EUROPAN 18 Landscape as a City, City as an Island

Design proposal

This proposal envisions a dynamic, living system shaped by the site's natural and urban characteristics. Water serves as a guiding and transformative element, actively shaping and interacting with the spatial form.

Turku, a mosaic of islands

Turku lies at the edge of the Archipelago Sea (*Saaristomeri*), where the Finnish mainland dissolves into a mosaic of islands. Here, rock, wind, and vegetation intertwine, forming a landscape shaped by contrast and transition. The city touches the rugged terrain of the archipelago, the glacial hills and the dense shoreline biotopes. Here, the city is not imposed on the land, but embedded within it.

Despite this deep connection to nature, Turku's urban fabric has historically followed a rigid grid. By this urban-centric approach to city development natural systems were overridden: the banks of the Aura River straightened, the Varsoja stream canalised. Still, time and again, rocky outcrops interrupt this order. These breaks in the grid, clearly visible in historic city plans, also manifest spatially in Turku's urban structure, creating distinctive places where the built environment enters into a direct relationship with the natural landscape.

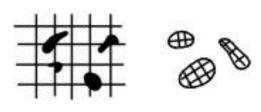
Shift the paradigm

We see these outcrops not as disruptions, but as spatial and cultural assets – places where Turku's unique identity and layered processes come into focus.

As the rocky hills break the continuity of the city's layout we propose to inverse this urban-landscape relationship along the Varsoja. The basis of our design is the creation of a landscape framework in which formations of architecture act as archipelagic entities. Architecture acts not as object, but as a mediator between urban and ecological systems. With nature as the "masterplan" and new urban forms (that we define through the concept of the neighbourhood archipelago) serving as experiential anchors of the archipelago, a key landscape center emerges along the Varsoja corridor. This new green core shapes and moderates the city's future growth, strengthening the dialogue between Turku and its natural setting.



Islands of nature inside the city grid. Excerpt of historical map of Turku, Finland. Published by C. W. Gylden, 1837



The city is reimagined as islands immersed in nature

A green core for the neighbourhood

Urbanisation in Vähäheikkilä accelerated after its annexation to Turku in 1939, with the growth of public facilities, industries, and housing without a clear strategy having been defined for the planning of these areas or their peripheral zones. Today, Vähäheikkilä is a heterogeneous district, mixing older housing, businesses, industry, services, and vacant plots, illustrating a gradual evolution lacking a comprehensive strategy, which raises the question of its future within Turku's urban growth.

Rather than viewing fragmentation as a problem, we propose to embrace it as a new urban reality and a potential asset. This collection of distinct "islands" – neighbourhoods, districts, or iconic buildings – each has its own identity and function. Every island (architecture) is designed or preserved to reinforce its unique character and collective identity, rather than being homogenised by city-wide planning. They are not isolated, but reconnected through this new green core, which acts as connective element – the final piece of the puzzle.

Spatial experience

The paths and open public spaces follow the "language" of water, flowing harmoniously alongside it. Entering from the west, visitors immediately encounter a transformed space where traces of the old industry intertwine with the new creative district's structures. Here begins a journey of discovery – walking along, visitors can engage with the stream lying below, using steps and platforms that invite interaction with the wild garden. At the heart of the site lies Hill Park, a topographic choreography centred around the prominent hill. Together with the Green Plaza and cultural center, it forms a vibrant hub for socialising, sports, and play. Multifunctional play areas for all ages, expansive flood meadows, and an amphitheater blend seamlessly into the landscape, serving diverse uses during dry seasons. Moving away from the hill, the Wetland Plaza introduces a gentler rhythm. The path meanders through forested areas, occasionally hovering above water and opening into seating spaces that invite visitors to relax amidst flooded landscapes and shaded groves. The journey concludes in the Archipelago Neighbourhood, where shared spaces, homes, playgrounds, and the flowing stream create a unique collective living experience.

Step 1 - Landscape integration

We take the landscape forward design of the Varsoja area as an opportunity to make different components of the archipelago tangible and interweave them with one another. In doing so, we integrate the site into the existing ecological corridors and strengthen its landscape coherence within the Turku archipelago. To this end, we identify the following characteristic natural and urban phenomena:

- Rocky outcrops: The rocky outcrops in Turku are part of the glacially shaped bedrock, creating unique
 microclimates with dry, nutrient-poor, and wind-exposed conditions. Typical boreal archipelago ecosystems
 include lichens, pine forests, heather, and small wet biotopes. These hills serve as biodiversity hotspots,
 refuges for specialised species, and urban landmarks offering viewpoints and public spaces.
- Forests: Turku lies between boreal coniferous and hemiboreal mixed forests, with species like pine, spruce, birch, oak, maple, and ash. Old trees and deadwood are preserved to support biodiversity and carbon storage. A near-natural riparian forest ecosystem is promoted along the Varsoja stream.
- Wetlands: Wetlands in Turku are key ecological infrastructures that combine flood protection, biodiversity, climate mitigation, and quality of life.
- Meadow: Meadows and open landscapes are among the region's most species-rich habitats, especially dry
 and wet meadows. They are threatened by succession, so minimal intervention is applied. Important
 recreational areas with educational trails and observation points exist in the region, and along the Aura
 River.
- **The built environment**: the city plays a vital role in the archipelagic landscape, where city forms intersect with natural processes. Thoughtfully shaped urban interventions can deepen and enrich Turku's intrinsic connection to nature.

The competition site is a patchwork of the different landscape characteristics in Turku's archipelago. By reopening the buried canal, we aim to enhance these diverse landscapes. The stream serves as the backbone of the project, reconnecting the various biotopes.

Step 2 - The stream as ecological spine and catalyst for public life

Water is the driving force behind both climate resilience and public life. Our stormwater strategy transforms the landscape into an adaptive system that slows, stores, filters, and infiltrates water through bioswales, rain gardens, swales, and terraced retention and detention basins. These features manage runoff, protect downstream areas from flooding, and shape ecologically rich environments. Water gates allow flow regulation during wet seasons, while terracing creates varied habitats and fosters biodiversity.

The site's clay conditions are an opportunity for climate resilience. Their natural filtering capacity removes heavy metals, and in combination with constructed wetlands act as powerful carbon sinks, sequestering carbon and promote ecological richness.

The river becomes a visible, seasonal presence throughout the site. In the urban west, it appears calm and linear; the water basins is a playful feature that mimics the natural basins found in the surrounding rocky landscapes; and in the forested east, it flows quietly as a contemplative element. It shifts with the seasons – sometimes revealed, sometimes hidden – inviting people to engage with water in multiple ways. Altogether, the system offers a resilient, multifunctional landscape that adapts to climate, celebrates water, and connects nature with daily life.

Step 3 - Enhancing biodiversity with Ecotones

Turku is abundant with biodiversity due to its fragmented urban landscape filled with dense forest patches and waterbodies of all kinds. While walking through the site, one can observe a range of biodiversity. This includes bird species such as Common blackbird (*Turdus merula*), Fieldfare (*Turdus pilaris*), White wagtail (*Motacilla alba*), Great tit (*Parus major*), Eurasian blue tit (*Cyanistes caeruleus*), House sparrow (*Passer domesticus*), and Eurasian magpie (*Pica pica*); mammal species like the Eurasian red squirrel (*Sciurus vulgaris*); and insects including Small tortoiseshell (*Aglais urticae*) and ants. Urban areas in Turku are also home to foxes (*Vulpes vulpes*) and many other bird and insect species which our site has the potential to support.

Habitat edges (ecotones) are the intersection of two different habitats such as a stream and forest. The "edge effect," a theory in ecology, shows that biodiversity and ecological function are often enhanced in these edges. In our design, we apply this principle by creating multiple ecotones across the site. The four main habitats, forest, wetland, rocky landscape, and meadow, are connected through these edges, which serve as transitions between the different biotopes and feature denser vegetation adapted to the habitats they link.

The project integrates principles from ecological theories to support urban biodiversity against fragmentation, degradation, and human disturbance, preserving forest canopy through tree corridors, retaining local plant species, and creating wetlands for water-dependent species such as ducks (*Bucephala clangula*) and waders (*Haematopus ostralegus*). The aim is to foster a resilient urban ecosystem where local flora and fauna can thrive.

Step 4 - Slow mobility

Surrounded by busy roads and fragmented urban blocks, our mobility strategy creates a calm, connective centre that enhances access to the wider neighbourhood. A 3 m-wide main path guides movement through a series of spatial atmospheres – forming a choreographed sequence that reveals the site's natural layers and ecological richness. To ensure safety around key locations – such as the daycare, the Vähäheikkiläntie-Ispoisten Puistotie intersection, and access to the new Puistomäki residential area, we introduce targeted traffic-calming measures. These include widened pedestrian zones, a new roundabout, and clearly marked crossings defined by distinct materiality. Vähäheikkiläntie Road is reimagined as an extension of the park: a climate-positive urban edge that prioritises walking, cycling, and biodiversity while maintaining essential vehicle functions. Strategically planted strips provide animal corridors and support groundwater recharge, transforming a traffic-heavy boundary into a resilient, green public space.

