**BLIND SPOTS IN ARCHITECTURE** 

# HYDROCITY

## BLIND SPOTS IN ARCHITECTURE #3

Biznesa, mākslas un tehnoloģiju augstskola "RISEBA", SIA RISEBA University, Faculty of Architecture and Design November 2024

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**BLIND SPOTS IN ARCHITECTURE** 

## HYDROCITY: URBAN WATER EDGE CONDITIONS IN "WIRRAL WATERS"

**VOLUME 2** 

A COLLABORATION BETWEEN MANCHESTER SCHOOL OF ARCHITECTURE (MSA) AND RISEBA FACULTY OF ARCHUTECTURE AND DESIGN (FAD)

## **URBAN DESIGN LAB**

## **BACHELOR'S PROGRAM**

## **ARCHITECTURAL DESIGN 4 COURSE**

JONAS BÜCHEL, EFE DUYAN, ILZE PAKLONE

## LANDSCAPE ARCHITECTURE COURSE

MARC GELDOF, HELĒNA GŪTMANE, ILZE RUKŠĀNE

## **MASTER'S PROGRAM**

## **INTERNSHIP IN ARCHITECTURE COURSE**

EFE DUYAN, HELĒNA GŪTMANE, RUDOLFS DAINIS ŠMITS

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## **INTRODUCTION**

In 2023, students from the Manchester School of Architecture (MSA) and RISEBA University's Faculty of Architecture (FAD) embarked on a collaborative design studio through which students developed masterplans for sites in each other's city to explore these goals.

The first-year of the collaboration Urban Design Lab was entitled "Hydrocity - Riga and Birkenhead," and was exhibited in Riga in March 2024. The collaboration will continue into 2024/25 with new sites and challenges in Riga and Manchester. While the experiment between Manchester and Riga focuses on parallel projects, the partnership could expand over time to include other schools, fostering a global response to collective urbanism.

This international exchange has seen contributions from students, academics, and practitioners from different parts of Europe. The final output exemplifies how a diverse range of expertise can culminate in pragmatic and reputable urban regeneration design methods. International collaborative urban labs are active research platforms amplifying the experiences of architecture and urbanism students worldwide.

RISEBA University Faculty of Architecture worked on Wirral Waters by critically engaging with the ongoing process at its urban design lab, combining three separate courses in collaboration with the Manchester School of Architecture. Wirral Waters is one of Europe's largest urban regeneration sites, on the left of the Bank of River Mersey, including the surrounding historical docklands of the Wirral Float.

This book presents the Urban Design Lab 2023/24 results in two volumes, namely the urban research results and design proposals.

#### Visions

The projects aimed to transform Wirral Waters into a vibrant and livable urban center, bordered by the neighborhoods of Birkenhead and Wallasey. Central to this vision was creating a new urban identity, marked by enduring aesthetics and innovative affordances. The proposals introduced a variety of new magnetic functions interpreted in contemporary ways centered around the Float, metaphorically, as a grand urban plaza filled with water. A key challenge was ensuring that these projects functioned as attractions for visitors without triggering gentrification, while preserving the continuity of the area's history and everyday life. The design approach embraced a delicate balance between the allure of a fresh start and the importance of respecting the de facto situation and retelling its historical narrative. Projects range from museums and a Highline to a power plant, bus station, recycling center, education and sports facilities, alongside contemporary workplaces and flexible housing. Architecturally, the designs balance iconic new structures with subtle interventions, blending embedded in historical context.

#### Hydrocity and The Context of Water

The presence of the Float and the River Mersey raised significant ecological concerns and prompted discussions about the treatment of the waterfront. In response, a continuous, accessible public promenade along the water's edge was designed to symbolically unify the new urban identity. The promenade's enhancement of the waterside experience was carefully studied, incorporating micro-analytical approaches to consider views both across and towards the water.

Additionally, how the architecture would be perceived from the opposite side of the Float and the River Mersey became a critical design consideration. Some designs introduced additional channels, creatively enhancing water exposure. Accessibility was prioritized through pathways connecting the Float to surrounding residential areas, positioning the whole site almost as a transition zone toward the water. As a result, the projects heavily focused on engaging with and emphasizing the various biophilic aspects of water. They are about the water as much as they are around it.

#### **Connectivity and Movement**

To emphasize the emerging prominence of Wirral Waters, the project prioritized establishing solid connections with nearby towns through the development of bus and water transport hubs. Internal connectivity was also enhanced with the introduction of water-based transportation within Wirral Waters, alongside the addition of sports activities such as rowing, sailing, and cycling to encourage movement. To avoid isolating the site from surrounding neighborhoods, landscape design focused on creating inviting, accessible spaces, including a continuous promenade linking the entire area. Several projects pushed boundaries to stimulate activity, proposing features like a Highline, tectonic landscaping, a green corridor to the historical Birkenhead Park, public plazas, a bus station, a micro-mobility hub, water canals, minifloats, and bridges. These elements share a common goal: enhancing connectivity, preventing isolation, and generating multiple benefits for the area's revitalization. In this sense, movement and connectivity were not merely functional aspects but became integral design features, vital to the success of the revitalization efforts.

#### Identity

The research has revealed that underground structures and geology perhaps had a more significant yet subtler impact on the identity and development of the territory than more common or visible structures investigated. It led the teams to keep a close eye on the materiality and look for deeper historical connections. The historical significance of Birkenhead Park and the industrial heritage of the docks prompted discussions on adaptive reuse and the aesthetic dialogue between old and new, as well as the role of collective memory. Existing warehouses and dockland features, including rail tracks, piers, cranes, steel bridges, and even a sunken ship, served as sources of inspiration for adaptive reuse. Respecting and, at times, challenging the site's genius loci was essential. Some projects adopted straightforward adaptive reuse strategies, while others employed symbolic and bold aesthetic gestures to evoke the site's historical identity. This identity is seen as key in crafting a new narrative for the area, one that attracts new residents and visitors without alienating the existing community. The projects aim to integrate the historical identity into a regenerated urban brand, balancing new, vibrant functions for the future denser population with local integration, ensuring that the evolving identity is embraced by both newcomers and long-term inhabitants.

