

Pick up the Thread

**Márton Bella, Krisztina Ferencz,
Levente Homoki, Bíborka Korbodi,
Gergő Pintér**

Hungarian University of Agriculture and Life Sciences - MATE

The Moura Who Wove by Moonlight

In an old village with Roman stones on the hillside, a crumbling tower stands. People avoid it at night, for they say a Moura appears there during the full moon. One summer night, a young shepherd wanders by. As the moon rises, he hears a delicate tapping— not footsteps, but the rhythmic clatter of a loom.

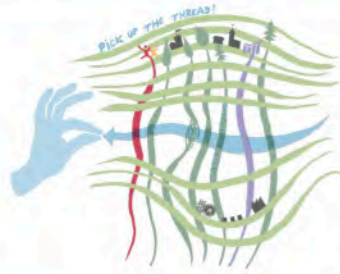
He peers inside. A woman sits at a loom, dressed in white, her long black hair reaching the ground. The thread she weaves shines like moonlight, forming patterns of springs, roads, stars, and ancient signs.

She notices the boy and speaks calmly: “I have waited a long time. If I finish this weaving before dawn, I will be freed. But I cannot do it alone.” The boy asks how he can help. The Moura replies: “Pick up the thread, and ask nothing. Do not count the time. Do not speak my name.”

The boy was holding the thread all night, when a rooster crows and the first sunlight appears, the boy asks: “How much time is left?” At that moment, the thread snaps. The loom falls silent, the cloth vanishes, and the Moura slowly turns to stone with her loom. Only a small piece of fabric remains: the corner of a scarf with an unfinished pattern.

It's said that anyone who reweaves it will dream of paths they have never walked before. The Moura still waits in the tower for someone who can finish her work without questions.

HONORABLE MENTION



The diversity and richness of Guimarães extend beyond its historical significance, lying in the close intertwining of cultural heritage, community life, and the landscape, together forming a living, organic fabric. The textile industry has played a defining role in the city's development for centuries, serving not only as an economic driving force but also as an identity-shaping element that remains present in both the landscape and the built environment to this day. This legacy is legible in the patterns, colors, and formal language of the urban fabric.

Despite of the importance the city had for centuries, in the end of the twentieth century it began to lose it, because of the accelerating urbanisation tendencies, the citizens started moving, mainly to Porto. To reverse this process, we would like the historical legacy of the past to live on in a renewed form, reflecting today's way of thinking.

One of the settlement's most valuable natural assets is the Coura River, which in recent decades has repeatedly flooded the city as a result of intense rainfall, causing significant disruption to urban life and damage to the UNESCO World Heritage-listed historic city center. For us, addressing the challenge of flooding offers an opportunity to reinterpret green spaces, public realms, and the built environment, while shaping a more flexible and resilient urban infrastructure. The aim of the proposal is to ensure that flood management is not treated as an isolated technical intervention, but as an integral part of the urban and landscape structure, while also establishing a coherent landscape and urban network capable of responding to the challenges of climate change and strengthening local identity.

In the long term, the concept seeks to create a sustainable and adaptive system that not only preserves the cultural and natural values of Guimarães, but also establishes new relationships between people and landscape, forming a fabric in which the heritage of the past and the opportunities of the future are harmoniously intertwined.

LONG TERM VISION, UNDERSTANDING THE WHOLE

Guimarães is one of the oldest cities of Portugal, located fifty kilometers North-East from Porto, having a rich, thousand-year-old heritage. It's usually referred to as the "birthplace of Portugal".

By the Fourteenth-Fifteenth centuries, Guimarães had an important role as a religious and economic center regionally, it has also become a pilgrimage site. The structure of the historical city center and many of its sites remain from this era.

CHARACTERISTIC RIVER SEGMENTATION



The Coura River flows with varying intensity in different parts of the town. On Penha Mountain, the water flow is greater, especially after rainfall, allowing water to flow unimpeded into the town center, where it slows down, accumulates, and causes flooding. Later, the water can spread even further in the floodplain, where it can be used for agricultural activities.

THE GREEN BELT CONNECTED BY THE WATER



In order to develop the green ring, we also recommend greening the areas along the river, including the excavated river sections, which would connect the ring and the inner areas. In other words, we would develop proceeding from the inside outwards.

