

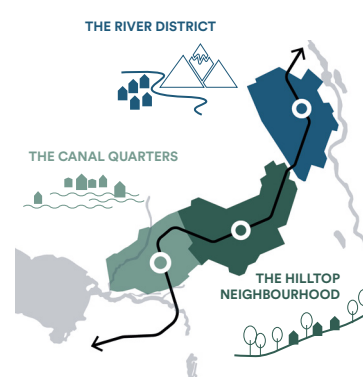
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**Strategic Urban Development Plan - Stage 2**

**CRAFTING KELDUR**

**Where Art, Science & Recreation Unite**

# A Creative & Vibrant District close to Nature



**Dense clusters along Borgarlína - the connecting spine**



**Close attractive green-blue structure**



**Sustainable everyday life with zero CO<sub>2</sub> footprint**

**STRATEGY**

- A dense, urban, climate neutral structure with premium qualities.
- Distinct clusters of buildings that enhance the existing landscape as well as the cultural and natural heritage.
- Sustainable daily life through Borgarlína's public transportation and the proximity to services and recreation.
- Early investments in public spaces to enhance the value of land.
- Economically feasible project with alternative financing models.

**Dense and Attractive**  
 The proposal presents a dense structure with premium urban qualities for residents and visitors concentrated around Borgarlína in total 11 600 new inhabitants in scenario 1, up to 15 500 new inhabitants in scenario 2.

Borgarlína is the central backbone, with services and commercial functions close to the bus stops, well-

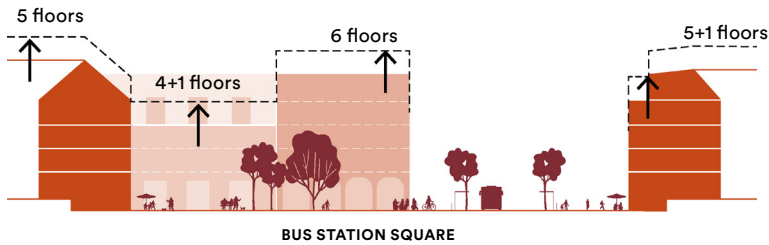
connected to adjacent areas. A sustainable healthy daily life is made easy with closeness to nature, cultivation areas, neighbourhood parks and squares.

The architecture draws inspiration from the landscape as well as existing buildings and functions such as the university, to create an unique and attractive character. The development maintains

a dense human-scale of 3-5 storeys.

**A Shared Vision**  
 Economic feasibility is crucial to attract businesses. Offering incentives such as lower land prices for early investments in the project can enable developers to establish early placemaking attractions for higher land value. A successful sustainable urban development project

#### 4.1 LAND VALUE & QUALITY



One Neighbourhood Common per 3-6 blocks for sustainable everyday life and urban qualities. They include solutions for mobility, energy, sharing, greenery and social interactions.



The relative small scale towards the waterfront is kept in the alternative scenario.

The alternative scenario is mainly achieved through one extra floor along the Borglina street.

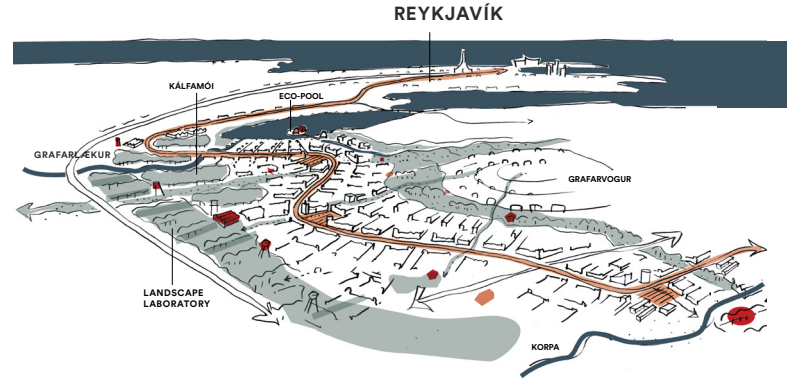
Neighbourhood Commons.

requires a goal-driven process with a shared vision that ensures collaboration amongst all involved parties. A clear vision and strategy provides the framework for decision-making and aligns the efforts of various stakeholders towards the same end goal. Co-creation is crucial, with commercial developers, researchers, innovators, the municipality, and experts working together to create

efficient land use.  
**Alternative Scenario**  
 Strategic investments in public space is even more crucial to achieve a successful higher development.

The principle for the alternative scenario is to:  
 - Mainly keep the same footprint as the main proposal  
 - Elevate the buildings around the bus street

- Create more efficient dwellings.
- Keep the small scale where it is vital for attractive public space and the district's identity.



The proposal enhances the perceived proximity to Reykjavik which is crucial for high land value.

## 4.1 LAND VALUE & QUALITY



### THE PROPOSAL

**Total area**  
approx. 117 hectares  
**Total building area\***  
approx. 212 000 sqm  
**Total gross floor area\***  
approx. 808 000 sqm  
*\*includes all functions, even garage floors in the Mobility hubs, but not existing buildings.*

**Height of buildings (average)**  
3-5 floors (urban blocks)

**Number of residents**  
11 600 inhabitants  
**Number of workplaces**  
7 700 workplaces  
**Bus trips per day**  
approx. 13 000 - 15 000 trips

**RESIDENTIALS**  
**Gross floor area residential**  
approx. 580 000 sqm  
**Inhabitants per dwelling**  
2 persons  
**Average apartment size**  
approx. 100 sqm GFA

**COMMERCIAL**  
**Gross floor area commercial**  
approx. 145 000 sqm  
**GFA per workplace**  
approx. 18,75 sqm per person

A third school is located in The River District following the same principles as the other: close to the bus station, to nature, sports facilities and existing adjacent areas.

### ALTERNATIVE SCENARIO

**Total area**  
approx. 117 hectares  
**Total building area\***  
approx. 213 000 sqm  
**Total gross floor area\***  
approx. 870 660 sqm  
*\*includes all functions, even garage floors in the Mobility hubs, but not existing buildings.*

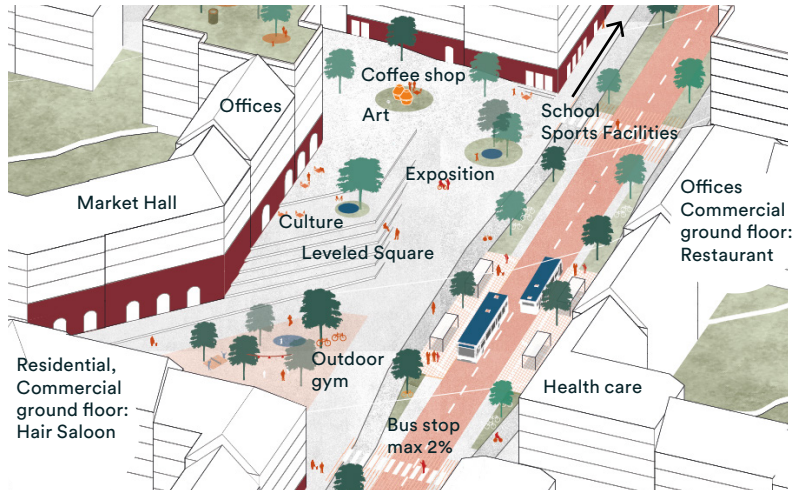
**Height of buildings (average)**  
4-6 floors (urban blocks)

**Number of residents**  
15 500 inhabitants  
**Number of workplaces**  
8 300 workplaces  
**Bus trips per day**  
approx. 15 000 - 17 000 trips

**RESIDENTIALS**  
**Gross floor area residential**  
approx. 620 600 sqm  
**Inhabitants per dwelling**  
2 persons  
**Average apartment size**  
approx. 80 sqm GFA

**COMMERCIAL**  
**Gross floor area commercial**  
approx. 155 150 sqm  
**GFA per workplace**  
approx. 18,75 sqm per person

# Dense in a Sustainable & Inviting Way



The Borgarlína station at The Hilltop Square.

## STRATEGY

- Dense, green and human scale. 3-5 storeys, 11 600 new residents and 7700 workplaces.
- Based on the topography and wind conditions.
- Higher development along Borgarlína  
Lower development in challenging topographical areas and areas that meet nature.
- Wide range of typologies and apartment sizes.
- Shared mobility solutions for private cars.
- Strategy for slope and stations, see chapter 4.5

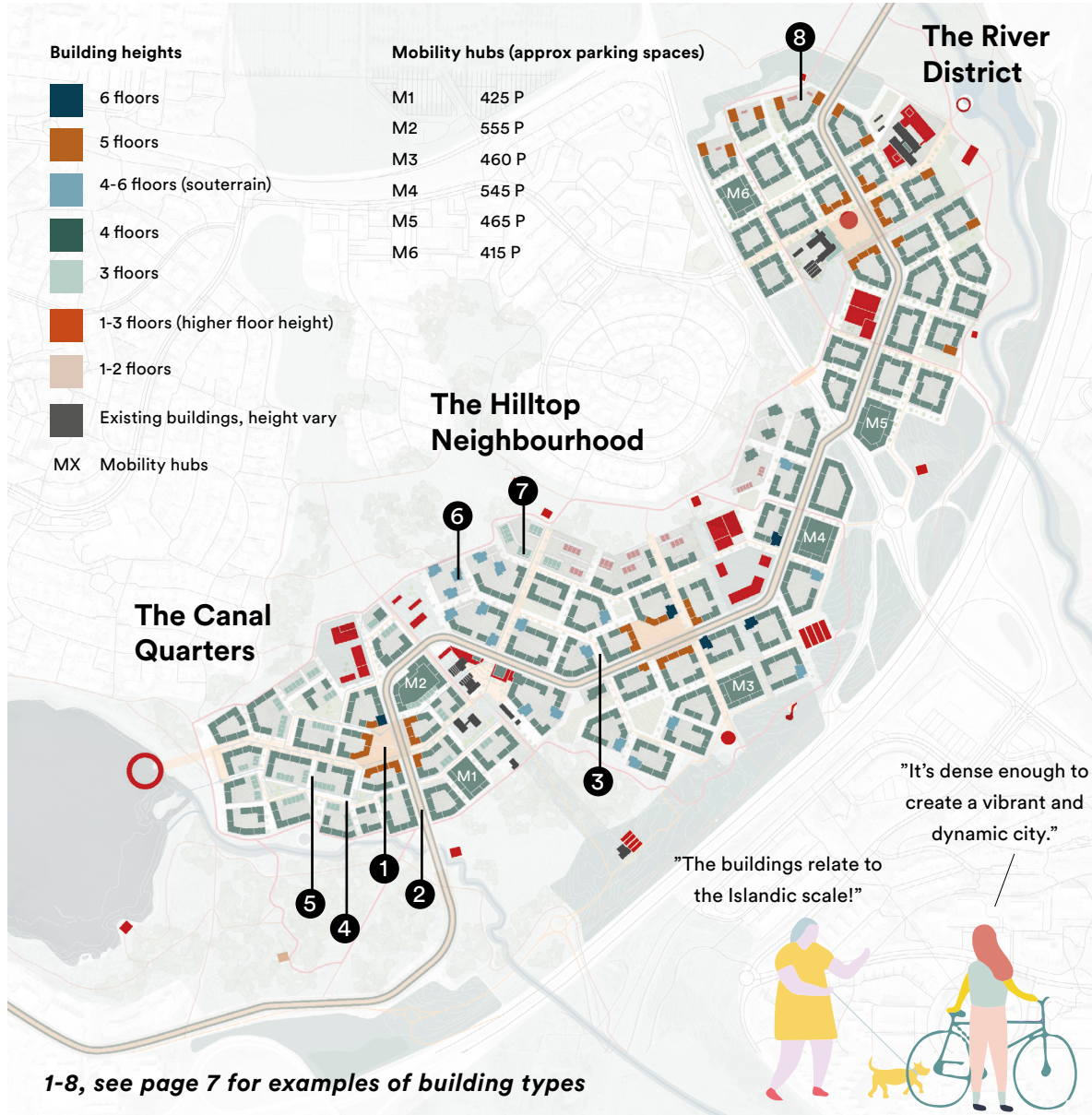


**The Canal Quarters**  
Open blocks with elements of townhouses spanning 3-4 storeys. Sheltered location in the green valley, taking advantage of optimal sun exposure. Dense, diverse, and staggered blocks provide protection from rain and wind. Canals, water features, and a waterfront promenade enhance the ambiance.

