORTING ANALYSIS FRAMEWORK



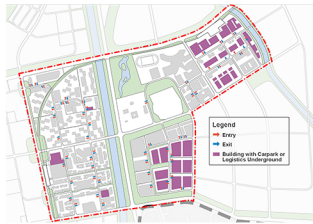
EXISTING BUILDINGS

Existing buildings contrast dense industrial blocks on the west with lower-density uses to the east. This reflects compact manufacturing and more dispersed residential and recreational patterns.



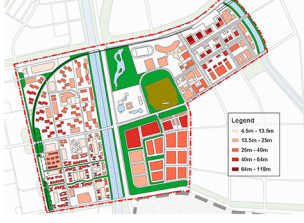
PROPOSED FOOTPRINT

The proposed footprint reorganises the site into residential, industrial, and business park zones. Building sizes vary by function, with smaller units for housing and larger footprints for production and logistics.



ACCESS & UNDERGROUND

Ground-level access is concentrated along Category 4 roads, with multiple entry points to support accessibility. Underground systems support parking and logistics, reducing surface traffic.



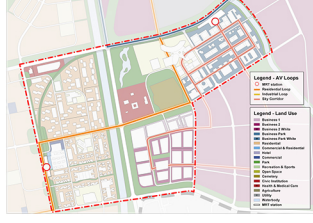
BUILDING HEIGHT PLAN

Building heights vary across the site, with the tallest buildings concentrated near the MRT node. Lower heights dominate industrial and peripheral areas, with selected blocks stepping up in intensity.



GREEN & BLUE PLAN

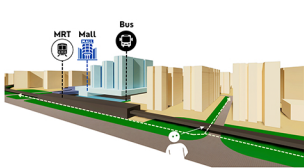
The green-blue network organises the site through a central spine linked to the canal and rail corridor. Secondary green corridors extend into residential areas, connecting parks, open spaces, and key nodes.



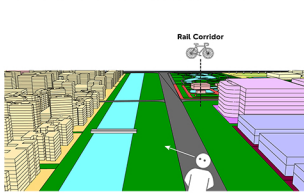
MULTIMODAL TRANSPORT

The transport system is structured by three AV loops across ground and elevated levels, connecting residential, industrial, and business park areas. All loops originate from MRT nodes, supporting movement and logistics.

CROSS SECTION

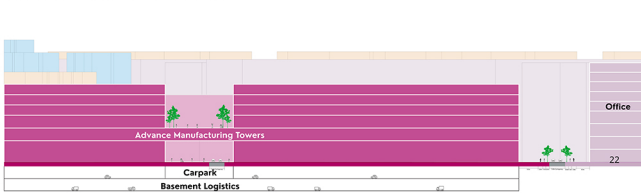


INTEGRATED TRANSPORT HUB



RAIL CORRIDOR INTERFACE

RESIDENTIAL SECTION A - A'

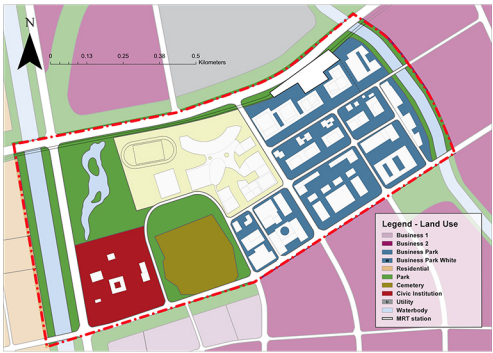


INDUSTRY SECTION B - B'