#### Conclusion

The Wirral Waters project presented a pathway of creatively moving forward so that, along the way, the approach has the potential to transform the site into a point of attraction and prepare it for the possible consequences. Our designer consciousness was divided between the top-down attention given to the charming power of building and the bottom-up attention to the ecological and urban sensibilities. Our Wirral Waters is almost a meta-design about the uncomfortable coexistence of the allure of tabula rasa and the conformity of continuity. It seems self-aware of its own double act of coming under the spotlights and being socially responsible.

Efe Duyan, Rudolfs Dainis Smits

DESIGN

## HYDROCITY: WIRRAL WATERS PROJECT DESIGN AREAS

BACHELOR PROGRAM ARCHITECTURAL DESIGN IV & LANDSCAPE ARCHITECTURE COURSES

AREA 1: Gatis Hasners, Katrīna Elizabete Onckule, Nil Nida Işık AREA 2: Kristaps Kadiķis, Linda Elīza Broka AREA 3: Aleksandrs Jevdokimenko, Kevins Markers, Mostafa Albadawi, Valdis Peļuškēvičs AREA 4: Akif Ertuğrul Öztürk, Magnus Gytre Lund AREA 5: Valts Zaķis AREA 6: Evita Andreja, Dita Viļuma AREA 6: Evita Andreja, Dita Viļuma AREA 7: Nauris Lukjanovičs, Mārcis Rautiņš AREA 8: Anastasija Šakele, Anna-Marija Iskrova AREA 9: Artjoms Druzs, Kristers Einiņš, Pāvels Luzins AREA 10: Aleksejs Sviridenko, Tomass Bakēvics AREA 11: Alise Birkmane AREA 12: Emilija Kiseļova, Tīna Deaka

#### MASTER PROGRAM

INTERNSHIP IN ARCHITECTURE COURSE AREA 13: Sintija KJavinska, Meldra Berzaja, Kristīne Zane Čible Reinis Salins Ksenia Sapega



# D1

RISEBA University of Business, Arts and Technology Academic Bachelor's degree programme "Architecture"



Between

Nida Nil Isik I Katrīna Elizabete Onckule I Gatis Hasners

### between [biˈtwiːn]

in or into the space that separates two places, people, or objects



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## Changing the mechanics of the existing space, *not affecting the existing*



Photo by https://www.flickr.com/photos/frisia\_bonn/



The human experience is filled with decisions, that shape individuals' lives. In this play of taking action and feeling the consequences, man starts to see the world as a separation of places, people or objects. The project - Between explores the multifaceted dimensions of "between", delving into how it influences man's perception of space and time.

By navigating the realms in the in-between, we highlight the extremes that exist in spite of each other and create life.



## Context

Our task was to develop the planning of the specific territory, to create a high-quality and sustainable environment.

## Location

United Kingdom Birkenhead 53.40281, -3.03103

## Authors

Nida Nil Isik Katrīna Elizabete Onckule Gatis Hasners

# *Existing* is what makes it *special*

The site is located in Birkenhead, which is a town in the Metropolitan Borough of Wirral, Merseyside, England. Historically, it was part of Cheshire until 1974. The town is on the Wirral Peninsula, along the west bank of the River Mersey, opposite Liverpool.

The project's site is specified on a linear semi-island with direct access to water from three sides. This man-made semi-island was previously known as Vittoria Dock, which was constructed in the mid-19th century as part of the expansion of Birkenhead Docks to accommodate the increasing maritime trade and shipping activity.

The site's key features are two warehouses, The Clan Line Warehouses were built adjacent to Vittoria Dock in the late 19th or early 20th century to serve as a storage facility for goods transported by the Clan Line, a prominent British shipping company. The warehouse is characterized by its robust construction, harmonious placement of large doors, pinkish cladding, and expansive interior spaces designed to accommodate the storage and handling of cargo. These warehouses take up almost all of the available space. A rail system runs around and through them, originally used for cranes to move things on and off the ships.

When exploring the existing details of the site, we could not help but notice the beauty that already exists there. A little adaptive detail that caught our attention was the upper left corner of the warehouse on the left side, it has been cut off to allow the cranes to move. Central park

Train station

Birckenhead park

15 min walk distance

Main Wind direction (West > East) (average 5.2 m/s)











Image: Google Earth Pro

Image: Google Earth Pro

Image: Google Earth Pro



# changing by *not changing it*

The appreciation of all the details and the manipulative design principles in the existing building led us to the conclusion- changing the place by not changing it. We decided to keep the existing volumes and explore the infrastructure that already lies there. From the beginning of the project, this concept was clear to the team. It means that we are choosing to go against the proposal that is set for the original Wirral Waters development, which suggests building skyscrapers there. Our vision includes a skyscraper that lies horizontally.

In the context of the Wirral Waters project, this site plays a central role.

This contributes to the decision to give the place to the community and public. When looking at it from a bird's eye view, one could not help but notice the enormous size of the warehouses and the separating line in the middle of them. This led to further development of the concept, which includes the celebration of differences found on the side of Liverpool with its artistic heritage and on the more industrial role that Birkenhead has played. Therefore the two kept volumes represent these opposites.

The volume on the right side is a space where art can flourish and the other volume plays a more commercial role. The implementation of the principle of contrast brings balance to the otherwise monotonous space, it makes it alive!