**The Hill Neighbourhood**  
Robust block structure spanning 3-5 storeys with sheltered green courtyards. Dramatic location on the slope offering stunning views. Ascending buildings and breathtaking vistas.

**The River district**  
Mainly closed block structure that opens up towards the view spanning 4-5 storeys, with certain parts of the block allowing for 6 storeys. Gaps within the block offer scenic views. Situated attractively by the river, boasting striking views of the mountains and landscape.

## 4.2 DENSITY DISTRIBUTION AND FORM



### DENSITY

**Height of buildings (average)**  
3-5 floors (urban blocks)

**Number of residents**  
11 600 inhabitants

**Number of workplaces**  
7 700 workplaces

**RESIDENTIALS**

**Gross floor area residential**  
approx. 580 000 sqm

**Number of dwellings**  
5 800

**Inhabitants per dwelling**  
2 persons

**Average apartment size**  
approx. 100 sqm GFA

**COMMERCIAL**

**Gross floor area commercial**  
approx. 145 000 sqm

### PARKING STRATEGY

The new development is a liveable city with sustainable mobility like public transport and bikes in focus. Private cars are primarily parked in the mobility hubs that are easily accessed from the main roads. The high degree of walkability and proximity to services and schools reduce the reliance on personal vehicles. As an effect this will significantly reduce the amount of parking spaces per residential unit to maximum 0,5 per unit. Shared mobility solutions such as car-sharing, bikes and cargo bikes are located in every block for close convenience making the the first-choice option.

### PARKING

**Total number of parking spaces**  
approx 3000-3500 P (depending of the range of jointly utilize.)

### SUBDIVISIONS

**Parking needs**

The parking ratio (parking space per 100 sqm GPA residential/commercial) is relative to the distance to the closest bus stop

**Bus stop within 100m (22%):**  
0,3 P-ratio - approx. 480 P

**Bus stop within 200m (35%):**  
0,4 P-ratio approx. 1010 P

**Bus stop more than 300m (43%):**  
0,5 P-ratio approx. 1550 P

**Parking along the streets (temporarily used by visitors etc)**  
approx. 300 P

**Common neighbourhood solutions (only shared cars, residents)**  
approx. 5 -40 P per unit

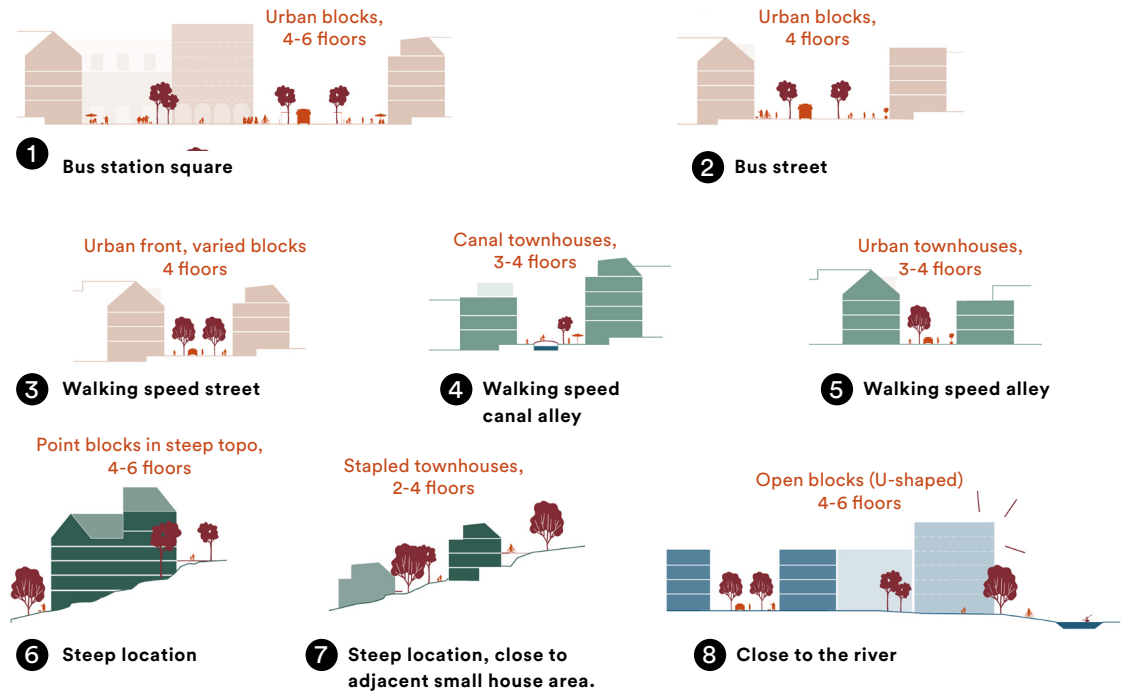
**Mobility hubs (shared and private cars, temporary visitors, residents and workers)**  
approx. 2 870 P (subdivided as shown in the map)

**Parking spaces per school**  
approx. 20 P

# Dynamic City Life



The bus station square with a wide range of mixed use.



Examples of building types. 1-2. Commercial OR Residential with commercial, 3-8. Residential with commercial ground floor in strategic locations ground floor.

**STRATEGY**

- Flexible block structure.
- Focus services and commerce around Borgarlína.
- Incorporate existing site uses, enhance its unique character.
- Create a walkable city & active edge zones.

**Flexible Block Structure**  
The structure is robust in size and measurements, and it caters to various uses: residential, services, commerce, etc. This flexibility is crucial for maintaining adaptability over time.

**Commercial along Borgarlína**  
Commercial ground floors are concentrated along the main street and squares to provide

a wide range of services, including shops, restaurants, municipal services, and schools. This concentration helps in creating a more sustainable and liveable city. Larger commercial buildings are situated in areas with good transportation access.

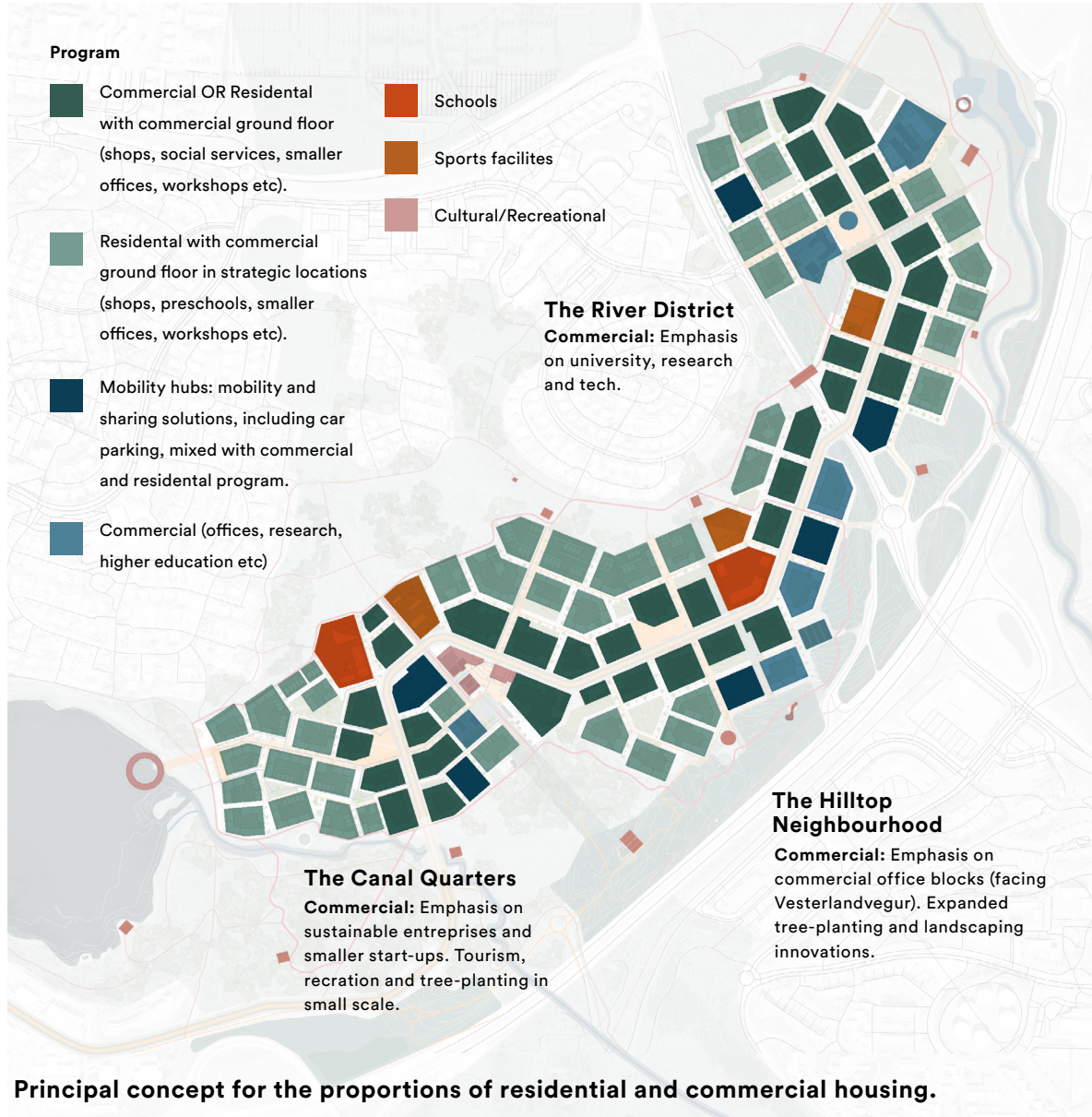
**Residential with High Value**  
The city's housing units are strategically positioned near water bodies and green

spaces to offer residents a connection to nature. Existing features on the site, such as the universities and the sheep pens, will be retained. The Director's house will be integrated into the new structures, and rows of trees will serve as structuring elements.

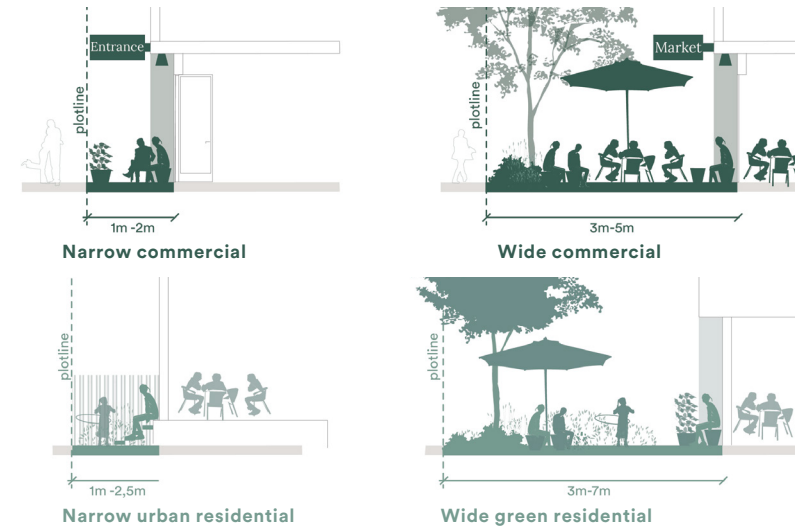
**Walkable City & Active Edge Zones**  
The urban design strategy

aims to create a compact and walkable city that provides a range of amenities and services within walking distance. Sustainable modes of transportation encourage social interaction and offer a high quality of life for all residents.