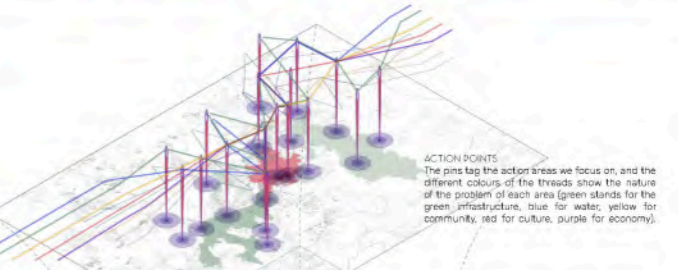
CHARACTERISTIC CROSS-SECTION OF THE CITY



Guimarães characteristic urban section clearly reveals the landscape character and the land-use patterns derived from it. The elevated terrain of Mount Penha functions as a major recreational area for residents, while the city's hilly zones support a diverse residential fabric shaped by a rich historical legacy to the west, the flat lowlands are predominantly devoted to agricultural production.

The Coura River mirrors this spatial land-use structure: however, functional floodplains are only available along the agricultural stretches. During extreme precipitation events, there are no effective measures to slow down or retain the rapidly accumulating runoff descending from the slopes of Mount Penha. As a result, large volumes of water concentrate within the urban area, leading to recurrent flooding.

For this reason, stormwater management and retention should be addressed already along the river's upper reaches on Mount Penha. Such an approach would not only enhance public safety and overall urban livability, but would also contribute to the city's economic resilience. By mitigating flood risks upstream, substantial long-term economic losses associated with flood damage can be avoided.



ACTION POINTS
The pins tag the action areas we focus on, and the different colours of the threads show the nature of the problem of each area (green stands for the green infrastructure, blue for water, yellow for community, red for culture, purple for economy).

RIVERS
The Coura river and other smaller watercourses intertwine the city, but in many places the twisted flows underneath the covering, especially at the city center and its buffer zone.

CULTURAL LIFE
Guimarães has a rich cultural life, thanks for the numerous traditions and the intense tourism, but it is heavily focused on the historical city center, and the importance of the city parts is very uneven. For instance, the Bairro C area, which is approximately only two-hundred meters away from the city center, and had a very important role in the life of the city both economically and culturally, has gotten to the "periphery" in those terms, even with the UNESCO heritage site leather tanning vats (by those the Coura zone got its name).

NATURAL FORESTS
Guimarães has quite a few small spots of natural forests inside the administrative borders, nearby the outskirts of the city, damaged by fragmentation, and overall the green infrastructure of the city is very fragmented, with only a few exceptions, like the greenery of the Penha mountain.

CURRENT CONDITION



Blue waves on Penha Mountain during the dry season

Collecting drainage channel system during the dry season

Multi-channel river during the dry season

Blue waves on Penha Mountain during the rainy season

Collecting drainage channel system during the rainy season

Multi-channel river during the rainy season

HEALING THE COURA RIVER

The natural water management concept is integrated into the landscape, healing the river by restoring the balance of the Coura River, building on the existing landscape structure. The project addresses and repairs the functional decay and the physical symptoms of the green infrastructure.

THE UNITY OF BLUE AND GREEN

The life-carrying water network provides vitality to the landscape's green infrastructure system, together forming an integrated living blue-green infrastructure network.

THE PROTECTION OF LIFE

By proceeding through the water network, flows back and forth from the Coura River ensuring long-term stability for both existing and newly established green infrastructure systems throughout the landscape.

- BLUE INFRASTRUCTURE
- GREEN INFRASTRUCTURE
- COMMUNITY
- CULTURE
- ECONOMY

- Flood-prone areas
- boundary of Bairro C district
- boundary of Guimarães
- topography lines
- small-scale planning areas
- national agricultural reserve
- natural forest
- planted forest
- agricultural fields
- water surfaces
- Coura river
- UNESCO site buffer zone
- UNESCO site
- road network
- current and planned green belts
- intervention points
- future expansion of green spaces
- future spread of water surfaces
- natural water surfaces
- water treatment strategies
- river
- flood areas
- landing spots
- habitat
- urban green
- view points
- Mediterranean vegetation of Penha Mountain
- Atlantic vegetation of Penha Mountain
- Agricultural fields
- Agricultural farms

Creixomil floodplain

The Creixomil floodplain near Guimarães combines farmland, wetlands, and urban habitats. Its restoration enhances biodiversity, stabilizes riverbanks, and improves recreational spaces, while promoting a farmers' leading with lower regenerative land use and landscape-sensitive planning for the city's sustainable future.