URBAN DESIGN PLAN



SUPPORTING ANALYSIS FRAMEWORK



BUILDING FOOTPRINT



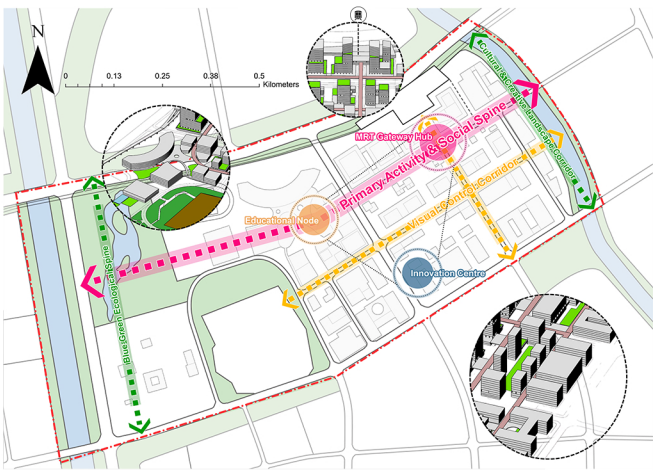
PARCEL PLAN

Land Use	ha Area	% Area
Business Park	17.24	20.8%
Business Park White	6.13	7.4%
Educational Institution	12.89	15.56%
Civic & Community Institutions	5.95	7.18%
Park	11.83	14.27%
Waterbody	4.03	4.86%
Road	18.01	21.74%
MRT	1.34	1.62%
Cemetery	5.44	6.57%
Total	82.86	100%
Total (Without Green & Blue)	67.00	81%

Population Type	Desity	Projection
Workforce	28-35 sqm/pax	20605
Residents	25-35 sqm/pax	320
Total	-	20925

LANDUSE BUDGET & POPULATION PROJECTION

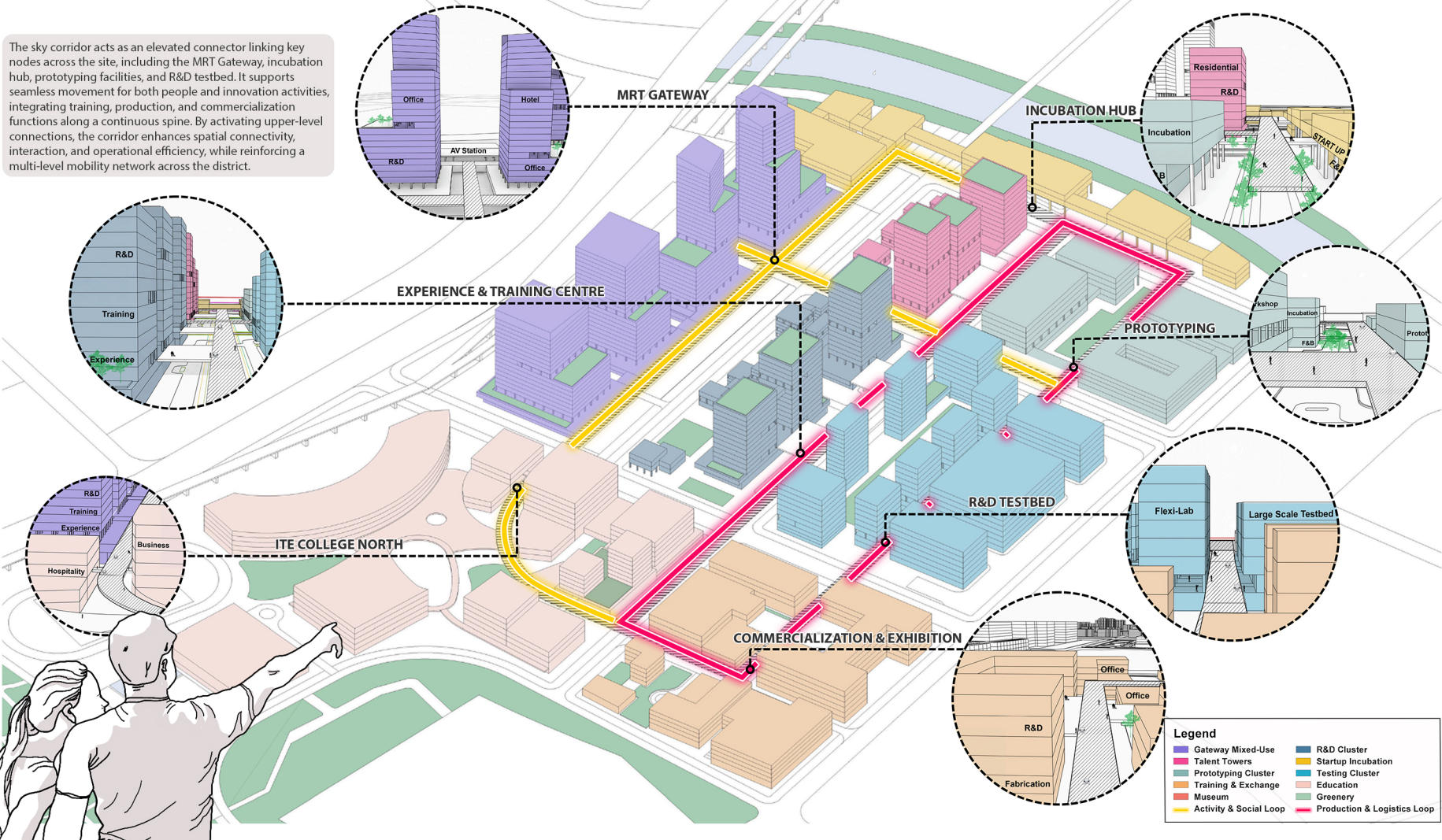
The land use shows a balanced mix of business, infrastructure, and green-blue systems. Business park uses anchor the site as an innovation and employment hub, while parks and waterbodies enhance environmental quality. The site accommodates about 20,605 workers and 320 residents.