### 4.3 MIXED USES



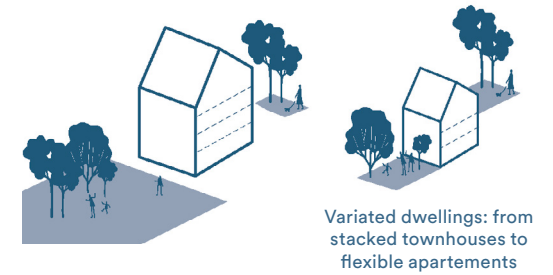
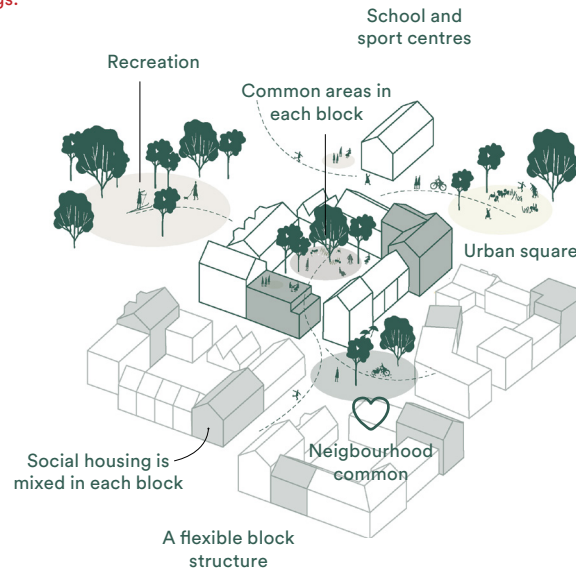
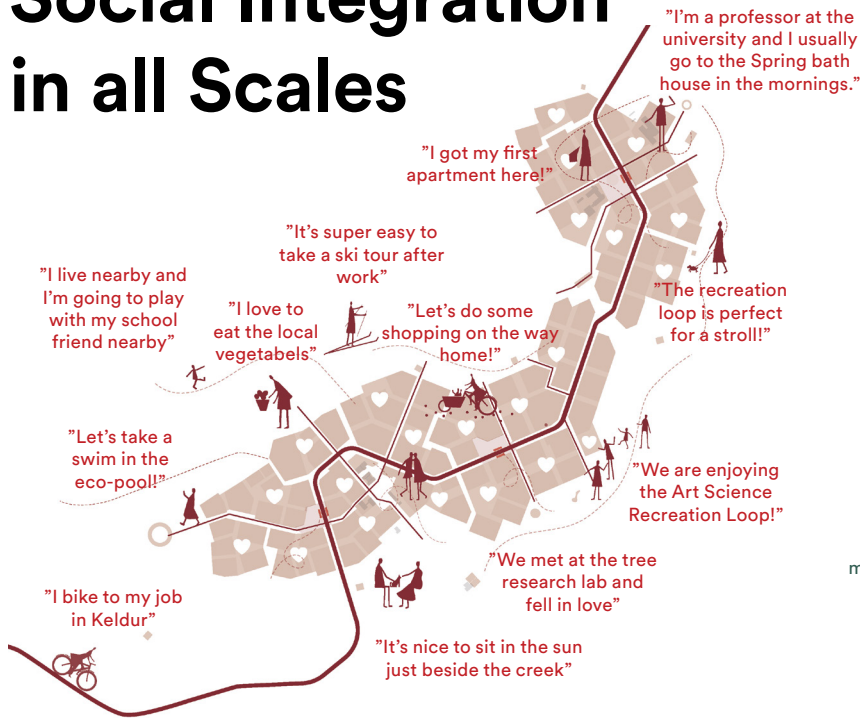
**The neighbourhood commons creates opportunities for a mixed community at the local level.**



**Well-designed edge zones blends commercial and residential programming, allowing mutual benefit.**



# Social Integration in all Scales



## All scales incorporated

### STRATEGY

- Incorporate all scales through a mix of a wide range of activities, public spaces, building types and tenure forms to enable social mixing.
- Flexible housing and block structure to ensure the possibility to reside in the area and make the proposal robust to demographic change.
- Targets points facilitated by the public realm are strategic located to enhance social integration.
- The integrated composition of residential and commercial housing ensures a living city 24/7.

### The District Level

The proposal is well-connected to adjacent neighbourhoods. The wide range of activities and commerce offered will be of benefit to the already existing areas. Schools and sports facilities are crucial as a foundation for social integration and wisely located.

### The Neighbourhood

The neighbourhood offers a

wide range of social spaces within a short distance to enhance the feeling of ownership.

### The Home

The proposal offers diverse and flexible housing contributing to social mixing and the opportunity to continue residing within the neighbourhood.

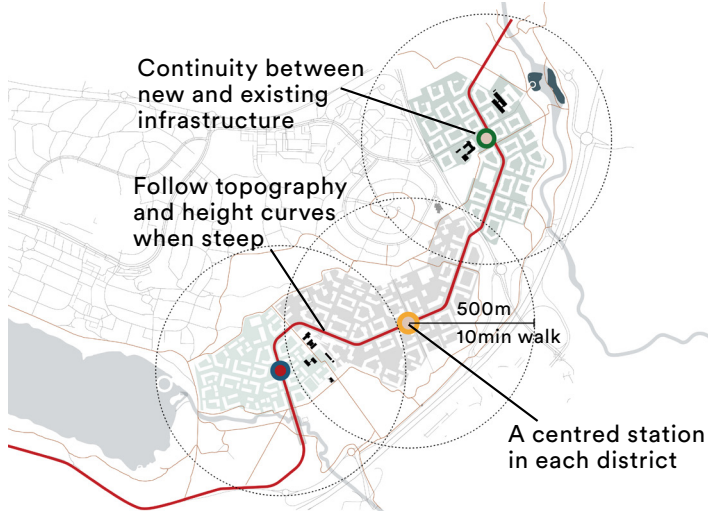
Social housing, as well as

housing for seniors and students, are suggested to be evenly blended into other residential blocks for social integration.



"After we separated it was great to be able to rent out a room and get the chance to keep the apartment"

# Public Transport as the City Life Generator



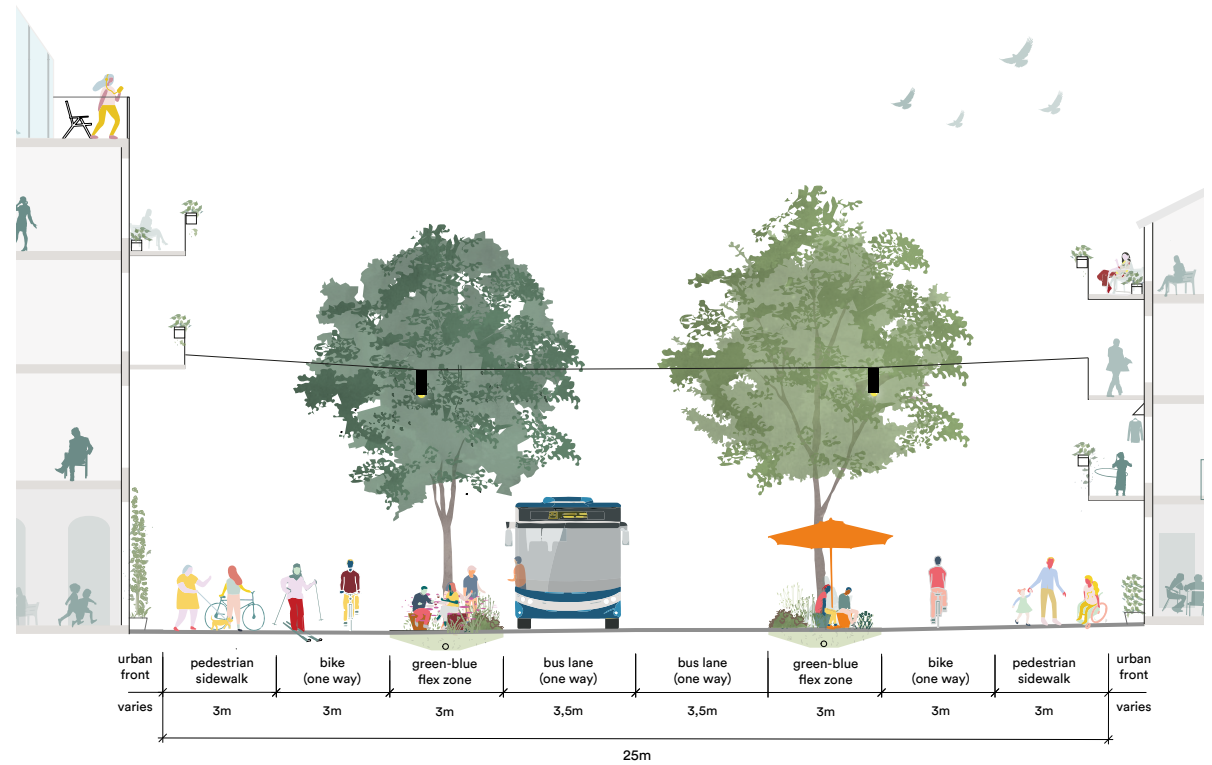
Overview: location of stations.

## STRATEGY

- Close, fast and convenient: Prioritizing public transportation/interchange hubs.
- The station at the centre of each district.
- Accessible bus stops: maximum 500 m or a 10-minute walk.

## Close, Fast and Convenient

The route of the main street for the Borgarlína bus is the spine of the new structure. It considers nature and topography by avoiding the steepest locations and enhancing water features such as canals and dikes. It is also based on and relates to existing buildings and green-blue infrastructure. Together, these elements create a characteristic fast lane for



Street cross-section of Borgarlína street.

the bus. The main concept is based on the idea of a car-free route through the city that prioritizes ease of cycling, walking and bus travel.

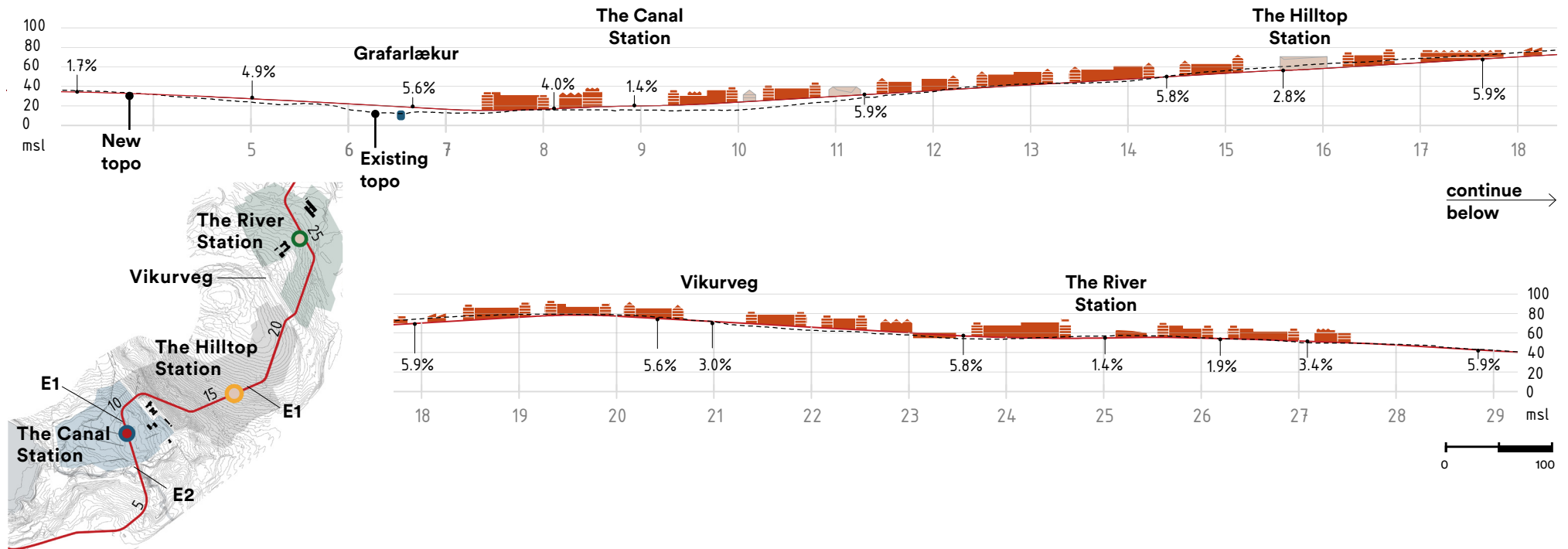
## Borgarlína Stations

Close, easy and safe to reach, are the key components for a successful location. An easy flow between home and station by bike or walk helps people to find it comfortable to take the bus.