Mount Penha

The native vegetation around Guimarães, in the northern Mid-o region of Portugal, is particularly old and diverse because the area lies in a transitional zone between Atlantic (oceanic) and Mediterranean climatic influences. As a result, the flora succession shows two distinct "trees" one characterized by oaks, oaks forests, and the other by various other habitat vegetation. The dual character shapes the local environment and will continue to influence the development of the region from the long term.



THE VISION IN ACTION

Our objectives, addressing both Nature and People equally, revolve around river restoration, economy, culture, recreation, and community life. Beyond its ecological significance, the flow of the Coura River plays an important role in supporting the physical and mental well-being; therefore, our aim is to bring the river as close as possible to everyday urban life, enabling regular interaction with water. In this context, we explored the possibilities of river exposure, identifying sections where bringing the water to the surface is feasible, and defined three types of interventions adapted to the river's surrounding context.

The river-related interventions are complemented by a network of designated walking routes within the city, which reveal different layers of the settlement through economic, cultural, recreational, green, and blue themes, with an educational approach. These walks connect recreational nodes defined by the project, encouraging pedestrian movement and a more conscious exploration of the city. The routes aim not only to link existing tourist attractions but also to uncover lesser-known

urban areas that have previously remained outside visitors' attention, thereby redirecting tourist flows into new directions.

At the nodes, elements of a custom-designed family of objects are introduced, serving as multi-functional resting and meeting points while acting as clear spatial markers that strengthen the identity of the routes. The walking network weaving through the city provides value not only from an educational and recreational perspective, but also has a stimulating economic effect: cafés, shops, and services tend to concentrate along the routes, particularly around the nodes. This is further reinforced by the proximity of one of the routes of the El Camino.

The walking routes are marked with different colors based on their thematic focus, indicating the subject each route presents. From an economic and community perspective, areas suitable for the establishment of community gardens have also been designated. Although such initiatives already exist in Guimarães, expanding the network allows more residents to participate in partial self-sufficiency, while these spaces also serve as important settings for community building and the strengthening of local social ties.



1. The green routes reveal Guimarães' green space system, parks, and elements of green infrastructure. They connect vegetated public spaces and sites of ecological intervention, highlighting the role of green areas in climate adaptation, biodiversity enhancement, and the improvement of urban living environments. Information panels at the nodes sometimes present specific green space interventions, which characterize the project's highlights: recreation, maintenance, and ecosystem services of urban green spaces.

2. The blue routes explore the theme of water by connecting urban and landscape nodes. Some nodes are located directly at water-related sites—such as wetlands or along the river—while others present water-related interventions through a more theoretical approach. At such blue nodes, information panels introduce topics including river daylighting, flood management, water retention, permeable surfaces, stormwater management, irrigation, and water-sensitive urban design. Along the routes, the presence of water becomes perceptible either physically or through informational content, for the benefit of all.

3. The yellow routes connect urban spaces related to community life and neighborhood vitality. Some nodes include public spaces for active use, such as playgrounds and sports fields, emphasizing the role of public spaces in everyday urban life. Educational content at the nodes includes the importance of community building, social interaction, active living, and self-protection strategies, such as constructing firewalls and maintaining the integrity of the building's structure.

4. The red routes weave Guimarães' cultural heritage, historical layers, and monuments. They link meeting points, resting areas, and spaces suitable for active use, as well as heritage venues and sacred sites, emphasizing the role of public spaces in everyday urban life. Educational content at the nodes includes the bath, heritage, historical processes, and spirit of the place, supporting a deeper understanding of the city for both visitors and residents.

5. The purple routes present the economy as an overarching layer that connects tourism, local business, and environmental interventions. For example, along the route, information panels address how flood management and water retention contribute to garbage reduction, cost savings, and the strengthening of the local economy. Throughout the area, it becomes evident that environmentally and community-driven interventions generate multiple benefits but also long-term economic value.