PLANNING STRUCTURE

The planning structure is organised around interconnected spines and key nodes that guide movement and activity. A primary east-west spine links the MRT Gateway Hub, Educational Node, and Innovation Centre, supported by a blue-green ecological spine, cultural corridor, and visual control corridor. Together, these elements form a coherent spatial framework.

URBAN DESIGN SPATIAL PERSPECTIVE

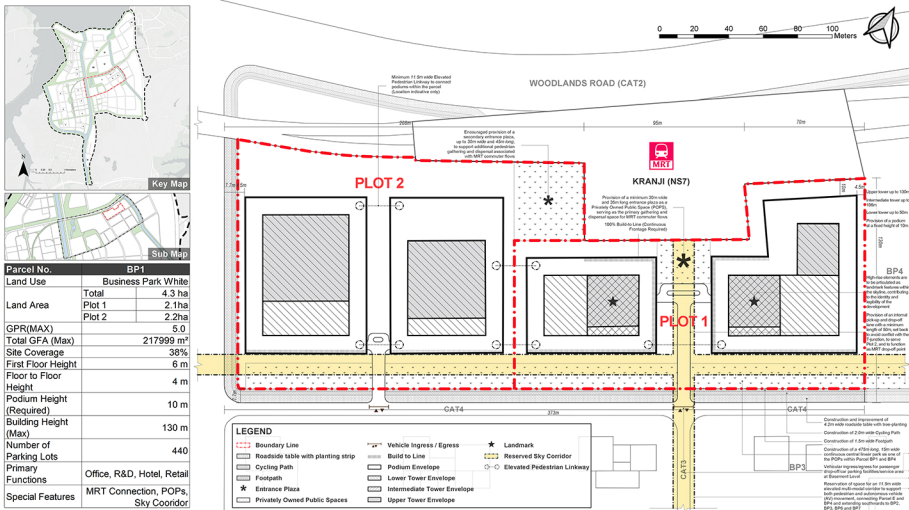


The sky corridor acts as an elevated connector linking key nodes across the site, including the MRT Gateway, incubation hub, prototyping facilities, and R&D testbed. It supports seamless movement for both people and innovation activities, integrating training, production, and commercialization functions along a continuous spine. By activating upper-level connections, the corridor enhances spatial connectivity, interaction, and operational efficiency, while reinforcing a multi-level mobility network across the district.