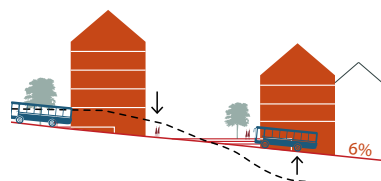
## Accessible for Everyone

The stations are located at intervals of 400-700 meters, which makes them easily accessible for pedestrians and cyclists. With a maximum of 500 m or a 10-minute walk to the closest bus stop. The bus stops are integrated with adjacent areas, making it easy for residents in nearby districts to use public transportation.

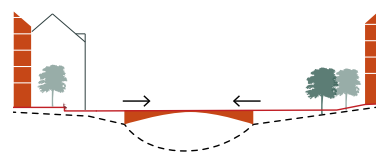
## 4.5 BORGARLÍNA AND BUS ROUTES



**Predominant solution:** Adapt infrastructure to the existing terrain and allow the buildings to unify the structure. (Cross-section of Borgarlína bus route.)



**Mitigating topography, exception 1 (E1):** Cut and fill where necessary, but never more than maximum one floor 4-5m.



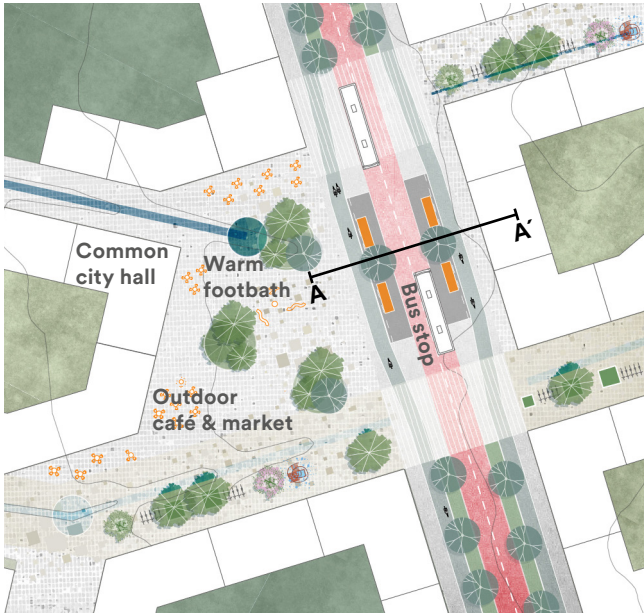
**Mitigating topography, exception 2 (E2):** When difference exceeds one floor 4-5m, road adapts with bridge.

### The Centre of Attention

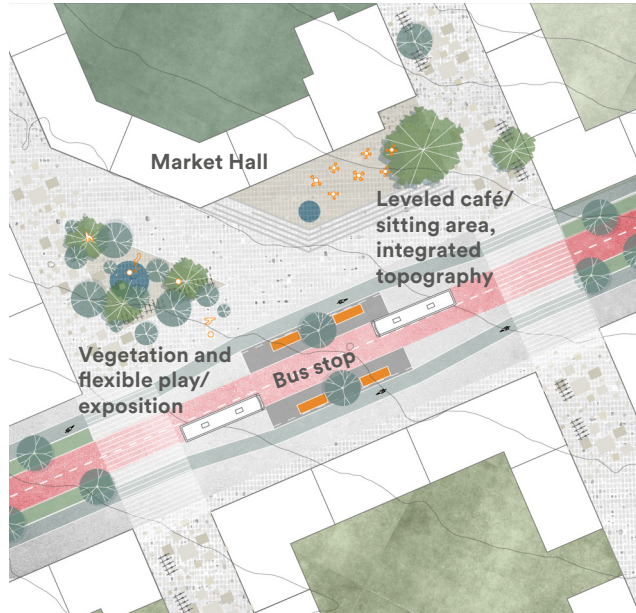
The stations are situated at the heart of each district: The Canal Quarter, The Hill Neighbourhood, and The River District. Each site incorporates existing structures and landmarks that define their respective areas, while also enhancing accessibility to all

the region's attributes. The depicted section represents a standard profile and adjusts with gentler angles at bus stops or docking locations as needed.

#### 4.5 BORGARLÍNA AND BUS ROUTES



The Canal Square - water as the signature.



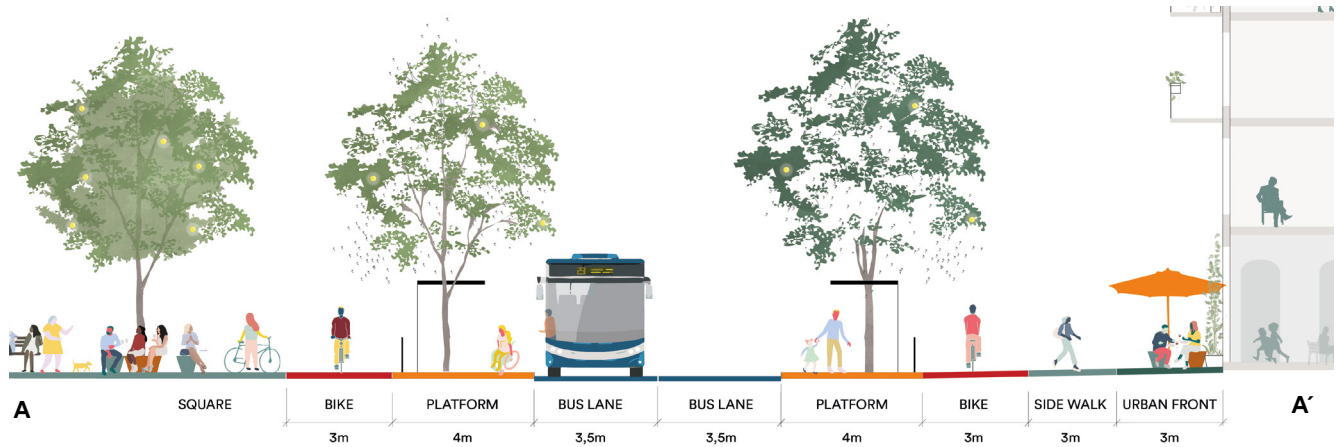
The Hilltop Square - topography as signature.



The River Square - science as signature.

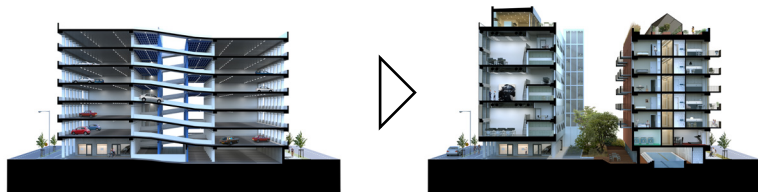
#### STRATEGY STATION LOCATION

- Easily accessible for adjacent residential areas.
- Adapted to convenient topography.
- Close to existing and new landmarks/destinations.



Cross-section of the Borgarlína station (A-A).

# Future-proof Mobility Solutions



Parking facilities.

Converted to offices and/or housing when the car is not needed anymore.

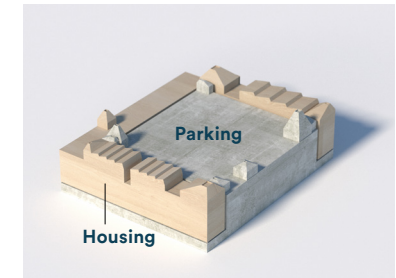
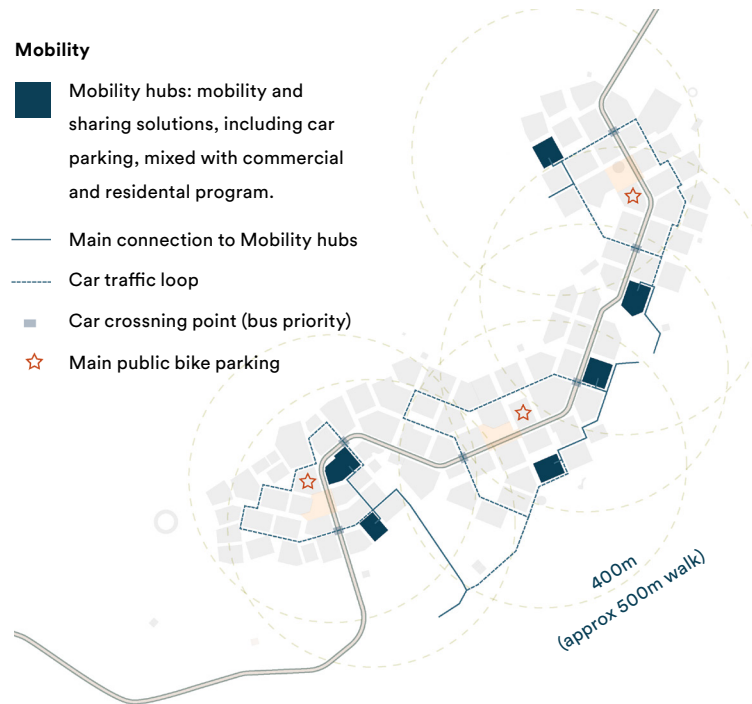
## Attractive and convertible Mobility hubs.

### STRATEGY

- A liveable city where public transport and sustainable mobility is prioritized.
- All services within the district is easily reached by bike. Bike parking is generous.
- Three ways for car parking are suggested:
  - 1) Parking along the streets (temporally used by visitors etc).
  - 2) Common neighbourhood solutions (only shared cars, residents).
  - 3) Mobility hubs (shared and private cars, temporary visitors, residents and workers).

### Mobility

- Mobility hubs: mobility and sharing solutions, including car parking, mixed with commercial and residential program.
- Main connection to Mobility hubs
- - - Car traffic loop
- Car crossing point (bus priority)
- ☆ Main public bike parking



## Attractive and well-integrated Mobility hubs.

**Number of parking spaces**  
approx. 3000-3500 P\*  
\*Depending of the range of jointly utilize

**Percentage of parking spaces in mobility hubs:** approx. 80-90%

**Number of bike parking spaces**  
approx. 12 000 - 15 000 P  
approx. 3 bikes per appartement

See page 6 for more parking data such as parking ratio.

### Sustainable Mobility

Taking the bus, cycling, or walking should be the first choice of transport. To promote sustainable mobility, bus stations and bike paths are centrally located.

### Car Parking Solutions

At the extend that cars are used sharing solution is to be encouraged, enabled through Mobility hubs and Neighbourhood Commons.

The mobility hubs are located in direct connection to the main entrances to the district to avoid unnecessary traffic through the district. They are also located close the station squares to encourage travellers in nearby neighbourhoods to choose the bus.

### Mobility Hubs

Mobility hubs focus on the sharing economy, mobility on

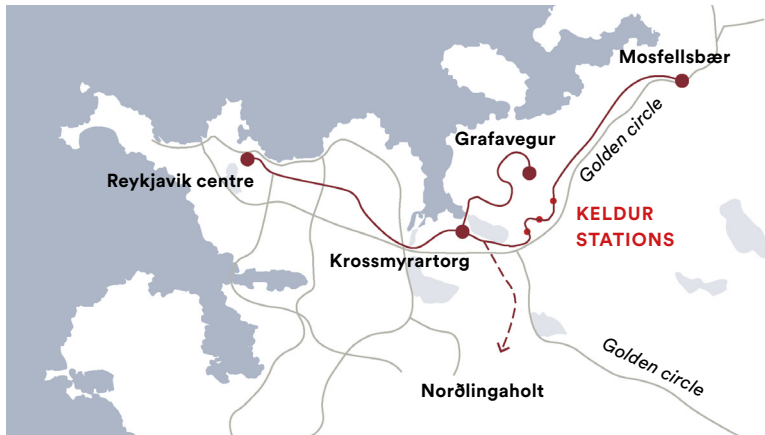
demand, charging facilities and various types of vehicles.