Step 5 - Creating social spaces

The new public spaces respond to the existing functions and forms on the site and complement the living areas for neighbourhood residents. They appear as plazas marking the park entrances and are sometimes accompanied by distinctive architectural elements (a pavilion at the cultural center, an observation tower in the forested area). Above all, they are distributed along the main promenade, which is organised around the water bodies. These spaces include playgrounds (kindergarten playground, hills playground), sports facilities (sports fields in the new urban district), as well as educational and cultural areas (the cultural center square, bookshelf pavilion).

Step 6 - Architecture as Archipelagos

The placement of the architectural archipelagos is guided by the site's natural and urban context. Located at the eastern part of the site, at Ispoistsen puistotic road, this placement of the buildings preserves the central area for nature to reclaim and flourish. On the east side, the urban archipelago formed by existing buildings is embraced and reinforced with new functions, which enhances its presence in the landscape.

Rather than scattering development throughout the site, the concept concentrates on maintaining density in carefully chosen areas by building new hills. Buildings are grouped into small neighbourhoods and placed atop these hills, which serve multiple functions. The hills protect homes from potential flooding, conceal parking lots, and foster unique neighbourhood identities. This approach also provides a diverse landscape and integrated recreational areas. The soil excavated to create water basins is reused on-site to form these hills.

A variety of living environments are proposed within the area, ranging from urban to suburban lifestyles and from coliving arrangements to traditional housing. These include diverse housing typologies such as townhouses, urban villas, linear blocks, and co-living spaces, which cater to a wide range of preferences and needs.

The parking facilities are strategically integrated into the ground floor and concealed beneath the newly created hills, blending them seamlessly into the landscape. Additionally, two vertical parking structures offer adaptable functionality for future needs. The height of the buildings is carefully limited to four floors to maintain harmony with the surrounding context and tree canopy.

Each archipelago fosters connectivity and includes small collective spaces, such as saunas, retail shops, and community rooms, which promotes a vibrant social fabric. To further energise the neighbourhoods, we introduce social hubs and activators – dedicated spaces designed to encourage interaction and community building. These spaces make the area lively and inclusive. Each archipelago have building types that form a cohesive yet diverse neighbourhood:

- **The Urban Archipelago and Creative Courtyards:** Enhanced with new extensions, existing buildings evolve into vibrant hubs for workshops, production spaces, offices, co-living spaces, student apartments, and artist studios. The Turun office building is reimagined to serve public functions, such as a ground-floor museum or exhibition space, a library and archive on the second floor, and artist studios at the top. This building anchors a thriving creative ecosystem.
- **The Varsoja Strip Archipelago**: These three buildings are positioned along Vähäheikkiläntie Road and act as sound and visual barriers for the park while maintaining connectivity. These buildings offer south-facing apartments with balconies that open into the park.
- **Urban Villa Archipelago**: This consists of five four-story buildings arranged in a circle around a communal courtyard, which fosters neighbourhood interaction.
- **Townhouses Archipelago**: The eastern neighbourhood features two-story townhouses that blends seamlessly into the surrounding area. Each house has a private terrace and access to a communal garden connected by meadows, offering a more intimate, nature-oriented living experience.

Step 7 - Renewable energy

To support Turku's ambition of achieving carbon neutrality by 2029 and advancing toward climate positivity thereafter, our proposal aligns with the city's strategic sustainability and urban development goals. We propose utilising approximately 18,000 m² of the available rooftop area for photovoltaic (PV) panel installation. Based on local solar irradiance, this system has the technical potential to generate between 1–2 GWh of electricity annually. By integrating residential-scale battery storage, the system enhances urban resilience by reducing dependency on the local grid and enabling energy use during peak demand or low-sunlight periods. This decentralised infrastructure supports smart city objectives by powering public amenities such as electric vehicle charging stations, pathway lighting, and potentially water and drainage systems. Furthermore, the integration of energy and utility systems reflects circular economy principles, contributing to a more self-sufficient, adaptive, and climate-positive urban environment.

Phases

Phase 1: The detailed zone is developed, including the first architectural archipelagos (the Varsoja Strip and Urban Villa). One "Creative Courtyard" will serve as a community information center and workshop, involving local residents in crafting components for the new housing.

Phase 2: The western residential neighbourhood is built, along with play areas and rainwater retention features in front of the kindergarten. The Turun office building is renovated and acts as a magnet to reactivate the former industrial zone.

Phase 3: The Urban Archipelago is developed in the final phase, once the city has acquired the privately-owned land.

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Our design empowers re-thinking natural sources and reinterpreting urban life. Guided by the site's specifics, water breathes life into natural urban habitats. This living system invites nature in, celebrates water, and evolves with its inhabitants.