## 1 Park

Birkenhead Park, a model for Central Park in New York City, Victoria Park, and Mersey Park are all prominent recreational zones in the area. Unfortunately, none of them are on the shore. Our site, in particular, had the opportunity to be a recreational zone where people could be close to the water. The concept of bringing people closer to the water played an important part in deciding to dedicate entrances to our site to have a green thumbprint. The park acts as a transition between surrounding industrial zones and our site for the well-being of the community.

## 2 Market

Marketplaces play a vital role in economic growth and creating a substantial business ecosystem. It serves as a significant item during cultural exchange and public gatherings while providing for the existing community. In sustainable urban development, it is crucial to create diversity and various offerings with adaptable spaces, which is why the marketplace is arranged by containers. The marketplace is located at the left-side entrance, closer to both the main road and the parking area. It was placed there with accessibility and efficiency in mind.

## ③ Residentials

A mixed-use area cannot be completed without creating an additional community to make the site come to life 24/7. Through their interactions with people, the masses can fulfil their purpose of becoming functional. The residences help support the economy and ensure natural surveillance, which can enhance security. Additionally, the existence of distinct unit sizes provides diversity in the user profiles. The residential units are placed within the left-side volumes' ground level, and on the connecting vessel of the two buildings; the frame on the upper level.

<ul> <li>⑦ Car parking</li> <li>⑥ Kiosk</li> <li>⑨ Dolphin splashes</li> </ul>	<ul> <li>Sitting stairs</li> <li>Fishermans prom.</li> <li>Yacht Club</li> </ul>	<ul> <li>Wegitable market</li> <li>Food market</li> <li>Fish market</li> </ul>	<ul> <li>Flea market</li> <li>Shop</li> <li>Boat repair shop</li> </ul>	<ul> <li>Cafe</li> <li>Art market</li> <li>Sport store</li> </ul>	<ul> <li>Floating garden</li> <li>Yoga studio</li> <li>Sport store</li> </ul>	<ul> <li>e Gym</li> <li>e Daycare</li> <li>e Perry stop</li> </ul>	<ul> <li>Skatepark</li> <li>Exhibition space</li> <li>Library</li> </ul>	<ul> <li>Workshops</li> <li>Rail stage</li> <li>Mind-body center</li> </ul>	<ul> <li>Blackbox</li> <li>Community garden</li> <li>Watchtower</li> </ul>	<ul><li>e) Storage</li><li>e) Pavilion-stage</li></ul>
Enterances	O Building volume	··· Rib	Tree	— Rails	- Crane	··· 2nd floor				



## (d) Art

The whole right volume has been dedicated to creative expression. The zoning principles that are introduced in this area break the solidity and linearity in its place comes undefined boundaries. From the design principles, this has been achieved by curtains on a rail system which are attached to the frame on an upper level. The rail system has been created by using an oval grid, which is driven from the existing construction. Five semi ovals intervien therefore five zones emerge. In the middle of each oval, a more intimate part is located. By spreading the oval outwards it intervenes with the zone next to it therefore it shows how undefined the artistic expression is. The placement of the curtains can change according to the needs of its users.

## Square

The waterfront square serves as a transitional space that connects the site to the green corridor, creating a seamless flow between urban and natural environments. It encourages pedestrian movement into the site from Birkenhead Park. The waterfront location of the square offers panoramic views of the water, creating a visually stunning focal point that enhances the overall ambiance and attractiveness of the site. Designing the square with recreational facilities such as seating areas, promenades, and public art installations strengthens leisure activities and social interaction, enriching the community experience. It serves as a landmark feature, defining the identity of the site when combined with the green corridor.

## **6** Waterfront

Enhancing the waterfront features of a site with docks and promenades serves several important purposes, ranging from aesthetic improvements to practical benefits. Docks and promenades provide accessible points for recreational activities such as boating, fishing, and leisurely walks along the water's edge. By extending the waterfront with promenades, visitors are able to enjoy unobstructed views of the water. In addition, it can function as a gathering space for various activities involving nature. Through maximizing access, fostering connectivity, promoting economic development, preserving the environment, creating public spaces, and increasing property values, these elements contribute to the overall attractiveness and sustainability of the site.

## Additive and subtractive principles

Additive and subtractive principles in architecture are not mutually exclusive but rather complementary approaches that can be leveraged to create sustainable, adaptable, and enduring built environments. By embracing both principles, we aim to design spaces that not only meet the needs of today but also have the flexibility to evolve and thrive well into the future, embodying the concept of "changing by not changing" while promoting sustainability and resilience. This plot is one of the most valuable in the whole Wirral Waters area, so when playing with the shapes and sizes of solids, we aimed to create an iconic yet low cost design. The form, while playful, follows the existing guidelines set by the heavy structure of trusses, columns, and beams that already exist as a skeleton. The functions helped create the forms inside the buildings; the marketplace and commercially used areas are less playful and more gridal, but the art district with exhibition areas, a library, and recreational areas is more playful and flexible. The extruded and intruded volumes create interesting nooks and crannies. This flirtatious facade is compelling from all sides of the Mersey Float. The two buildings are connected through a newly introduced frame on a second level. This serves as a second vessel of accessibility, and with volumes freely extruded from it, this frame acts as a shadow of the volumes breaking through the existing roof.











# D2

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## WIRALL WATERS HYDROCITY

## TRAGEDY from tragedy to rebirth

Kristaps Kadiķis Linda Elīza Broka

RIGA | 2024/2025



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## INTRODUCTION

Hydrocity is an urban development project that seeks to transform a historic landplot with a rich maritime heritage into a vibrant, interconnected community. Inspired by the symbol of a sunken ship found on the site, the project is guided by the theme "TRAGEDY - From Tragedy to Rebirth." This theme captures the essence of honoring the past while fostering new beginnings.