"It's always easy to find bike parking close to the bus stop!"

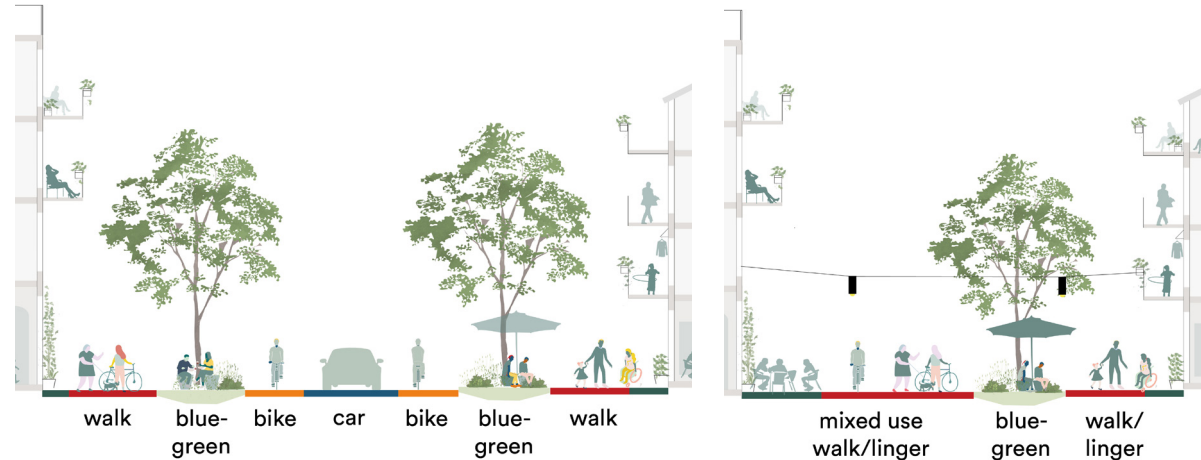


# Well-connected, Walkable & Inviting

About 13 000 - 15 000 trips per day with public transport



Large scale connections.



— Main Connection (18-20m )

- - - Pedestrian Street (10-13m )

## STRATEGY

- The proposal prioritizes cycling and walking within the area.
- Connected road network with the surroundings of Reykjavik.
- Strategy for topography and cycling + walking routes to the stations
- Average 2-6% slope on pedestrian and cycling paths to the bus station.
- Efficient and attractive public transport through easy access.
- Strategy for slope and stations, see chapter 4.5.

## Well-connected

In the new district, cycling and public transportation take precedence. The transportation network seamlessly connects with surrounding neighbourhoods and Reykjavik. The main road structure is adapted to the topography, and the average gradient of pedestrian and cycling paths is 2-6%. Within the area, there are roads with steeper gradients, but there is

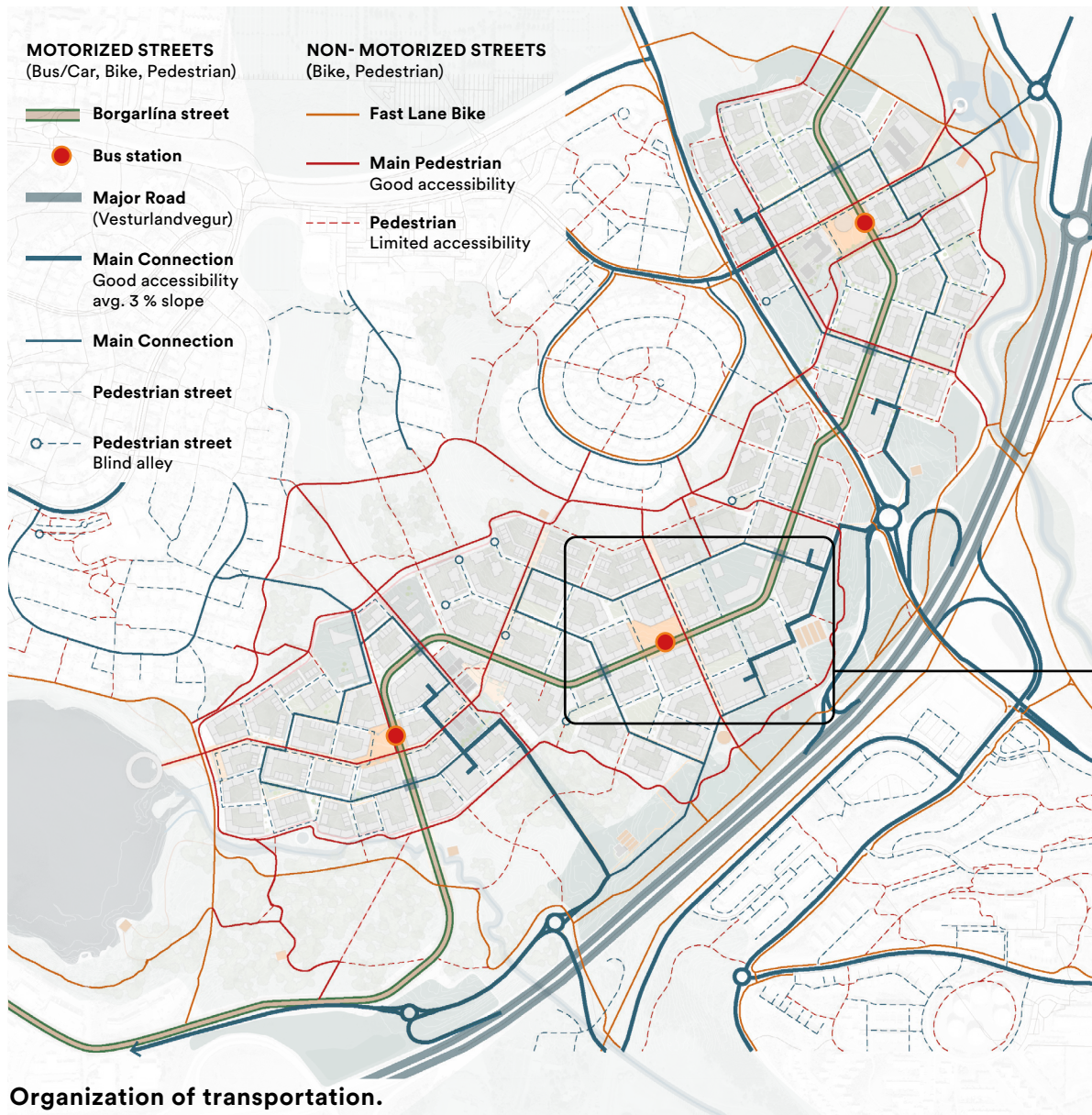
always at least one accessible route to the bus stop, school, and residences.

## Attractive Public Transport

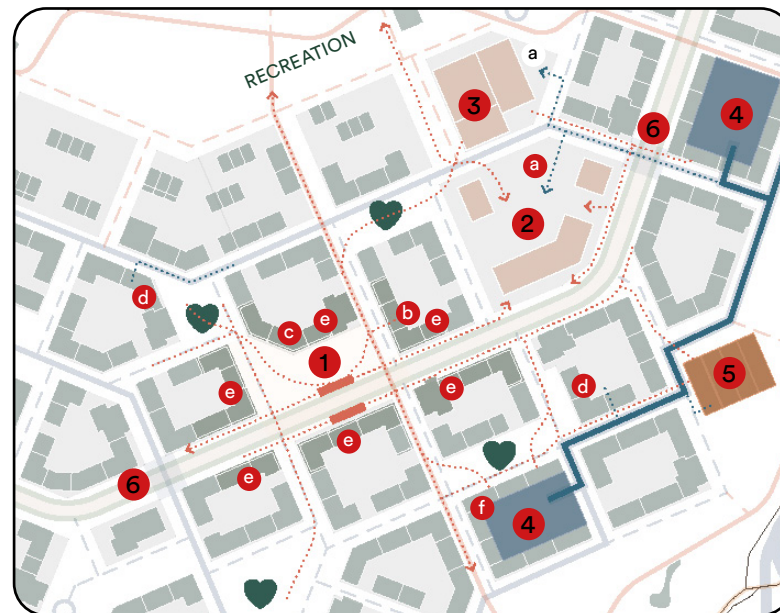
This design ensures that bus stations are accessible to all travellers to and from the area, making bus travel an attractive option. Given the proximity to public transportation and good bike paths, it is reasonable to assume that one third of the

trips will be made by walking/cycling, one third by bus, and one third by car. In total this means about 13 000 - 15 000 trips per day with public transport.

## 4.7 STREETS, PATHS AND CONNECTIONS



Example of how elements interact: bus station, commerce, school and mobility hubs.



**Main target points**

- 1. Bus central square
- 2. School
- 3. Sports facility
- 4. Mobility hub (parking, see page 13)
- 5. Display lab
- 6. Car crossing point
- ♥ Neighbourhood common

**Exampel of programming**

- a. Delivery and parking
- b. Main bike parking
- c. Health centre
- d. Preschool
- e. Shops, cafés and restaurants
- f. Large grocery store

"Keldur offers great and challenging running opportunities!"



"...as well as accesible trails, mainstreets and squares with reasonable slopes and places to rest."



# Diverse & Engaging Urban Spaces



Station Squares - large scale



Neighbourhood Commons - medium scale



Smaller Urban Nodes - small scale

## STRATEGY

- Highlight local heritage via storytelling and preserved structures and nature.
- Create public space hierarchy by including large, medium and small areas.
- Engage local artists in designing and storytelling for public spaces.
- Arrange public competitions for area installations, landmarks and public spaces.

## Station Squares

The urban structure is enriched with a range of public spaces that varies in scales and program. The station squares are vivid and bigger in scale and holds a big flow of people. This is a great place for events and exhibition that interacts with its visitors. They are welcoming and have a strong identity that differs

from each others through design and storytelling, see examples at page 12.

## Neighbourhood Commons

At a medium scale, we have the Neighbourhood Commons, primarily oriented towards Keldur residents. They offer green spaces and serve as a hub for community interaction, featuring shared

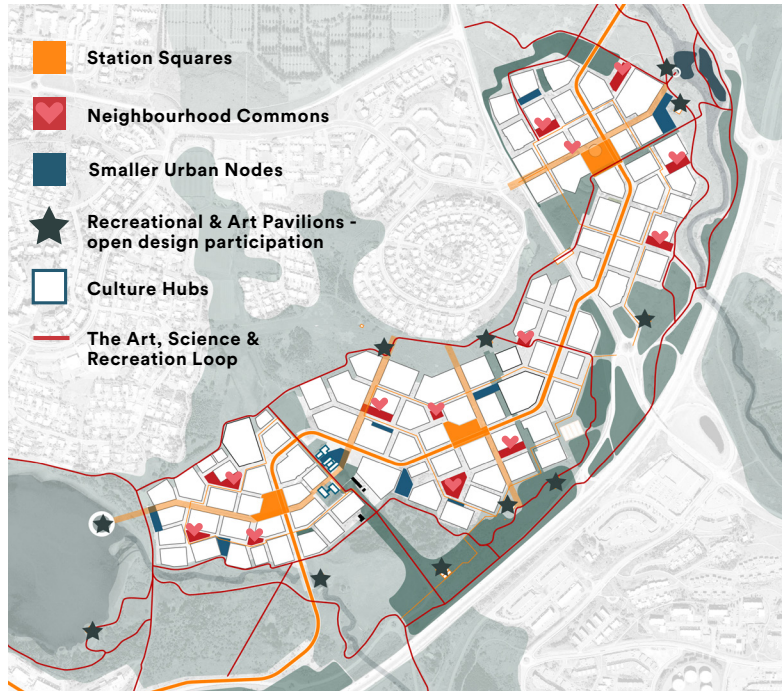
functions like food gardens, indoor bike workshops, etc.