FUNCTION PLAN

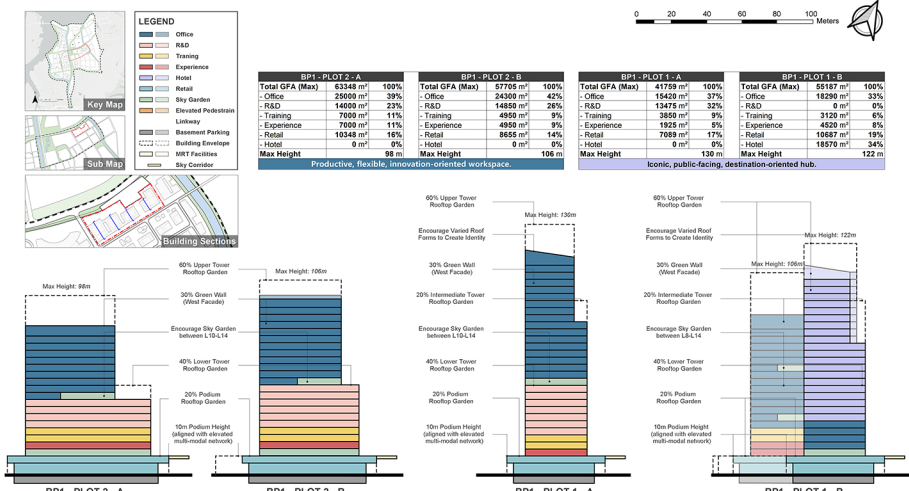
The function plan organises the site into a clear innovation pipeline, from education and research to startup incubation, prototyping, testing, and commercialization. Each cluster supports a specific stage, enabling a continuous flow from knowledge creation to market application. Together, these functions create a coherent and integrated innovation ecosystem.

DEVELOPMENT CONTROL PLAN



BUSINESS PARK 1 - OVERVIEW

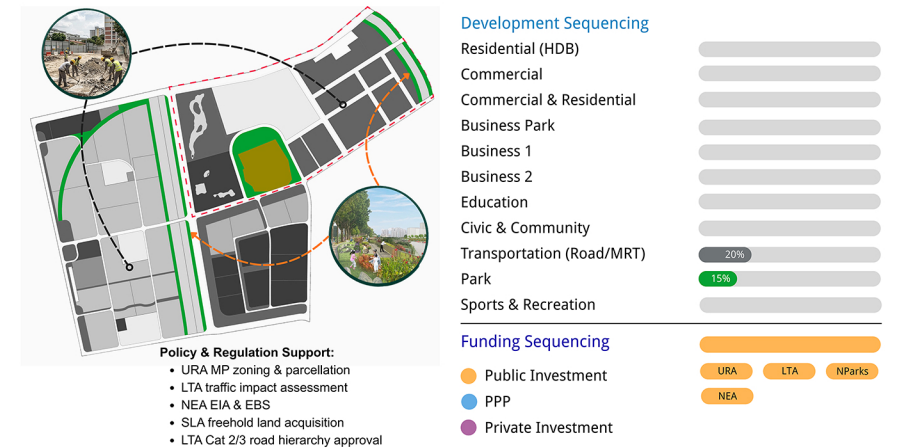
The plan establishes clear development parameters, including land use distribution, building envelopes, and movement systems. It organises parcels around the MRT hub while ensuring efficient circulation, public space integration, and functional clarity.



BUSINESS PARK 1 - BUILDING SECTIONS

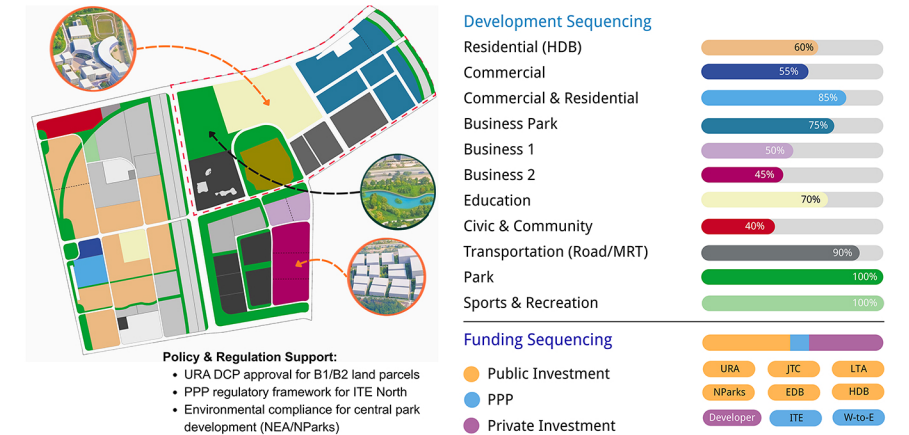
Building sections define a clear vertical hierarchy from podium to tower, integrating mixed-use functions with structured height controls. Sky gardens and stepped massing introduce variation while maintaining coherence and environmental performance.