At the heart of Hydrocity lies the Maritime Museum, designed in the shape of a half-submerged ship, standing as a testament to the area's storied past. The museum, with its unique glass chimneys and stunning rooftop terrace, invites visitors to explore maritime history.

The Maritime School and Research Center promotes education and innovation in maritime studies. This two-story building with direct water access facilitates hands-on learning, blending academic pursuits with real-world experience. The front plaza offers a communal space for students and staff to relax and connect.

The four high-class apartment buildings, converted from existing hangars, provide luxurious living spaces surrounded by greenery. Designed to maximize natural sunlight and equipped with ample parking and playground areas, these apartments offer a harmonious blend of urban convenience and natural beauty.

Connecting all these elements is the central park, the lifeblood of Hydrocity. With its curvy paths, birch trees, and tranquil islands, the park offers a serene escape from city life. Picnic spots and seating areas that are thoughtfully placed throughout, encouraging residents and visitors to slow down and connect with nature.



## CONCEPT

Hydrocity is a visionary project designed to transform a historic landplot into a vibrant urban space, inspired by its rich maritime heritage. The central theme, "TRAGEDY - From Tragedy to Rebirth," honors the past while fostering new beginnings. At the heart of our site lies a sunken ship, a symbol of loss and memory from an era when ships were the lifeblood of this area. This ship, serves as the core inspiration for our project, guiding us to preserve and celebrate these memories while transforming them into a narrative of revival and growth.

The existing six large hangars on the landplot will be repurposed to serve various functions that embody this theme. The hangars parallel to the main road will be converted into residential apartments, with the ground floors dedicated to public functions such as cafes, shops, and community spaces, creating a lively and interactive street life. Another hangar will be transformed into a maritime school and research center.

In a particularly symbolic gesture, the hangar closest to the sunken ship will be demolished to make way for a maritime museum designed in the shape of a sunken ship. This museum will serve as a poignant reminder of the past, housing exhibitions that narrate the history of maritime activities in the area and the stories of those who lived and worked here.

Connecting all these buildings and their functions is a central park, which acts as the project's lifeblood, akin to blood vessels in a body, ensuring seamless connectivity and interaction among different spaces. The park will feature green spaces, walking paths, and recreational areas, promoting a sense of community and well-being.


## SITE PLAN



## **MARITIME MUSEUM**

The Maritime Museum is designed in the shape of a sunken ship, with only half of the ship visible and its nose raised up, evoking a sense of dramatic history and intrigue. The ground floor is a tranquil seating area, providing a space for visitors to relax and gather their thoughts before or after exploring the museum. The main entrance is accessed via a ramp that leads visitors to the first floor, where the primary exhibition is held. This floor features a unique glass floor through which visitors can view the actual sunken ship below.





The second floor of the museum is divided into two sections: one half dedicated to additional exhibitions and the other half to a café. This café offers a serene environment for visitors to reflect on their experience while enjoying views of the Wirral Waters. Additionally, the rooftop terrace provides a panoramic view of the surrounding waters, enhancing the maritime theme of the museum.



\*view to ships glass floor



\*view from 3rd floor



\*ground floor plan



\*3rd story floor plan

Throughout the museum, glass chimneys extend through all floors, serving as the sole light source. These chimneys create a moody and atmospheric ambiance, immersing visitors in the maritime experience and evoking the feeling of being underwater or inside a shipwreck.



\*lighting diagram

## **APARTMENT BUILDINGS**

The existing four hangars have been transformed into high-class apartment complexes, offering a blend of luxury and comfort in an urban setting. Two of these buildings include a three-story parking garage, ensuring ample parking space for residents. Surrounding the apartment buildings is a vast green area, forming a central park that acts as an urban oasis. This park provides a refreshing contrast to the dense city environment, making it a valuable amenity for the residents.

Living in these apartments, residents enjoy the luxury of being surrounded by greenery, which helps to create a sense of seclusion and tranquility, effectively hiding the "city" within a lush, natural environment. The apartment complex also features a well-equipped playground area, making it an ideal place for families.



\*facade of the apartment building

Each apartment building is four stories high and designed to maximize natural sunlight. The orientation of the buildings ensures that every apartment receives ample sunlight throughout the day, enhancing the living experience with bright and airy interiors.



\*lighting diagram

## PARK

The park acts as the lifeblood of Hydrocity, connecting the Maritime Museum, Maritime School and Research Center, and apartment buildings. It is designed like a network of blood vessels, holding the entire project together through a series of interconnected paths and larger "islands" at key intersections.

None of the paths are straight; instead, they are curvy and winding to encourage leisurely walks, allowing residents and visitors to slow down, look around, and connect with nature. The park is filled with birch trees, creating a serene and natural atmosphere that provides a refreshing escape from the urban environment.

Throughout the park, there are larger "islands" at each major cross-section, serving as communal hubs with various amenities. These islands are connected by smaller islands and winding paths, creating a sense of discovery and exploration as you move through the space.

In response to residents' wishes, the park can feature picnic spots and simple seating areas scattered throughout the islands. These areas would provide perfect spots for relaxation, socializing, and enjoying the outdoors.



\*driveway into the plot



\*park from ship's roof floor

The main purpose of the park is to create an environment that makes you feel like you are out of the city. By immersing visitors in greenery and nature, the park fosters a sense of tranquility and well-being, enhancing the overall living experience within Hydrocity.





All the plants used in this project are local and evergreen, ensuring the space feels cozy and welcoming year-round. The walking paths and drivable areas are white brick, providing a clean and elegant look. The plazas plazas feature grass pavers, which enhance drainage and allow greenery to grow through, blending with the natural surroundings.