## Smaller Urban Nodes

These nodes opens up for flexible playful inclusive activities. Here, art can flourish and the shop owners can put up the tables outside.



## 4.8 PUBLIC SPACES AND OPEN AREAS



Overview of public space network.

### Art, Science and Recreation

The Art, Science, and Recreation Loop serves as the entryway to nature and art. Art pavilions and science centres act as natural nodes along this loop. To foster a sense of ownership, involving the local community in public art and storytelling through workshops and competitions is important, encompassing pavilions and other public

spaces like squares. Open calls can be extended to artists and others for contributions to nodes like The Eco-Pool or The Science Centre.

### Culture Hubs

To enhance the site's storytelling, the existing key elements like The Culture Street are emphasized by introducing public activities and opening them to public.



★ Recreational Pavilion such as the Eco-Pool



□ Example of Culture Hubs, The Keldur Culture Street and The Brewery



— Example of installation within the Art, Science & Recreation Loop



— Example of Art Pavilions within the Art, Science & Recreation Loop

# Crafting Keldur



**98,731 likes**  
**Kristin81** Proud to live in a carbon neutral neighbourhood with support of a physical structure of best practice...(read more)  
View all 99 comments  
9 hours ago

**A great place for watching the sunset by the water!**



**13,238 likes**  
**Gunnar7** Afternoon walk to Kálfarnói , then heading to the Landscape Laboratory #Landscape lab #keldurrecreation  
View all 34 comments  
9 hours ago

**A walk in the extended Landscape Laboratory!**



**43,789 likes**  
**Jón\_543** A nice swim today at Keldur Eco-pool. Fantastic how the water can be used. #waterfront #keldurrecreation  
View all 50 comments  
9 hours ago

**The Eco-pool is used all year in any weather!**



**1,504 likes**  
**Anna986** Visiting the best friends today they help Keldur maintain the grasslands & biodiversity #horses #keldurfriends  
View all 50 comments  
9 hours ago

**A friendly visit among Keldur's animal friends!**



**96,438 likes**  
**Guðrún\_1** Today's beer tasting in the cultural stables. A total success! #mybusinessblooming #keldurculture  
View all 62 comments  
9 hours ago

**Enjoy a beer at the The Brewery!**

## STRATEGY

- The Power of 10+ is applied as a strong placemaking strategy.
- From nature with love, keep & strengthen blue green corridors.
- Create collaborations with existing stakeholders at site.
- Keldur - a carbon-neutral development. A role-model for Iceland.
- Visualize the attractivity and closeness to science, recreation and art.

## Climate neutral, sunny and fun!

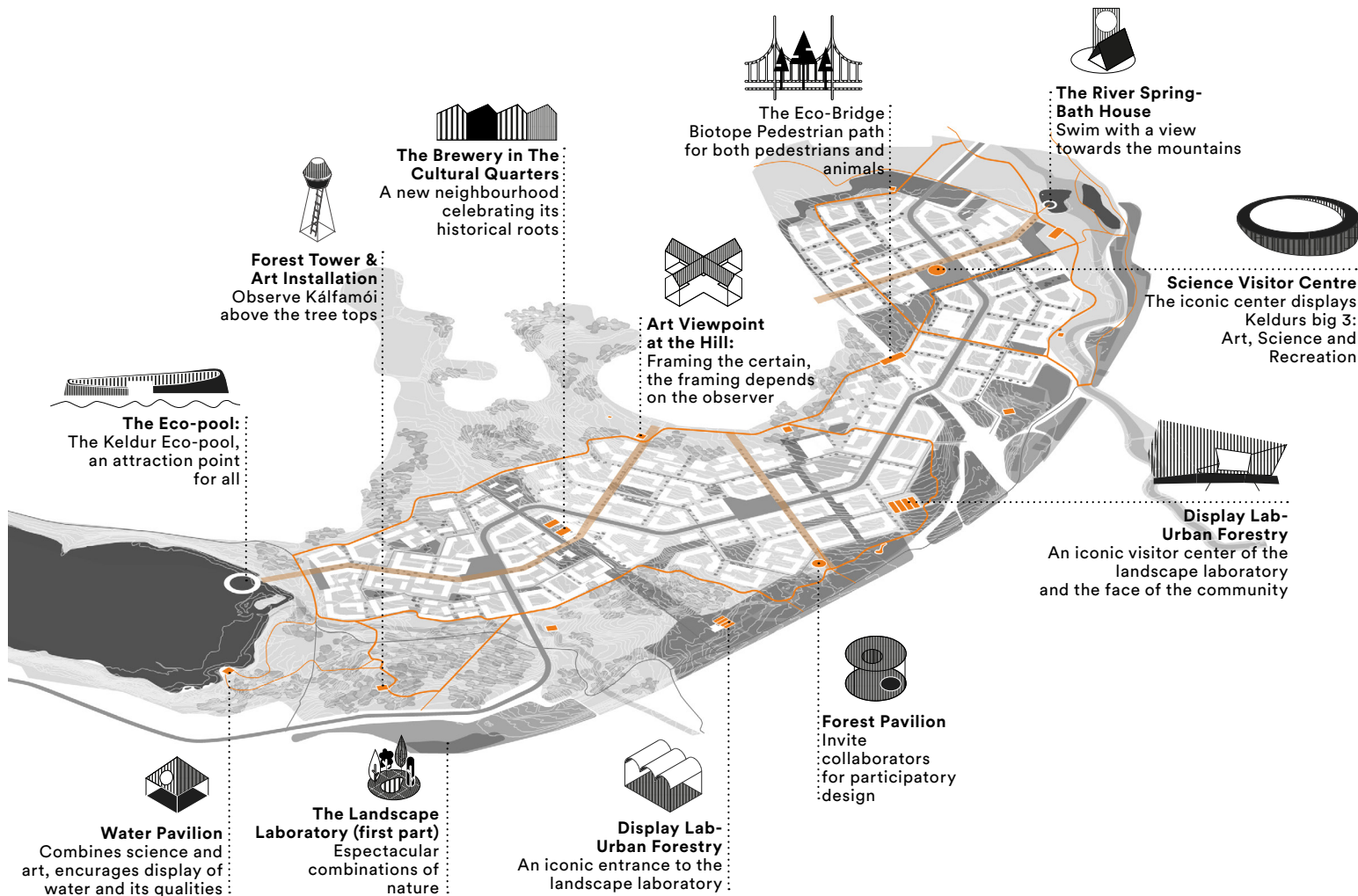
Rooted in the landscape and the traces of human activity such as cultivation, sheep grazing, etc. the nature values are integrated into the new proposal, along with the landscape's topography, the path of water, and the direction of the wind. In the new district, everything is within walking distance:

transportation, commercial functions, schools, services, energy production like solar panels, battery storage, local food production, and a greenhouse in each neighborhood unit along with Art, Science and Recreation within the area. The new housing displays a playful diversity at a human scale in 3-5 stories, adapted to the topography and nature.

## The Power of 10+

The strategy of placemaking is to create a range of reasons for people to visit a place. Applying the Power of 10+ in suggests that there are more than 10 different activities in various scales to create urban life. It shows that big things can be accomplished by starting at the smallest scale. This is also reflected at site, see page 19.

## 4.9 SENSE OF PLACE AND PLACE BRANDING



**Map of Attractions**  
Where the Power of 10+ is applied.

### Branding text:

**Crafting Keldur: Where Art, Science and Recreation unite in an urban and carbon neutral part of Iceland**

Step into a new era of living in Reykjavik, where sustainability takes the spotlight, crafting neighbourhoods that put people first. The new Keldur, a thriving district where the worlds of Art, science, recreation and sustainability intertwine.

Immerse yourself in nature-inspired architecture and landscapes that blend with the environment. Enjoy a car-free oasis where cycling and walking lead the way to a sustainable mobility and health. Embrace a lifestyle that's good for you and the planet.

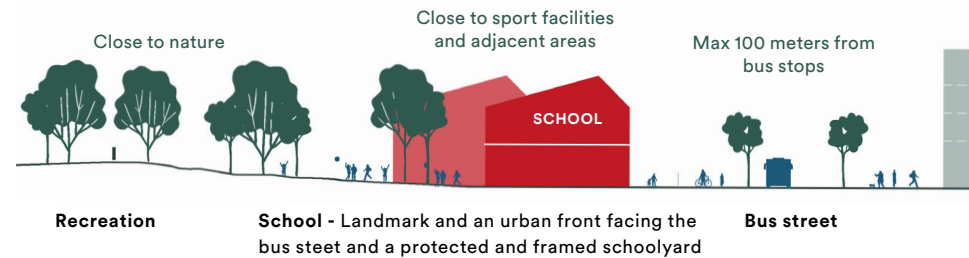
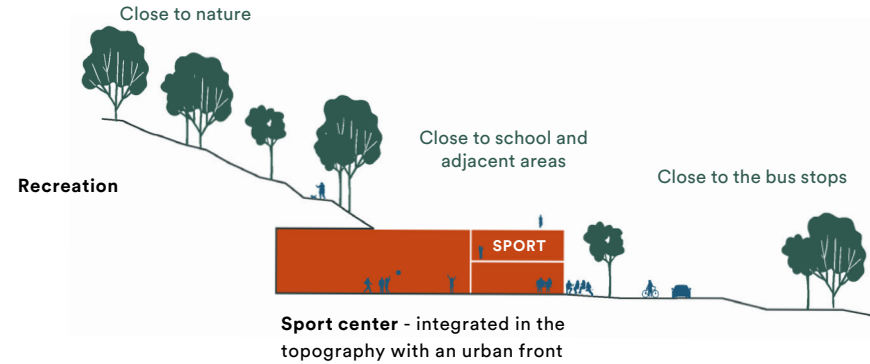
The new Keldur showcases a sustainable urban Development on a Human Scale and celebrates inclusivity, and a brighter, greener tomorrow.

Welcome to Keldur – Where the future is now!

# Synergies & Joint Utilizations

"I live in the area close to Keldur and could walk by myself to school as there are no car traffic to pass."

"We use the school's facilities in the weekends for our knitting club!"



## Principles for School and Sport facilities location.

### STRATEGY

- One school for each phase: aligned with the phase development and capable of growing gradually.
- Each school is centrally located near the bus stop, easily accessible for everyone.
- Proximity to public transportation and cycling. Within 100 meters from the bus stop.
- Landmarks within the district.
- Connecting the city. Designed to integrate with the surrounding neighbourhoods.
- Intended to house a multitude of functions and to be utilized around the clock.