Instead of having a simple architectural backdrop for the river, we imagined a rugged change to the banks. This results by advantage for two main reasons: visitors could get close to the water all along the route, use it as a place to rest, making it not just a visual element of the landscape, but an active part of it. Secondly, handling the fluctuating water level would help the way people walk. It would be a nice water space necessary to spread

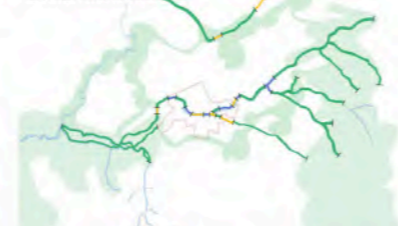
At some areas, the water could be kept in the surface, but we will not create a reservoir. Instead, these nodes, connecting the two sides of the river, are designed to be fun from morning to noon, and available regardless of the height of the river.

EXISTING SURFACE WATERCOURSE SECTIONS



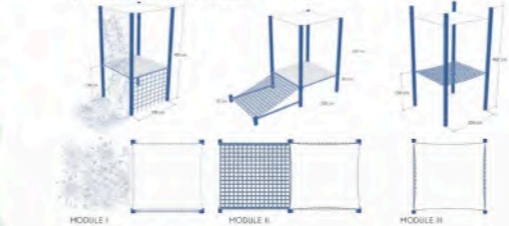
The diagram highlights the sections of the Coura River where water appears in an open channel within the city. Although green spaces or paved areas between buildings, within the urban fabric, the river becomes visible on the surface only in a few fragmented locations, while along most of its course it runs hidden beneath paving or buildings. This lack of visibility is unfavorable for urban life, as the beneficial physiological, ecological, and microclimate effects associated with the proximity of water cannot be realized. Outside the city, however, the river is clearly present on the surface in several sections, particularly within green areas. This is especially evident in the south-western parts of the city, where flat topography, irrigation potential, and accumulated sediment-rich nutrient soils support agriculture and crop growing uses.

PLANNED RIVER DAYLIGHTING



The diagram illustrating the proposed condition shows how the Coura River becomes an integral and perceptible element of the urban fabric. The aim is to open up the river as many locations as possible, and where this is not feasible due to existing buildings or infrastructure, to reinforce the presence of water in everyday urban life through auditory perception. In the diagram, green lines indicate naturally designed interventions spread within green spaces. Blue lines represent openings to paved environments primarily intended to improve accessibility, while yellow lines denote sections where the river is perceived through sound. As a result of these interventions, the fragmentation of the river within the urban area is eliminated, and the Coura becomes a continuous, perceivable urban landscape element.

PLANNED FURNITURE MODULES



A modular furniture system is designed to be deployed across different areas of the city, allowing flexible use and adaptation over time. The system consists of three modular elements constructed from a metal frame, rope netting, and wooden surfaces. Their adjustable angles and configurations enable varied forms of use, including sitting, reclining, and informal play. One module combines horizontal and vertical mesh panels that can be climbed or used for seating, with integrated space for climbing plants. A second module features a low wooden platform paired with a gently inclined mesh surface suitable for reclining. The third module consists of a horizontal net stretched within a metal frame, functioning as both seating and resting surface. Each module is equipped with an overhead shade, and where elements are installed for longer periods, small parking bays are integrated nearby. Together, these furnishings support comfort, flexibility, and a close relationship between users and the surrounding landscape.



METROMINUTO AS A GREEN WALKING FRAMEWORK
The road network, which was created based on the metrominuto and already includes the newly planned paths, can serve as the basis for themed walks, and as an important feature to include the newly designed recreational green areas in Bairro C.