Hawthorn (Crataegus monogyna)





This master plan shows the multi-functional development integrating residential, recreational, and commercial facilities. The plan is divided into several distinct zones, each serving different purposes and interconnected by a network of roads and pathways.

The development incorporates beautiful water features like canals, creating a peaceful atmosphere. These water bodies are surrounded by large green spaces for aesthetic and practical purposes, such as parks and buffers between different areas. The emphasis on green spaces and water features is more than just a design choice; it reflects a lifestyle that values living harmoniously with nature. This approach is about making things look nice, creating a healthier living environment and building a stronger sense of community.

Bridges connect different sections over water features, enhancing accessibility and integrating the various zones.

<sup>By</sup> **Kevin Marker**  The park is a central sports, recreation, and residential meeting point. Its purpose changes depending on the zone in which it is situated. In the residential zone, the park offers traditional amenities such as a playground, water fountain, restroom, and many seating areas, all surrounded by lush greenery. Just north of the water fountain, the area gently slopes towards the canal, providing a peaceful space for community gatherings, picnics, and relaxation, fostering community engagement.



There is more vegetation in the sports zone, creating a serene and invigorating environment for participants and spectators. Next to the football field is a spot by the canal where people can unwind and play chess. Towards the east of this area, a larger sloped area leads down to the canal, offering a place for relaxation and enjoying the waterfront.

For the recreation zone, the parking area is strategically located near the water, offering a picturesque view of the other two zones and making it easy for visitors to access.


#### **Design Vision:**

The Liverpool Riverside Sports and Wellness Hub is envisioned as a vibrant urban oasis that celebrates the city's rich sporting heritage while fostering a healthy, active, and environmentally sustainable community. By integrating diverse sports facilities with wellness amenities, the design aims to create a dynamic public space that caters to all ages and interests, set against the picturesque backdrop of the riverside.

#### **Design Elements:**

Football Field with Spectator Seating: At the heart of the site lies a state-of-the-art football field, reflecting Liverpool's passion for football. The adjacent spectator seating area is designed for comfort and visibility, creating a lively atmosphere for fans to enjoy matches and events.

Futsal Courts: Two futsal courts provide space for small-scale matches and practice sessions, promoting grassroots sports and offering a versatile area for both organized games and casual play.

Beach Volleyball Courts: Taking advantage of the riverside location, two beach volleyball courts are included, complete with spectator seating. These courts offer a unique recreational option and enhance the site's appeal as a multi-sport destination.

Pedestrian-Friendly Environment: The entire site is designed as a pedestrian-only zone, prioritizing safety and sustainability. This approach reduces vehicular traffic, lowers emissions, and creates a more inviting, walkable environment for visitors.

Bicycle Path and Rental Service: A dedicated bicycle path runs throughout the site, encouraging eco-friendly transportation. Bicycles are available for rent, making it easy for visitors to explore the area and promoting an active lifestyle.

Spa/Wellness Club: A three-story spa and wellness club anchors one end of the site, providing a sanctuary for relaxation and health. The facility offers a range of services, from fitness programs to spa treatments, supporting the well-being of the community.

Green Areas and Sustainable Landscaping: The site is predominantly developed as green space, featuring an abundance of trees and hybrid grass-paver flooring. This design enhances the aesthetic appeal, provides natural shading, and supports environmental sustainability by improving air quality and reducing heat islands.



bv

Mostafa



**Design Objectives:** 

Celebrate Local Heritage: The design honors Liverpool's football legacy by providing premier sports facilities that can host various events and activities.

Promote Health and Wellness: The integration of diverse sports and wellness amenities encourages active, healthy lifestyles and holistic well-being.

Enhance Community Engagement: The site is designed as a social hub where people can gather, interact, and enjoy a variety of recreational activities.

Environmental Sustainability: The pedestrian-friendly design, bicycle paths, and extensive green areas underscore a commitment to sustainability and ecological responsibility.



#### Conclusion:

The Liverpool Riverside Sports and Wellness Hub is a visionary project that merges the excitement of sports with the tranquility of green spaces and wellness facilities. By fostering a strong sense of community and promoting sustainable living, this development aims to become a cherished landmark along Liverpool's riverside, enriching the lives of residents and visitors through active recreation and serene relaxation.



by

Mostafa



The North Weat part of the plot features recreational area with two-level design. The ground level offers direct access to key facilities, including a boat service building, a bike rental and repair shop, a restaurant and a cozy cafe with an outdoor seating area. As well as it offers live music stage near the water creates a lively ambiance for visitors.

The lower level that is situated 3 meters below ground level, runs almost parallel to the waterline, providing a scenic walkway for leisure and community activities.





by Alexander



Residential area design was inspired by tribal settlement and nature itself. As in early settlements our two divisions of residential building blocks has the inner part reserved for tribes (in our case community's) inhabitants and outer part dedicated for infrastructure. This allow to have safe activities, like kid's games at children playground, relaxing evening and morning stroll or just nice occasional neighborhood meetings in the inner yard, that are not disturbed by ongoing motorized transportation. Safety is top priority in our residential area. And that applies to inner yards as well to access roads around the block. To menage traffic speed and provide safe environment we designed 2 to 3 parking spaces along the road thus narrowing streets width to one line. To meander between these parking "islands" driver must slow down his vehicle.

Joining two residential blocks and inviting guests from near and afar to our waterfront territory lays a pedestrian street with morning coffee places, souvenir shops, delicious pastry bakeries, small groceries stores and other pleasant pockets of excitement and joy on both sides of the street. Pedestrian road is covered by light roof in order to protect its guests from unforeseen weather conditions. The roof is constructed from lightweight materials and is shaped in resemblance of tent covers. This is also designed inspired by early settlements and brings all site together. Pedestrian street leads to sports section of the area and invites its walkers to experience new pedestrian bridge.