### Close to Nature & Transportation

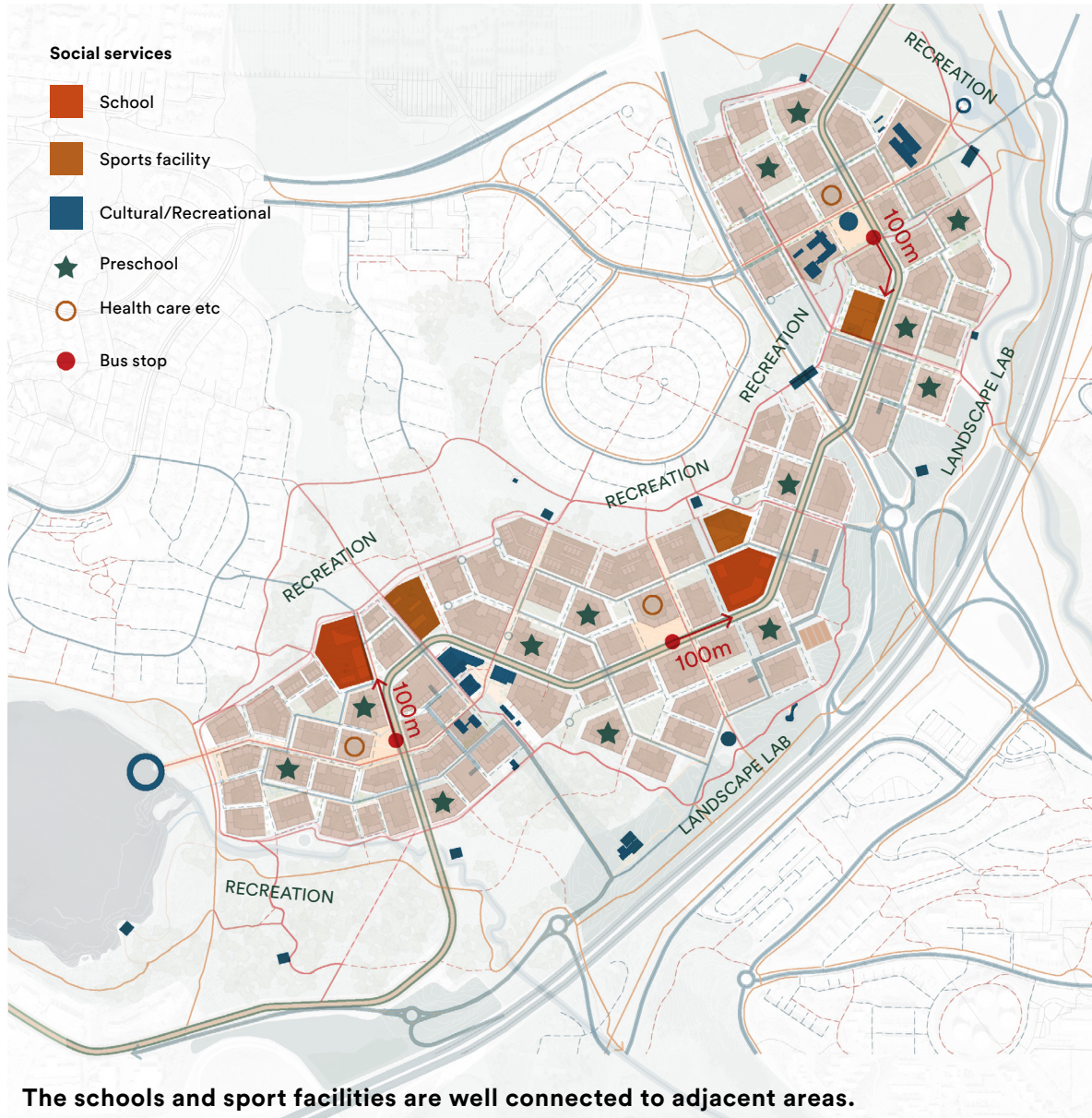
To enhance the liveability and sustainability of the community, walkability is prioritized by placing schools and sports facilities within 100 meters from the bus stops and squares. Health and cultural services are located close to public transport as well as nature and developed areas. Preschools are located in adjacent areas close to the bus stops, nature,

playgrounds, and pocket parks. The location of schools and service ensure accessibility and improve the quality of life by making it possible for everyone to healthy mobility such as public transport, bike or walk. Furthermore, the location creates good conditions for joint utilization and synergies for the adjacent areas and Reykjavik. The schools are located in way that the lots are able to expand if needed.

### Generator for Integration

Schools and other social services have the potential to create integration with adjacent areas. For example, residents could live in already developed areas and go to school in Keldur, where the placement ensures a safe way to school for children.

#### 4.10 LOCATION OF SCHOOLS AND OTHER SOCIAL SERVICES



**The schools integrates existing areas to the new district.**



**Attractive school facilities enables shared and diversified use for associations, other education and temporary events during weekends and evenings.**

# Site Specific Urban Adaption to the Landscape



Strategic interface within the green corridor between new and existing development.

**STRATEGY**

Work Site specific and derive from the existing landscape when adding new development.

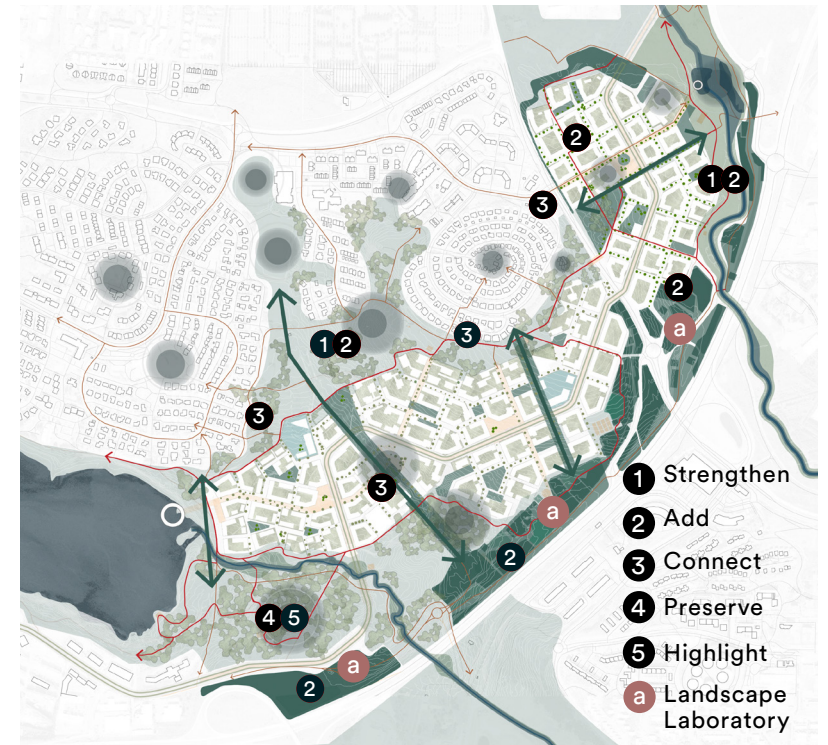
- Preserve and emphasize existing valuable biotopes.
- Strengthen the green and enrich biodiversity by initiation of a Landscape Laboratory.
- Involve the community

and universities in green development efforts.

- Keep grazing animals, like sheep and horses, to maintain grasslands, open and enclosed areas.
- Use water as resource and preserve existing low points within streets and public space for water ways and infiltration.

### Preserve, Strengthen and Emphasize

The green corridor and recreational space that lies between the existing neighbourhood and Keldur's future urban development is connected and strengthened with recreational nodes, pathways, community gardens and greenery. To strengthen all the green is vital due to the anticipated increase of users. This strategy unifies residents from both neighbourhoods.



Strategy for existing keyspots, see also chapter 4.9.

Important features such as Kálfamói is highlighted by storytelling and art, meadows are preserved with sheep grazing and food production, and large tree zones are preserved outside and inside the urban structure.

### Derive from the Existing Landscape

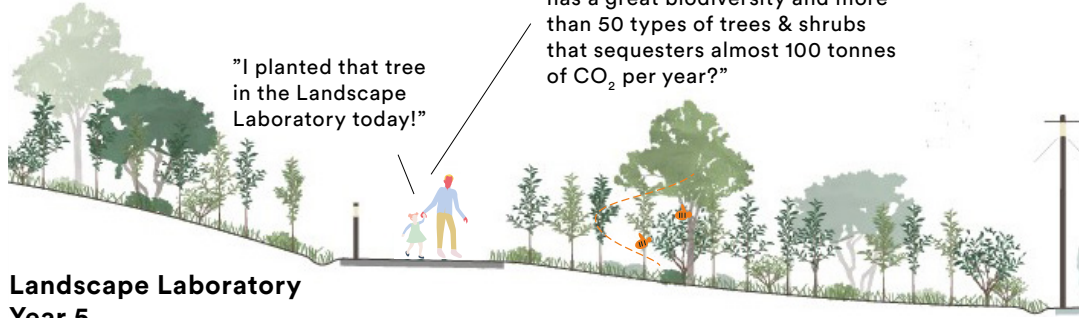
Keldur's existing vegetation creates a rare paradise within Reykjavik, important to be preserved but also

strengthened by adding recreational and natural implementations such as the Landscape laboratory (see map). A forest where different tree combinations can be tested and illustrated how urban areas can achieve aesthetic, recreational, and ecological benefits even under climate stress, aiding carbon emission reduction.

#### 4.11 NATURAL AND URBAN CONTEXT

"Dad, did you know that The Landscape Laboratory of Keldur has a great biodiversity and more than 50 types of trees & shrubs that sequesters almost 100 tonnes of CO<sub>2</sub> per year?"

"I planted that tree in the Landscape Laboratory today!"



**Landscape Laboratory  
Year 5**

I remember planting this 50 years ago!



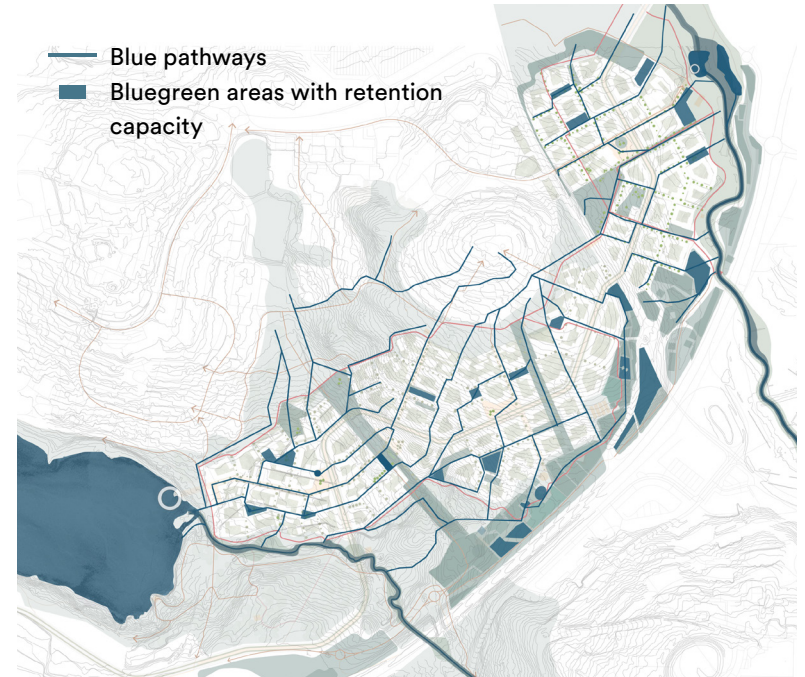
**Landscape Laboratory  
Year 50**

Open storm waters & greenery for an enriched streetscape



**Strategy for blue infrastructure**

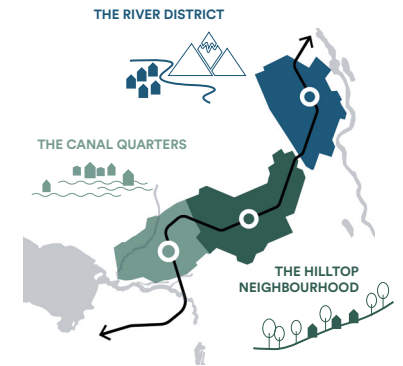
Existing water ways are preserved and green spaces/streets are optimised for good infiltration



**Blue infrastructure paths and green areas for water retention.**

#### Water as a Resource

The blue-green structures have shaped the three distinct neighbourhoods. For instance, existing canals and low points on the Canal Quarter's site have influenced the new road layout. Similarly, in the Hilltop Neighbourhood, the significance of green streets in managing water flow offers another notable feature.



# An Attractive Destination from Day 1

"The Eco-pool is the reason why we wanted to move here!"



The Culture Street and the Brewery as part of the first phase.

## STRATEGY

- A phasing strategy that supports the Borgarlína development: each phase is developed starting close to the bus station and square.
- A landmark or anchor investment that establishes the area's image in each phase.
- Flexible block structure that allows adaptation to different demographics and commercial demand
- A strategic role for the first phase, with future qualities and amenities to make the new urban quarter attractive from the very beginning.

## A Leading Role-model in Sustainable Urban Development!

Accessible to Everyone from Day One: We're Opening the Doors for All Reykjavik Residents! Step off the bus and embark on a jog along the loop, uncovering the possibilities of this space from day one. The Art, Science and Recreation Loop becomes the gateway to nature and art. The inaugural phase of Borgarlína

is underway (with potential for expansion in all phases). The first bus stop and square are taking shape – a meeting point for us all! A vibrant food market, tree planting, and local artists are invited to engage in on-site art projects.

