



Industrial Edge: Canal and Cargo



Canal Territory: Existing Conditions

# 01

## BRUSSELS CANAL

From Industry to Living Landscapes

**KU Leuven** Design Studio 2024-2025

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**KU LEUVEN**

### How This Project Reflects My Strengths:

**Adaptive Reuse & Industrial Identity:** Embracing the site's industrial heritage through thoughtful transformation, maintaining architectural language while enhancing urban functionality.

**Network-Based Zoning Strategies:** Structuring spatial organization around play, ecology, and movement networks to support inclusive, layered urban experiences.

**Barrier-to-Connection Design Thinking:** Turning spatial and infrastructural barriers into opportunities for connection and flow through strategic landscape and public space design.

**Contextual Integration:** Weaving landscape, built form, and public infrastructure into a coherent fabric that respects temporality, topography, and urban rhythm.



Project Overview

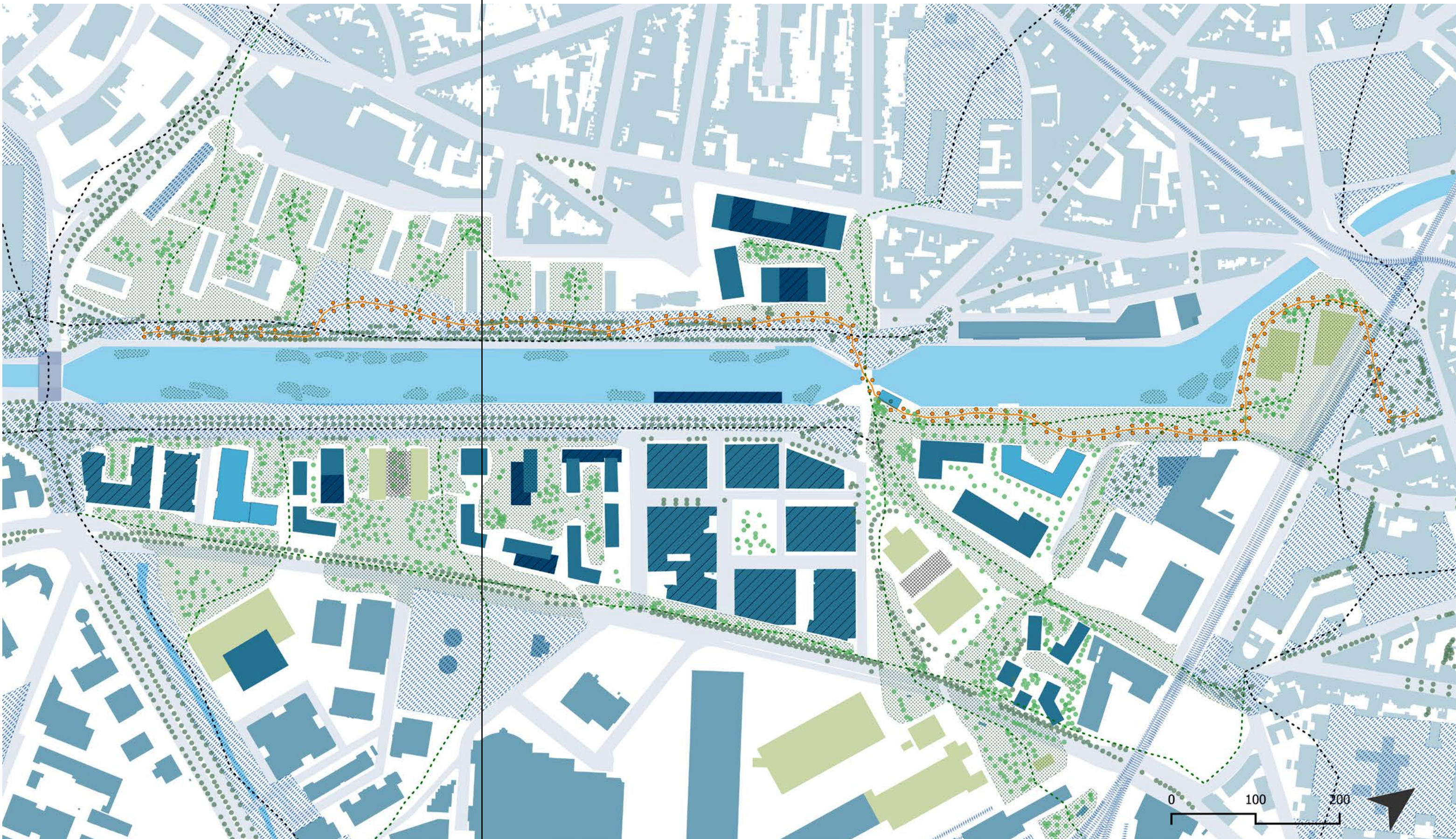
Biestebroek is a post-industrial area along the Brussels Canal, marked by former warehouses, transport infrastructure, and growing development pressure. Once an industrial hub, it now faces challenges of spatial fragmentation, ecological degradation, and socio-economic inequality — but also offers opportunities for urban regeneration through mixed-use development, productive landscapes, and ecological restoration.