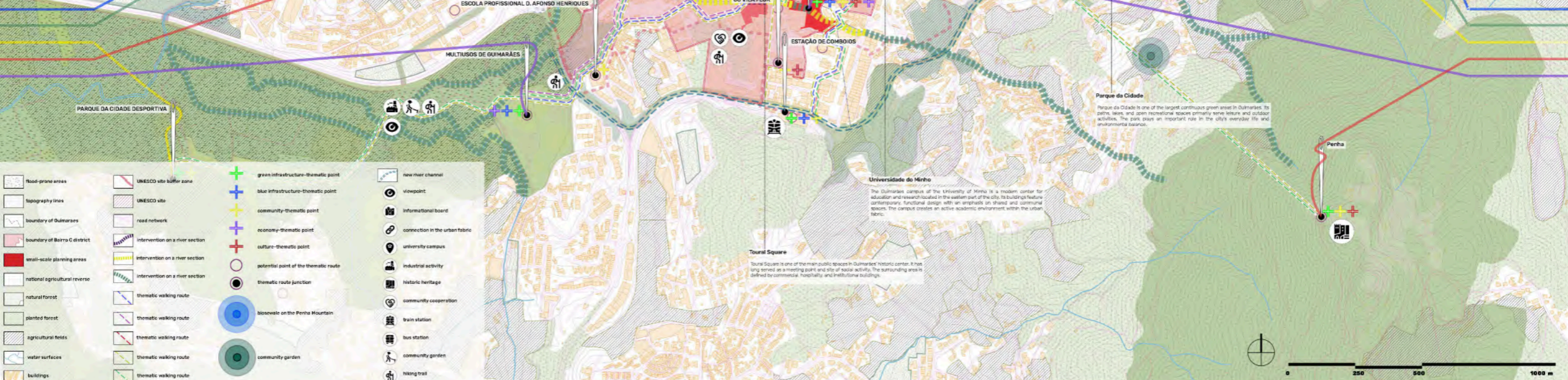
ACCESSIBLE PLACES FOR COMMUNITY GARDENS
The water management intervention points and potential community gardens (marked with blue dots) compared with the free open spaces alongside the Metrominuto walking routes (marked with purple dots) that are easily accessible to anyone and could potentially be used for establishing community gardens. These chosen open spaces are typically located along roads leading out of the city center.



FLOOD PROTECTION AS A COMMUNITY RESOURCE
For flood protection purposes, we would like to create protective units along the Coura River, where we can store water if necessary and slow down the flow of water down the mountainside. The primary goal of this is to prevent water from collecting in the flat terrain at the bottom of the mountain and causing flooding in populated areas. Secondly, we would like to use these newly created reservoirs and action areas for the benefit of the community. They could also provide space for community gardens or become new recreational areas for the park forest.



FRAGMENTED GREEN AND WATER NETWORKS
The current state of the planning area, the mountain, the city, and the Coura River, arise as three sections, along with the green belt and the otherwise rather fragmented green network. The water network is also very fragmented and often inaccessible to people. Light blue indicates underground sections, while darker blue indicates surface watercourses. The water network is also very fragmented and often inaccessible to people.





GENERAL CONCEPT

The chosen area is located in the central, densely built part of Bairro C, functioning as an urban sub-center, with a small portion situated within the UNESCO World Heritage zone. The site is surrounded by a diverse set of public and institutional buildings, including a university campus, a music conservatory, a social service center, a theater, a former factory building, an elementary school, and a private clinic.

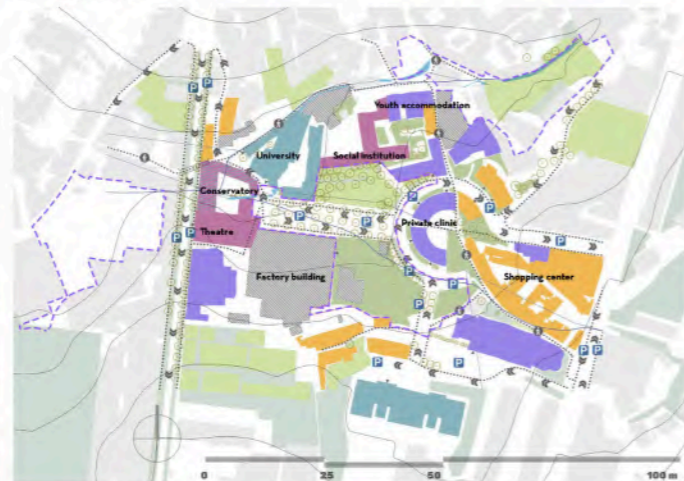
Adjacent to the former factory building lies a fenced, currently unused, sloping green area characterized by continuous grassy surfaces. This space is bordered by a road leading to the school and a large paved parking area situated between the clinic and the theater. The road serves both vehicular and pedestrian traffic, which is particularly significant due to the proximity of the school and other public services.