From the start, we're cultivating spaces for all: raised beds in courtyards or front yards, shared neighbourhood plots for urban

farming and larger outer areas dedicated to more extensive food production.

## Landmark Investments in Phase One

The Art, Science and Recreation Loop, the square, school, and sports facilities take centre stage. The Eco-pool stands as the primary recreational destination, with public engagement at its core. As our journey unfolds, a



## 4.12 PHASING



Phase 1 - The Canal Quarters

Phase 2 - The Hilltop Neighbourhood

Phase 3 - The River District

Landscape Laboratory is initiated, and communities unite to plant trees across the entire expanse. Local cultivation spaces sprout, offering sustenance for existing and new residents alike. Join us in embracing a future where accessibility, sustainability and unity are at the heart of it all.

### Flexible Development

The flexible block structure allows a project development over time considering commercial and demographic situation. The area's attractiveness is already in place in phase 1, regardless of further development.



Attractions in the first phase: playgrounds, allotments and The Art, Science and Recreation Loop.

# Structural Plan



The River District

The Hilltop Neighbourhood

The Canal Quarters

### Legend

- 1 The Art, Science and Recreation Loop
- 2 The Landscape Laboratory and Display Labs
- 3 Schools
- 4 The Canal Square
- 5 The Hilltop Square
- 6 The River Square
- 7 Eco Bridge for people and animals
- 8 Art Pavilions (see the orange forms along the Loop)
- 9 The Science Laboratory
- 10 The Iconic Eco-Pool and Bath house
- 11 The Culture Street



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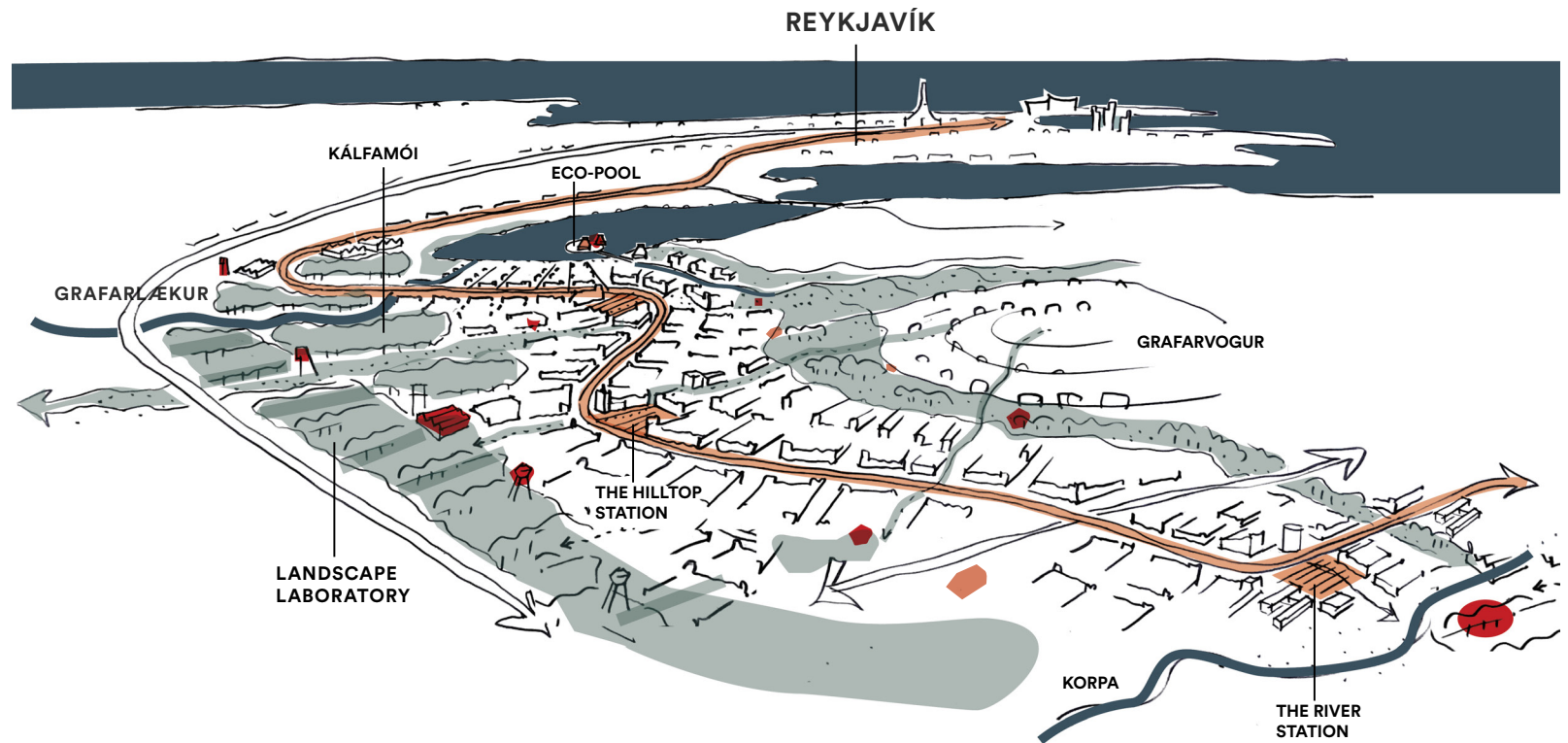
# Welcome to Keldur!

## A New Part of Reykjavik

The Borgarlína bus street is the backbone of the proposal and the proximity to the city centre as well as other target points are crucial to the overall integration. The concept of a robust block structure is flexible and resilience to uncertain evolution, such as demographic change and the relationship between work and home. The proposal offers an efficient land use where green urban qualities are very well integrated.

On a district level integration is enabled through local food production and testbed opportunities. Adjacent areas benefits from the districts vibrant city life as well as attractive schools, social services and sport facilities.

The three Borgarlína stations in Keldur starts the new era of Reykjavik development where the capital region in total is better connected with public transport as the first choice!



**Conceptual sketch showing the overall integration of the area, to the city centre as well as adjacent areas.**

## 4.14 VISUALIZATIONS



### **The Canal Quarters**

The proposal includes a dense, human-scale urban structure with proximity to fantastic recreation, art and science. Signature Buildings like the Eco-Pool, The Art Pavilions and Schools stand out as landmarks and link Keldur with existing areas.

#### 4.14 VISUALIZATIONS

##### **Come Ice-skating at the River District Square!**

The bus station are the main target points of the proposal where the public transport is prioritized. The squares are framed with dynamic ground floors such as commerce and social services. The public space itself is programmed with different activities through all seasons. There are great places to just sit and enjoy the sun as well as play. This particular place is activated with the Science Laboratory Centre - a public visitor centre that is part of the University.



#### 4.14 VISUALIZATIONS

##### Local Artists Hanging out at The Brewey and the Cultural Street

The characteristic existing buildings are transformed into a great meeting spot for artists, residents and visitors. This small-scale urban node becomes an attractive place with greenery and water features for temporary installations, festivals and beer testing.

The topography offer fantastic urban qualities with a public library situated in the steepest part of the hill. For better accessibility between the Canal Quarters and The Hilltop Neighbourhood an interior elevator is proposed as an addition to exterior ramps.



#### 4.14 VISUALIZATIONS

##### **An Overview of the Keldur Site and its Three Unique Characteristics**

Within Keldur, the topography is striking and has shaped the layout, resulting in three distinct neighbourhoods, each with its own unique character. The architecture derives insight from the special nature, landscape and existing structures, including the university, to create a distinctive and appealing ambiance.

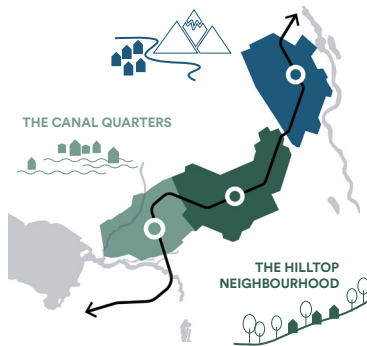


# KRAFTING KELDUR

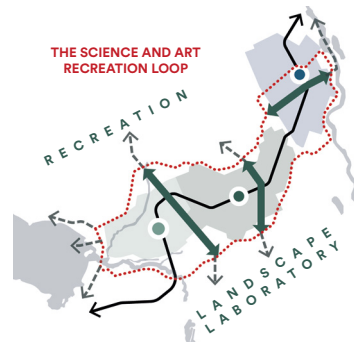
## Where Art, Science & Recreation Unite



The Brewery and the Culture Street: Existing buildings integrated and transformed into the new urban structure.



Dense clusters along Borgarlína - the connecting spine



Close attractive green-blue structure



Sustainable everyday life with zero CO<sub>2</sub> footprint

### CONCEPT

- Keldur - a carbon-neutral development. A role-model development for Iceland.
- From nature with love, keep & strengthen blue green corridors,
- A dense, urban, climate neutral structure with premium qualities. In total 11 600 new inhabitants in scenario 1.
- Distinct clusters of buildings that enhance the existing landscape as well as the cultural and natural heritage.
- Sustainable Daily Life through Borgarlína-s public transportation and the proximity to services and recreation.

### HOW

- The proposal prioritizes cycling and walking within the area reducing private car use.
- Connected road network with the surroundings and of Reykjavik.
- A phasing strategy that supports the Borgarlína development: each phase is developed starting close to the bus station.
- A landmark or anchor investment that establishes the area's image in each phase.
- Flexible block structure that allows adaptation to different demographics and commercial demand
- A strategic role for the first phase, with future qualities and amenities to make the new urban quarter attractive from the very beginning.
- The Power of 10+ is applied as a strong placemaking strategy to diversify activities.



4.15 THREE OVERVIEW PAGES (SUMMARY)

The Structural Plan of the proposed development of Keldur.



The River District

The Hilltop Neighbourhood

The Canal Quarters

Legend

- 1 The Art, Science and Recreation Loop
- 2 The Landscape Laboratory and Display Labs
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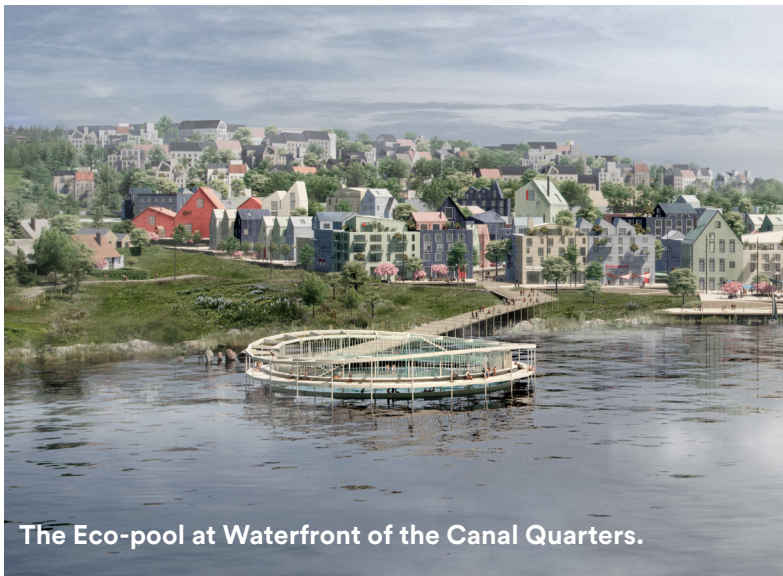


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4.15 THREE OVERVIEW PAGES (SUMMARY)



A dense urban structure with premium urban qualities, 3-5 storeys high, where the Borgarlina street is the backbone of the proposal.



The Eco-pool at Waterfront of the Canal Quarters.



Ice-skating at River Square before taking the bus to Reyjkavik.



"Let's go to The Eco-pool after work!"

"Yes! And then we could check out the new art at The Brewery!"



One Neighbourhood Common per each 3-6 blocks.