IMPLEMENTATION PLAN



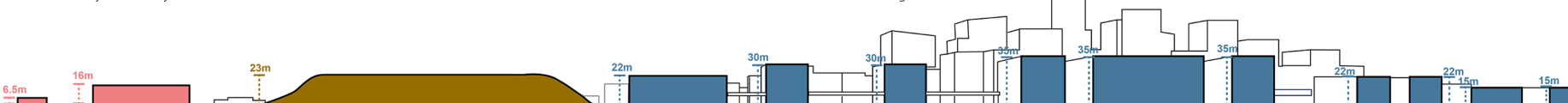
PHASE 0 (2025-2030): ENABLING INFRASTRUCTURE

This phase focuses on establishing the foundational infrastructure and regulatory framework to support future development. Key priorities include road hierarchy approval, land parcelisation, and environmental assessments to ensure site readiness. Early investments are directed towards transportation systems and green infrastructure, laying the groundwork for connectivity and ecological structure before major building development begins.

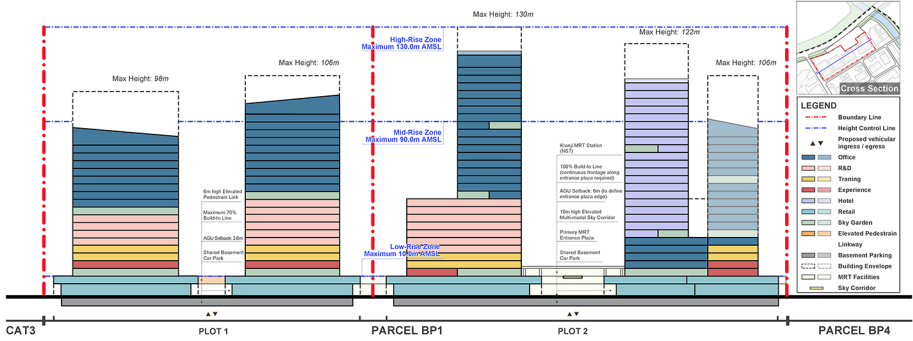


PHASE 2 (2035-2040): SCALED EXPANSION

The project enters a phase of accelerated growth, with significant expansion across business park, commercial-residential, and institutional uses. Key anchors such as education facilities and civic programs are delivered to strengthen talent development and community integration. Green-blue infrastructure and central park systems are fully implemented, enhancing environmental quality while supporting increased density and activity.



BP1				
Land Area	4.3 ha		Parking Requirements	
Total GFA (Max)	217999 m ²	100%	Total Parking Area	
- Office	83010 m ²	38%	- Offices (1 lot per 530m ²)	157
- R&D	42325 m ²	19%	- R&D (1 lot per 530 m ²)	80
- Training	18920 m ²	9%	- Training (1 lot per 530 m ²)	36
- Experience	18395 m ²	8%	- Experience (1 lot per 420 m ²)	44
- Retail	36779 m ²	17%	- Retail (1 lot per 420 m ²)	88
- Hotel	18570 m ²	9%	- Hotel (1 lot per 530 m ²)	35
GPR	5.0		Below Ground Floor (Required)	



BUSINESS PARK 1 - CROSS SECTION

The cross section illustrates a graded height transition across the site, from low- to high-rise zones, ensuring appropriate scale and visual continuity. Multi-level connections and podium alignment support accessibility and integration with the MRT node.

Central Linear Park

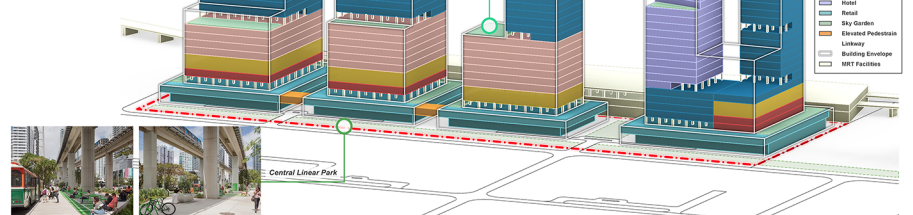
- Designed as a **Privately Owned Public Space (POPS)** accessible at all times
- Continuous ground-level public realm linking BP1 and BP4
- Functions as primary pedestrian and movement corridor
- Aligns **active frontages** (retail, lobby, spill-out-uses) along the spine
- Integrates landscape, seating, and informal activity spaces
- Structured with varying activity intensity along different segments
- Supports direct connectivity to MRT, key nodes, and adjacent parcels