All residential area is surrounded and gradually filled with park. Park and channels are wonderful place to spend time with your close ones or just thoughtful walks in solitary peace.





# D4

## HYDROCITY **Wirral Waters Students: Magnus Gytre Lund Akif Ertugrul Birkenhead, United** Kingdom 2024



#### WHAT IS AROUNDT

Rowing Club Recycling Center

Lummation Dayoft

Truis Destas.

Research Back

Realization Dravid

2-Diffee House matrix

No have Compared

### Case Studies



A DESCRIPTION OF THE OWNER.









### Zoning Ideas





THE PLOT IS LOCATED AT THE END OF WIRRAL WATERS IN BIRKENHEAD. THE WE DID IN THE DESIGN PROCESS WAS TO ANALYSIS THE SURROINDING AREA. BY THE ANALSIS WE DID WE FIGURED OUT THAT IT WOULD BE A GOOD IDEA TO DIVIDE OUR PLOT INTO TWO DIFFERENT ZONES. WHERE THE AREA SIDED WITH THE ROAD WOULD BE THE "INDUSTRIAL ZONE" AND THE AREA WITH THE WATERFRONT BECOMING A RESIDENTIAL ZONE WITH GREAT VIEW OVER THE WIRRAL WATERS. IN THE "BUFFER ZONE" WE CREATED A GREEN AREA AND INCLUDED WATER TO MAKE THE BUFFER ZONE MORE FUNCTIONING AND ALSO CONNECT THE PLOT MORE WITH THE WEST FLOAT.

4 | 5

THE IDEA OF THE RESIDENTIAL BUILDING IS THAT ITS BOTH SOCIAL HOUSING AND PRIVATE HOUSING, WE CHOOSED THIS BECAUSE WE WERE AFRAID THAT IT WOULD ONLY BECOME A PLACE FOR THE OVERCLASS. IN THE GROUND FLOOR WE HAVE DIFFERENT FUNCTIONS FROM STORAGE, COMMON KITCHEN FOR THE RESIDENTS TO A GYM AND CAFES.

SOME SKETCHES OF THE PROJECT DEVELOPMENT.







THE IDEA OF THE LANDSCAPE WAS TO CREATE A LARGE CONTRAST BETWEEN THE PEDESTRIAN STREET WITH THE RESIDENTIAL BUILDINGS AND THE GEOMETRICAL STREETS. ROBERTO BURLE MARX INSPIRED US IN LANDSCAPE ARCHITECTURE BECAUSE OF HIS USE OF ORGANIC SHAPES AND BOLD, ABSTRACT FORMS. HIS INNOVATIVE DESIGNS FEATURE SWEEPING CURVES AND GEOMETRIC PATTERNS THAT CREATE VISUALLY STRIKING AND HARMONIOUS LANDSCAPES. MARX'S APPROACH ENCOURAGES US TO MOVE BEYOND TRADITIONAL, RIGID DESIGNS AND EMBRACE MORE FLUID, NATURAL SHAPES, WHICH MAKES THE SPACE FEEL MORE DYNAMIC AND CONNECTED TO THE ENVIRONMENT. HIS WORK SHOWS HOW CREATIVITY AND NATURE CAN COME TOGETHER TO CREATE BEAUTIFUL, INSPIRING LANDSCAPES.

6 7

THE DIFFERENT ORGANIC ZONES IN OUR DESIGNS HAS DIFFERENT FUNCTIONS, WE HAVE AREAS FOR EVERYONE TO ENJOY. IN THE CENTER, THERE'S A ROSE GARDEN FOR QUIET AND RELAXATION. AROUND IT, THERE ARE GREEN SPACES FOR LOUNGING AND PICNICS. WE ALSO HAVE A SPORTS AREA FOR VARIOUS ACTIVITIES, ENCOURAGING PEOPLE TO STAY ACTIVE. THERE ARE MEETING POINTS AND SEATING AREAS FOR SOCIALIZING AND CONNECTING WITH OTHERS. WINDING PATHS AND SHADED WALKWAYS MAKE THE PARK EASY TO EXPLORE, WHILE A CHILDREN'S PLAYGROUND AND A PEACEFUL WATER FEATURE ADD MORE OPTIONS FOR FUN AND RELAXATION. EACH AREA FLOWS NATURALLY INTO THE NEXT, MAKING THE PARK A WELCOMING PLACE FOR ALL VISITORS.

WE DESIGNED THE ORGANIC SHAPES OUTSIDE OUR BUILDINGS TO CREATE A SEMI-PRIVATE AREA FOR RESIDENTS. OUR GOAL WAS TO GIVE A SENSE OF PRIVACY, MAKING THE OUTDOOR SPACES FEEL MORE LIKE HOME. THE FLOWING, NATURAL SHAPES HELP TO SEPARATE THESE AREAS FROM THE PUBLIC SPACES, OFFERING RESIDENTS A COMFORTABLE AND INVITING ENVIRONMENT WHERE THEY CAN RELAX AND ENJOY A SENSE OF SECLUSION.



THE TOP FLOORS FEATURE LARGER, PRIVATE APARTMENTS WITH GREAT VIEWS, OFFERING MORE SPACE AND PRIVACY FOR RESIDENTS WHO SEEK A MORE EXCLUSIVE LIVING EXPERIENCE.