The core elements of the design concept include the daylighting of the currently underground river, the creation of a recreational riverbank, terrain reshaping, and the transformation of existing green areas into accessible and functional public spaces.

On the northern edge of the site, behind the social service buildings, a historically significant tanning basin is currently hidden and difficult to access. The proposal integrates this heritage element into the park through a passage running through the building, creating a visually screened yet clear spatial and conceptual connection to the project area.

To maintain accessibility, the main road remains unchanged; however, vehicular access to the former parking area will be eliminated. A fundamental aspect of the proposal is the introduction of new pedestrian entrances, providing access from the upper edge of the sloping terrain, from the road toward the river, and from the riverbank down to the water itself.

CURRENT CONDITIONS



CONFLICT MAP



BRINGING THE WATER TO THE SURFACE

The most important element of the new design is the demolition of the parking lot and the exposure of the river flowing beneath it. To achieve this, the middle of the three rows of trees in the parking lot must be removed, while the other two will remain.

The exposed water surface on the side facing the hall would be designed with an architectural, stepped solution, while on the other side, close to the lawn, would be natural and reared. This would make the water accessible from both directions. A small area of the parking lot pavement will remain next to the theater for safety reasons (fire department access, etc.).

Next to the paved area at the entrance to the hall, we have created a decorative dam, from which the water flows through the sidewalk into the ditch, where we have provided a stepping stone to ensure passage.

REIMAGINING THE TERRAIN

The terrain sloping down from the school towards the river cannot really be used in its current state. To solve this problem, the terrain is to be turned into terraces, using retaining walls to create usable space.

Some parts of these walls also serve as benches, the planned terraces are to be covered with grass, supplemented with furniture in some places. The individual terraces are connected by stairs integrated into the walls and a ramp, ensuring barrier-free access.

At the bottom of the terrain, which is in level with the entrance of the building, there is a smaller paved area, which is the reception area of the hall building, but can be used freely, for example as an event space or stage. The terraced design is advantageous for this, as it also functions as a grandstand.

A new retaining wall will also be built on the lawn north of the former parking lot, creating a more sloping terrain and a deeper ground level in front of the building to be demolished.

EXPANDING THE GREENERY

In order to improve the current vegetation, we would create new wooded areas. The trees in the central row of the parking lot will be moved to the top of the terraces and supplemented with newly planted trees to create a pleasant, shaded place to relax.

New trees would also be planted in the smaller grassy area separated by the road, and due to its size and location, this area could function as a community garden.

The banks of the river are also covered with lawn, and spots of plants typical of riverbanks.

RENEWAL OF THE FACTORY BUILDING

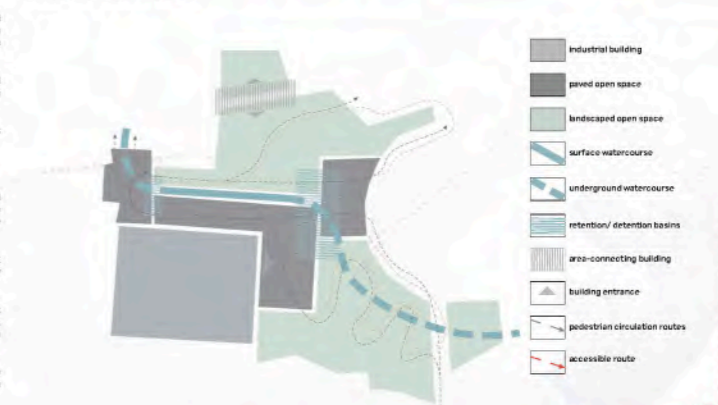
An important element of the concept is the integration of the disused factory building, which currently stands out as a prominent feature of the area, but has great potential for creating a multifunctional community space.

In terms of its economic appeal, it could function as a classic market hall, or as a market for produce and products grown in community gardens by local residents.