Landmark To

- Defined by a wedge-shaped profile with a sloping façade
- Establishes a strong visual landmark along primary axes
- Creates a distinctive skyline identity through angled geometries
- Releases space at ground level for public realm integration

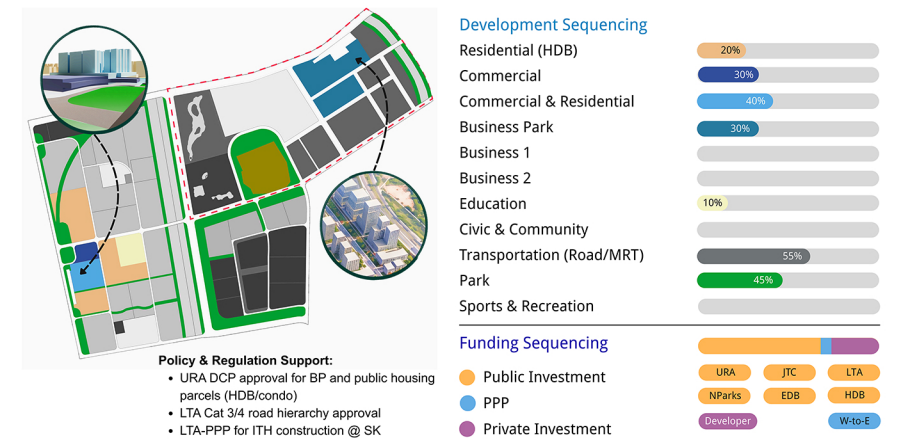
Sky Garden

- Located at transition levels between podium and tower
- Functions as semi-public outdoor space
- Enhances vertical layering of program
- Provides visual and spatial relief within dense massing



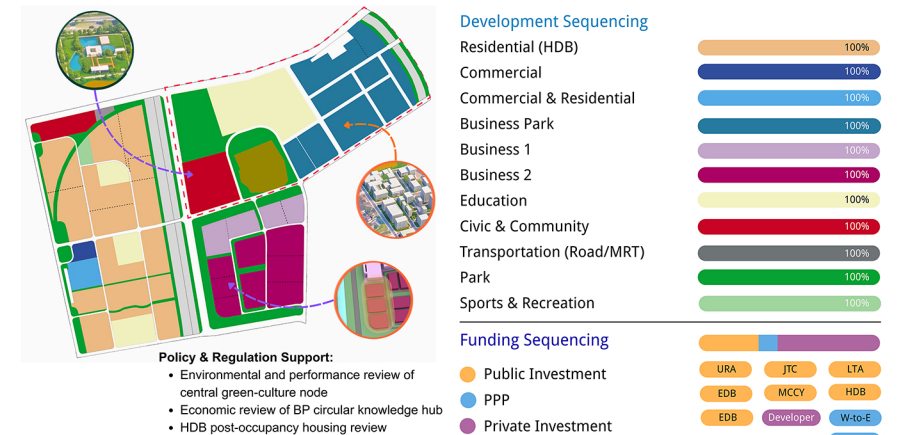
BUSINESS PARK 1 - SIMULATION

The simulation demonstrates how building massing, landmark elements, and sky gardens translate into spatial experience. It highlights the integration of public realm, vertical layering, and identity-forming features within a cohesive urban framework.



PHASE 1 (2030-2035): EARLY ACTIVATION

Development initiates with strategically selected parcels to generate early activity and attract users. Residential, commercial, and business park components are introduced alongside critical transport infrastructure, particularly the MRT-linked hub. Public-private partnerships begin to play a role, enabling mixed-use environments and setting up the initial economic and social ecosystem of the site. Early placemaking and activation strategies further help to establish identity and encourage initial community engagement.



PHASE 2 (2040-2050): FULL ACTIVATION

The site reaches full maturity, with all land uses and infrastructure systems fully operational. A balanced mix of residential, economic, and civic functions supports a self-sustaining urban district. Final-stage evaluations focus on performance, adaptability, and long-term resilience ensuring the district functions as an integrated innovation hub with strong connectivity, identity, and liveability, while reinforcing its role within the wider regional network.