THE LOWER FLOORS ARE DESIGNATED FOR SOCIAL HOUSING, ENSURING COMFORTABLE AND INCLUSIVE HOMES FOR EVERYONE. THESE UNITS ARE DESIGNED TO BE ACCESSIBLE AND FUNCTIONAL, WITH A SENSE OF COMMUNITY. ON THE GROUND FLOOR, WE HAVE PUBLIC AREAS SUCH AS GARDENS, MEETING SPOTS, AND RECREATIONAL SPACES, ENCOURAGING SOCIAL INTERACTION AND A VIBRANT COMMUNITY ATMOSPHERE.

WE ALSO INTEGRATED A WATER IN THE MIDDLE OF OUR PLOT, WHICH DIVIDES THE TWO AREAS AND MAKES IT MORE CONNECTED. THIS WATER ELEMENT ADDS A SERENE AND CALMING PRESENCE, ENHANCING THE OVERALL AESTHETIC AND PROVIDING A PEACEFUL RETREAT FOR RESIDENTS.

WE SELECTED A LIGHT-COLORED BRICK FOR THE BUILDING MATERIAL, WHICH IS BOTH DURABLE AND AESTHETICALLY PLEASING. THIS BRICK SUITS MANCHESTER'S ARCHITECTURAL STYLE, ADDING WARMTH AND A MODERN TOUCH TO THE BUILDINGS. IT HELPS CREATE A COHESIVE AND INVITING LOOK FOR THE ENTIRE DEVELOPMENT, MAKING IT A PLEASANT PLACE TO LIVE FOR ALL RESIDENTS.

# D5


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INTER STATES

WIRRAL WATERS

# DEVELOPMENT PLAN: THE NORTH TO THE West Float

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ARALAN T PREFAMILANT





#### WIRRAL WATERS DEVELOPMENT PLAN: THENORTHTOTHEWESTFLOAT

RISEBA FAD

E. Duyan | I. Paklone | J. Buechel

Valts Zaķis |

RIGA | 2024



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DEVELOPMENT AND ADMINISTRATION

**GREEN AREAS** 

WAREHOUSE EFECTIVE USAGE







### DATA OF THE PLOT

Adress: West Float of the River Mersey - Britannia House, Dock Road, Wallasey, Wirral CH41 1DF

Size : 57'095 m2

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Lenght and width: 607m and widest part of the plot is 110m

Functions : working plot consists of mulitple functions sports club with rowing club; warehouse with access to the waterline; Gas storage with gas tanks up 17m height; building with householf good store and car services.

They all have limited access to public: they are protected with fences and gates

#### NO ACCESS TO WATER

As the plot consists of private land plots, the owners are protecting their properties with fences and walls from the street side. The fences makes the West Float unaccessable to public on the other side of the plot. The only way meeting the water line is from the rowing club but the rowing club is also protectet with fence.

#### NO GREEN AREAS

The functions of the plots are mostly industrial like car services, warehouse and gastanks. Those kind functions rarely include green areas with proper laws, bushes and trees and this no exception. Next to the gastanks is zone with residential building where people are living. It is also with small amount of green areas. It is a big contrast between zone with gas tanks and a zone with residential building. There is no buffer zone.





#### WAREHOUSE USAGE

The warehouse in the plot is not used to it potential. It is located next to the float with active ship and boat traffic. The truck and car movement in the plot of the warehouse is also not used to its maximum potential. The truck movement is not well organized and it tends to make traffic in parking lot.

## GLOBAL PROBLEMS TO BE SOLVES

#### SUSTAINABILTY

The plot consists of working gas tanks by providing the neighborhood with gas. As gas energy is beeing used less and less the gas tanks will not be used in future like nowadays because of global warming. It does not mean they will have to demolished. They could be left as monument of the time gas beeing used.





#### NO OFFICES NEARBY

The neighborhood consists residentialbuidings, warehouses, servise buildings and sports clubs, but there is no place place for idea developments and neighborhood's administration and oficial meeting points.

## SOLUTION 1: NO ACCESS TO WATER



To provide access to the waterline from the Dock rd, some part of the plot need change it's function. This case it is the middle part with the Gas tanks.



From the street to the waterline the ground floor has to be with a lot of publicly available and open area. It is done by making tunnels through the building towards the water.

The tunnels are about 30 meters in width and 5 meters in height for openness and access of fire truck in case of an emergency.

The water line is going to be with a promanade for unofficial meeting, walks and the steps provide better whatching of sunsets and rowing competations in the West float.



## SOLUTION 2: NO GREEN AREAS

## 100.0m2 --> 7′500.0 m2



There are no proper lawns, bushes or trees across the whole 57'095m2 area. It is going to be increased significantly. From 0.6% of green area to 13.1% of the plot.

The promanade across the water line will provide a green corridor from park from north of the plot and to the forrest/ park south/east from the plot

## SOLUTION 3: WAREHOUSE USAGE





The warehouse in the plot is providing the neighborhood with products and groceries. The product are delivered from the warehouse by truck to shops.

It is planned in the project to increase the warehouse building towards the float and the street.

Towards the street will be new truck flyovers loading flyovers and the truck and car movement will be in one direction. One directional movement will provide more effective loading. The trucks will be entering north of the plot from the roundabout and exit in the east of the plot.

The waterline direction is going to be also increased with new boat flyovers. The boats will provide products to restaurants, operas and shop by water. They will have a lot of boat harbors and it will decrease the amount of truck on the roads.



## SOLUTION 4: SUSTAINABILTY





Usually sustainabilty is show in tables in numbers - energy efficiency pasports Amount of used energry, perimetral construction heat transfer coefficient (U-value).

The goal in this project is to show visualy care about sustainabilty:

- reconstruct the old gastanks to use them for public use;

- keep the original view of the gas tanks to remaind of the time when gas was one the main energy sourses;

- build around the gas tanks CLT (cross-laminated timber) contruction to connect multiple gastanks as one building.