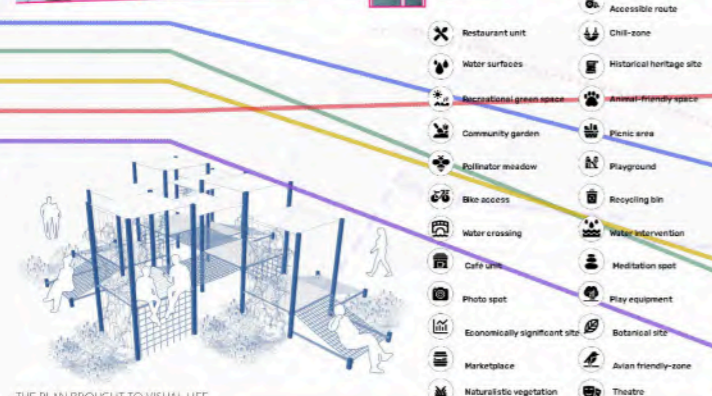
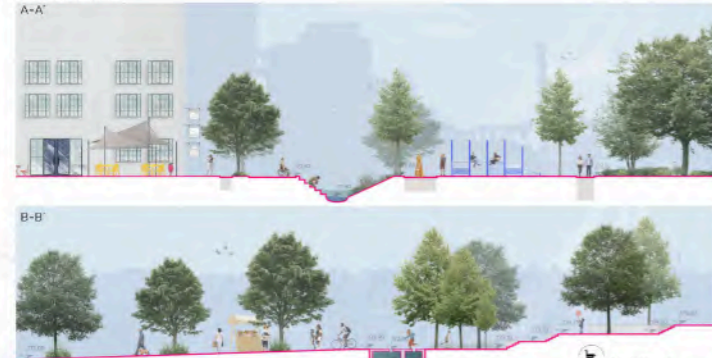
In addition, almost any type of catering unit or shop could be set up in it as required. This would ensure a steady income for the building operator, encourage local farmers and artisans to produce, and likely become an important commercial unit within the district or the whole city.

Having a cultural role is an important aspect of the concept, for example as an exhibition space or market place for local artisans, or it could even be used to host the venues of the annual local art biennial.

PLANNED FUNCTIONAL SCHEMA



SECTION DRAWING



THE PLAN BROUGHT TO VISUAL LIFE



THE TWO FACES OF THE RIVERBED



BEYOND LIMITS: A FULLY INCLUSIVE COMMUNITY SPACE



GROVE OF RESILIENCE: THE LIVING LABORATORY OF AN ADAPTIVE LANDSCAPE



THE PATTERN OF THE FABRIC

The visual and spatial concept of the proposal is woven together by five colored threads that, referencing Guimarães' textile heritage, guide the viewer through the city's various intervention points. Beyond their graphic role, the threads provide an interpretative framework: conflict-prone, underused, or damaged areas of the urban fabric are understood as "holes" that require stitching together and healing through integrated design responses. The blue (water), green (green infrastructure), yellow (community), red (culture), and purple (economy) threads each carry distinct meanings, yet are inseparably interwoven into a complex, living urban system.

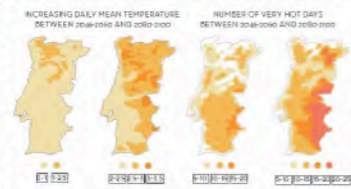
Along the blue infrastructure thread, the exposure and reinterpretation of the Couras River addresses food-related challenges while reintegrating water into everyday urban life. Making the river visible and perceptible improves the microclimate, enhances biodiversity, and encourages more nature-oriented community activities in the short term, while in the long term it leads to significant economic savings through damage prevention and contributes to the strengthening of ecological networks at the landscape scale.

The green and yellow threads connect the system of urban green spaces, public realms, and community functions. The proposed walking routes and nodes reveal lesser-known layers of the city, providing a clear spatial structure for orientation while creating places for meeting, resting, and urban life beyond building interiors. These elements generate new cultural and recreational qualities and, in the long run, support tourism and the vitality of local hospitality and services.

The purple thread represents the economic layer, weaving together environmental and community-based interventions. It makes visible how water management, green infrastructure,

and social initiatives generate not only ecological value but also tangible economic benefits. Community gardens, for example, support self-sufficiency and the production of healthy, locally grown food, while fostering long-term community cohesion and reducing the city's dependence on global supply chains.