This project explores the transformation of this post-industrial site into a vibrant, connected neighbourhood through adaptive reuse and strategic landscape integration. By organizing the zone around key networks—play, ecology, and movement—it redefines barriers as opportunities for interaction. The Collaborative Dock anchors the design, blending industrial heritage with new programs to foster collaboration, accessibility, and community life.

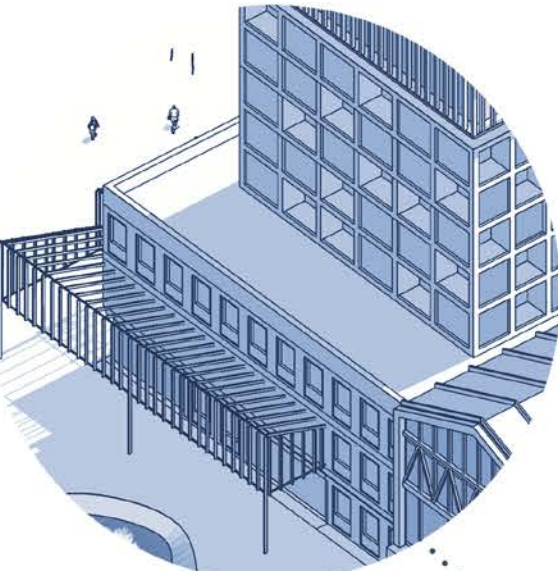
Masterplan Overview  
Strategy, Interpretation & Site Vision

LEGEND

New Tree	●	New Constructed Housing	■
Existing Tree	●	School	■
Existing Green Network	---	Adoptive Reuse	■
New Green Network	---	Play Axis	●
BUILDINGDESIGN			
Existing Housing	■	New Green Patch	■
Existing Industry	■	Existing Green Patch	■
New Industry	■	Rail	■
New Housing	■	Street	■
		Water Element	■

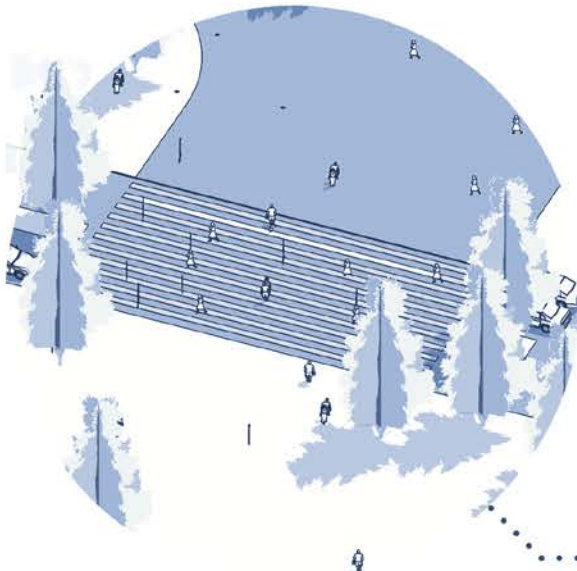






**The Hub**

A resource-sharing center that fosters circular economy practices through tool libraries, material reuse stations, and DIY workshops. It empowers residents and makers to repair, create, and collaborate sustainably.