Taken together, the network of threads is not merely a graphic device but the manifestation of an integrated urban and landscape-based approach, in which challenges are addressed not through isolated interventions but through mutually reinforcing systems. The concept aims to create a flexible, resilient, and identity-strengthening urban fabric, where the heritage of the past and the challenges of the future are interwoven into a single, coherent structure.



Northern Portugal has a generally mild oceanic-Mediterranean climate, cooler and wetter than southern regions due to Atlantic influence. Climate projections indicate warmer and drier summers, more frequent heatwaves, and increasingly intense rainfall events, with a shift toward Mediterranean conditions. Average temperatures are expected to rise by approximately 1-2 °C by mid-century and up to 2.5-3 °C by the end of the century, accompanied by more hot days and fewer frost events.

THE NEEDLE CUSHION

Our public furniture collection was inspired by the concept of the "pin-cushion." The point-like, acupuncture-style interventions in the landscape of Guimarães are represented on the map with pins, visually and conceptually resembling a pin-cushion. This approach reflects the small, localized interventions in the urban space through the design of the furniture.



THE NEEDLE CUSHION



At key nodes along the walking routes, information panels are installed to present the thematic highlights of each node for educational purposes. Each panel features a color-coded map of the walking network and indicates the nearest thematically differentiated nodes, guiding visitors onward and supporting clear orientation.

PHASING OF THE WALKING ROUTES



The development of the walking route network unfolds across three time horizons. It begins with the designation and consolidation of the proposed routes and nodes, followed by inner-city expansion up to 2040, linking additional thematic sites. By 2050, the network extends beyond the urban fabric toward the surrounding landscape character areas, strengthening the relationship between Guimarães and its wider landscape context.

GROVE OF RESILIENCE: THE LIVING LABORATORY OF AN ADAPTIVE LANDSCAPE

In the southern part of the open space design area, an approximately 800 m² experimental shrub-tree grove is proposed, aiming to explore the potential of climate-adaptive plant use in an urban context. The area will be planted with vegetation that experimentally responds to the projected climatic changes of Guimarães over the next 50-100 years.

The primary objective of the grove is to test drought-tolerant, heat-resilient, and urban-compatible plant communities that may be applied in the long term across various components of the city's green infrastructure, including public spaces, private gardens, and peri-urban, semi-natural areas.

The planting concept is structured across multiple layers—lawn, perennial, shrub, tree, and climbing plant levels—thereby enhancing ecological stability and biodiversity.

The grove functions as an open and publicly accessible space with a park character, while also fulfilling a pronounced experimental and educational role. The knowledge gained from this site can support the city in making informed, long-term decisions regarding climate-adaptive planting strategies. As part of the proposal, similar experimental plantings are recommended for other currently underused or functionless areas within Guimarães, contributing to the development of a city-wide adaptive green network.

The planting design follows a climate-adaptive approach, aiming to enhance biodiversity and improve the urban microclimate. A multi-layered vegetation structure (turf - perennial herbaceous plants - shrubs - trees - climbers) creates a resilient and long-term sustainable green infrastructure. The experimental grove in the southern zone is intended for testing drought-tolerant and heat-resilient species, which can be implemented in other urban areas in the future.

ENHANCING BIODIVERSITY THROUGH POLLINATOR- AND BIRD-FRIENDLY DESIGN

Urban expansion in Guimarães increasingly threatens pollinators through habitat loss and fragmentation. The redesign of open spaces and the integration of green corridors aim to restore ecological connectivity and create more favourable conditions for biodiversity. Community-based gardening plays an important role in this approach, as it provides pesticide-free, small-scale habitats that support bees, butterflies, and other pollinating insects.

The inclusion of nectar-rich ornamental and herbaceous plants further enhances food availability. Bee populations are additionally threatened by the spread of the Asian hornet, which requires active monitoring and early detection. To support ecological pest control in a sustainable way, the artificial grove is designed to be bird-friendly, encouraging insectivorous bird species that help regulate pest populations naturally.

SUGGESTED CLIMATE RESILIENT PLANTS



THE FINISHED FABRIC OF MOURA