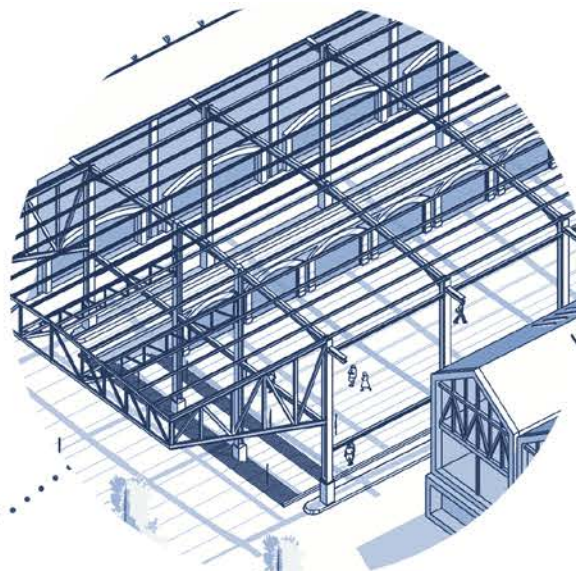
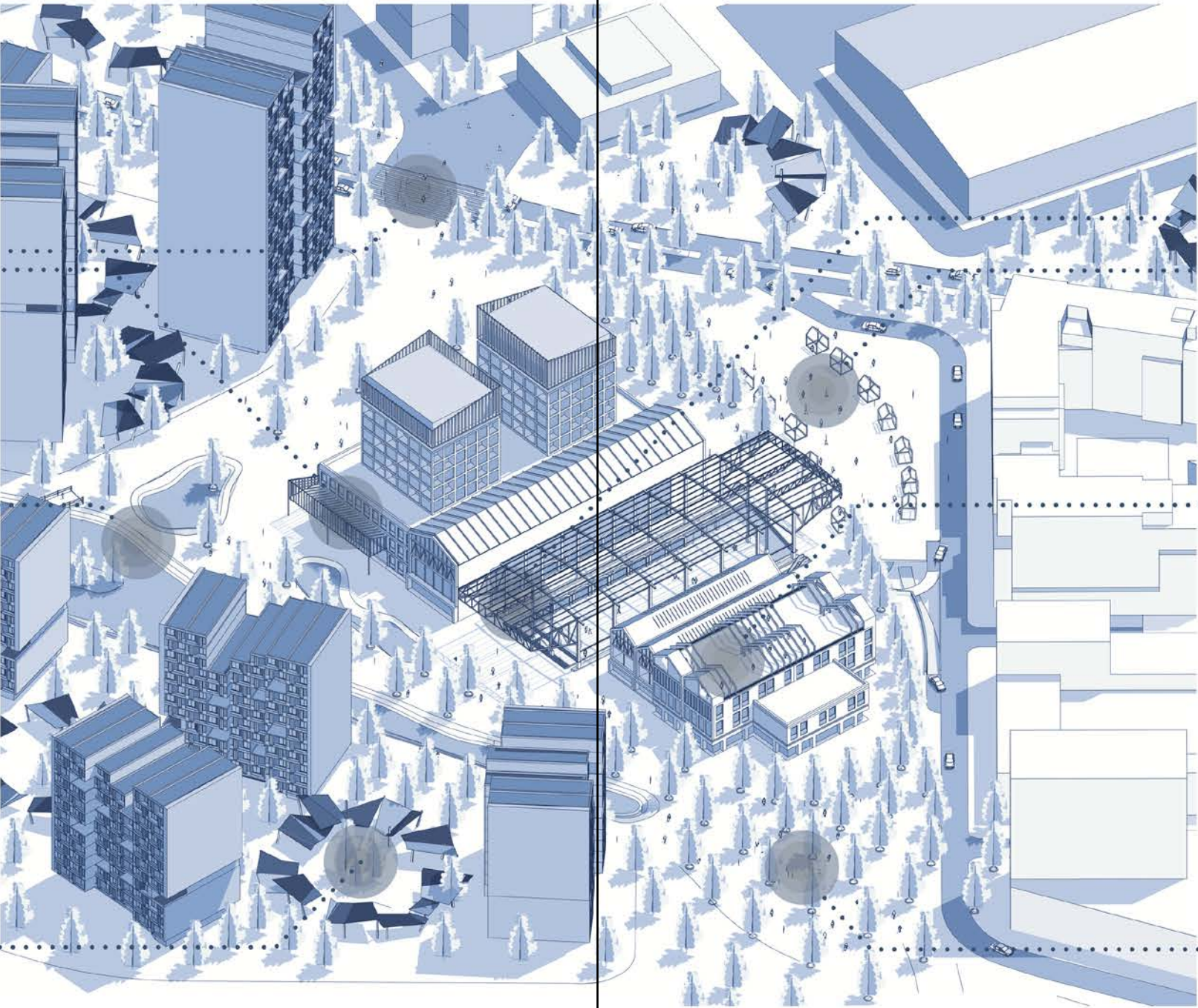


**Green Boulevard**

A linear park running north-south, transforming former industrial edges into a lush, walkable spine. It promotes active mobility, social interaction, and ecological continuity across fragmented neighborhoods.

**Micro-Scale Interventions**

A detailed zoom-in highlighting key micro spaces and interventions shaping the site's multifunctional corridors.



**The Engine Hub**

An innovation hub connecting universities, startups, and industries to experiment with sustainable technologies and urban solutions. It serves as a catalyst for research, testing, and community-driven



**Open-Air Market**

A dynamic public plaza hosting weekly markets, food vendors, and temporary installations. It celebrates local production, short supply chains, and diverse cultural expressions through open-air commerce.



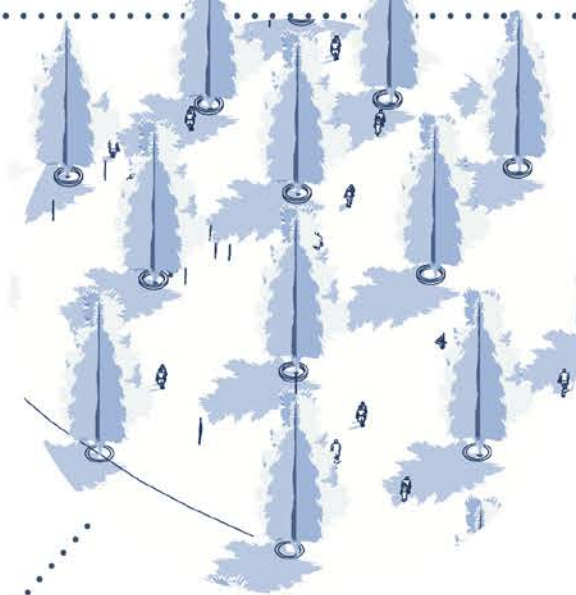
**Wet Valley**

A green-blue corridor that filters rainwater, connects green spaces, and enhances biodiversity. It offers a calm ecological pathway for walking, resting, and reconnecting with nature.



**Pocket Commons**

A small-scale communal park embedded within the residential fabric, offering shaded seating, greenery, and space for informal gatherings. It fosters neighborly interaction, everyday relaxation, and a sense of shared ownership among residents.



**Green Canopy Walk**

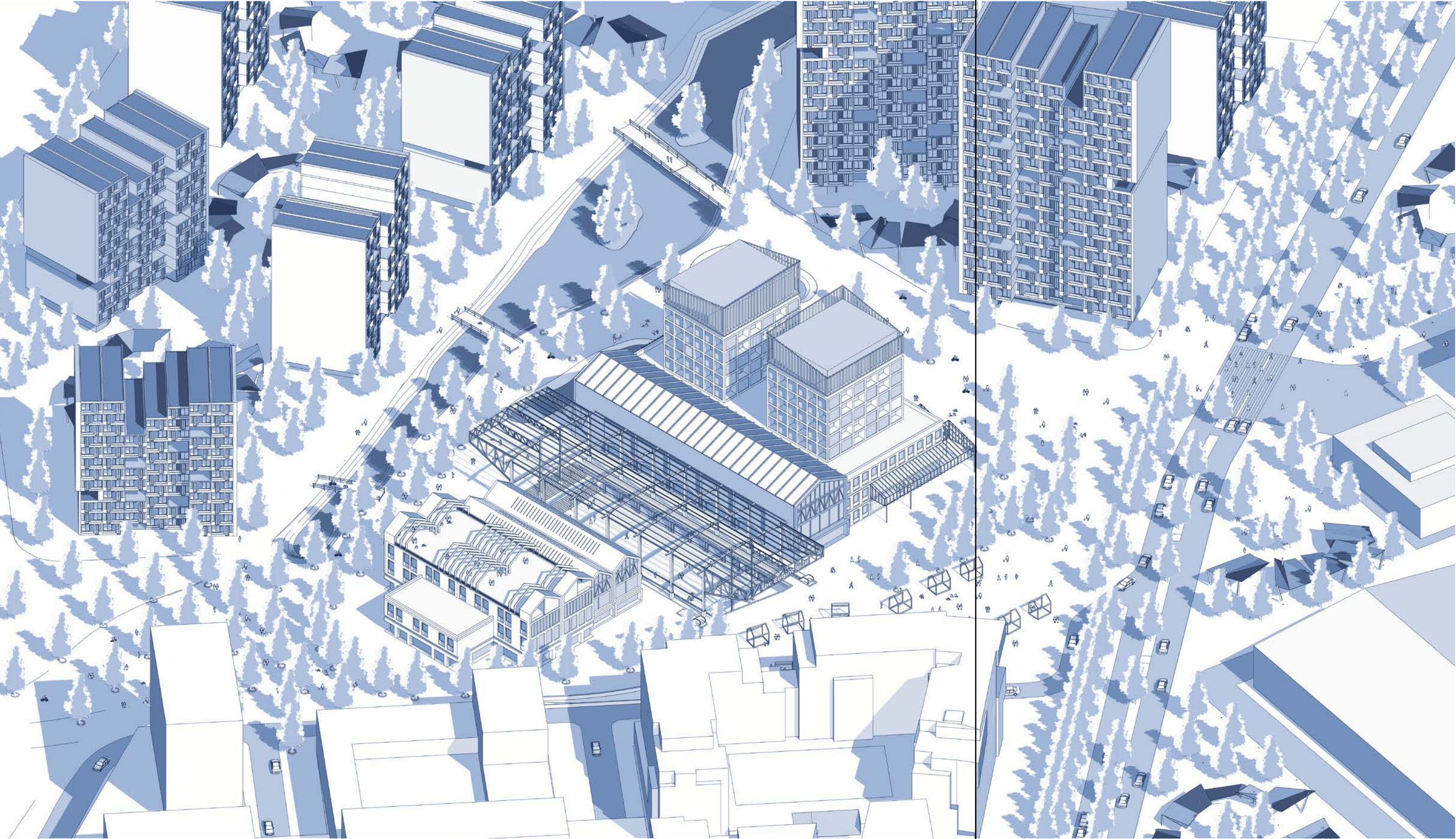
A shaded pedestrian promenade running alongside the canal, lined with trees, soft landscaping, and seating. Its linear form shifts and widens to create pocket plazas, resting spots, and spaces for community activities, blending movement with moments of pause and interaction.



**Rooftop Event Hub**

A flexible venue for networking, talks, and public events that bring together entrepreneurs, locals, and creatives. It supports the exchange of ideas, partnerships, and cultural expression in a vibrant setting.





**Conclusion**

The Brussels Canal site, once fragmented by industrial infrastructure, is reimagined through three integrated corridors—productive, ecological, and recreational. Each corridor responds to distinct urban challenges while collectively fostering a resilient, inclusive, and dynamic urban landscape. By layering innovation labs, green infrastructure, and public spaces, the project promotes community engagement, circular economy practices, and environmental regeneration. This holistic transformation repositions the canal as a connective spine—linking people, nature, and production—toward a more livable and adaptive Brussels.