The old gas tanks and new CLT constructions will be as contrasting elements and will work as a monument.



## **SOLUTION 5: NO OFFICES NEARBY**

The new building made out of old steel

gas tanks and new CLT constructions around them will be as a office building as its main function. It will also include 3 floored multi-storey car parking, public function like a library, restaurant, coffee shop, IT workshop and GYM.





20 | 21

# D6

## **WEST FLOAT**



#### HYDROCITY Wirral Waters Mobility point

location

year area size floor area floor count students West float, Birkenhead, United Kingdom 2024 29745 m<sup>2</sup> 1960 m<sup>2</sup> 1 Evita Andreja, Dita Viļuma

At the northern side of West Float an area that once housed a chemical storages, with its metal cylinders marking the landscape. Spanning 29744.81 m<sup>2</sup> (approximately 500 meters long and 80 meters wide), this closed-off space is now being transformed into an open area that blends residential and industrial elements with a park and a new bus station.

## WIRRAL BUS SATION

WATERS

In Wirral Waters, you first arrive at the new one-story bus station, designed with future development plans of Wirral Waters in mind. This new station is intended to solve mobility issues while serving as more than just a transit point. It's a busy meeting place for locals. Where once stood cylinders, now the building opens up to a garden. You pause at the station's café, enjoying the aroma of fresh coffee while observing the activity around you.

### ECOLOGICAL MOBILITY POINT





#### WIRRAL WATERS

You look around and see skaters glide through the park to reflect the contours of the old cylinders. And listen closely, because you'll hear the laughter of children playing nearby, their joy echoing against the gentle splash of water from a water area. This sustainable approach ensures that the bus stop gardens remain lush and green, a contrast to the gray industrial past. Rainwater collected across the land plot and supplied to the water area. As you go further, you'll discover the wild area - a space where nature reclaims its territory. Some of the old cylinders have been repurposed into homes for insects and small animals, showcasing how the old can seamlessly blend with the new, creating a habitat that supports life

ling and the



Section cuts A-A and B-B The bus station, spanning an area of almost two thousand m<sup>2</sup>, hosts various facilities including waiting areas, cafes, technical rooms, restrooms, shops, and gardens. While the private areas are made of concrete panels, the public space is opened up with glass facades.

This architecture stands as a single – story structure around 6 meters to relate to the adjacent residential buildings. Gardens within the station are placed where cylinders once stood. While the current situation features only one bus lane, future plans include expansion to electric intercity buses and local buses, aligning with our classmates' projects and planned transportation needs.





8 | 9





Every step through this space tells a story of transformation – a celebration of industrial heritage preserved and celebrated, with gardens blooming where cylinders once stood. It's about blending industrial history with future potential, creating a vibrant community hub that honors its past while embracing its future.

10 | 11

# D7
# ANOMAALIA



#### ANOMAALIA

location year authors Wallasey / Birkenhead, Liverpool, United Kindom 2024 Nauris Lukjanovics, Mārcis Rautiņš

In the crossroads between Birkenhead and Wallasey communes lies a space where the past lingers, but its qualities have not been lost, submerged in the forgotten space within the water that once animated it. We are tasked to reimagine and repurpose this plot by giving it a story with an arc, a narrative that avoids a tragic ending and instead embraces renewal. Standing by the water are silent witnesses to the plot's storied past. These structures, though grand, have become relics, overshadowed by the passage of time. Yet, they hold potential, a reminder that adaptability is key to survival.

Plot serves as a transitional space - where one can disappear and find solace. It is a four-dimensional space, an anomalous place where the usual rules do not apply. Entering this space, one delves in these four dimensions, thus four dimensional directions - from above to below, from past to future, from front to back and at the intersection of all these directions is the present, the middle, the now, where our vision for the plot begins to take shape. Our plot is uniquely situated, divided into two districts: Birkenhead and Wallasey. Each has its own history, culture, and feel, yet they share this forgotten land. By blending their histories and bringing all times together, we create a mix of everything, a place that honours the past while looking to the future.

The hangars on the site, once mere storage spaces, serve as an intermediate space between the outside and the inside, offering a transitional, more enclosed area for people to gather and interact, and thus create a sense of community.



Dimensional anomaly in the plot creates a sense of mystery - merging spaces together to overpower the least favourable, thus creating thoughts for the explorers - is it a forest or a parking lot?

- is it indoor or outdoor?
- is it a roof or a street?
- is it a second floor or a ground floor?
- is it the past or the future?
- is it industrial or commercial?
- is it private or public?
- where am I?

A "forest" of trees planted on the street side decreases noise pollution generated by the heavy vehicles and manufacturing facilities surrounding the plot.

Our goal is to create a space where these distinctions blur, where the past and future coexist, and where the industrial and natural worlds intertwine. This plot, once forgotten, will become a place of renewal and transformation.

Preserving historical walls as borders



Reviving the space by adding new functions



Adjusting the volumes to harmonize with neighboring structures



Bringing inside to the outside







4 | 5



# 3RD YEAR SPRING SEMESTER DESIGN STUDIO

# ENGLAND WALLASEY BIRKENHEAD





VAUXHALL

KIRKDALE

### Liverpool

LIVERPOOL CITY CENTRE

RISEBA FAD

Jonas Büchel Efe Duyan, Ilze Paklone

Anna-Marija Iskrova| Anastasija Šakele RIGA | 2024

**WIRRAL WATERS PROJECT:** 

"THE GREAT FLOAT COMPLEX"

BALTIC TRIANGI

Duppiu', Bootle, Liverpool, UK - Douglas, Isle of Man **NEW BRIGHTON** Wallasey EGREMONT LISCARD POULTON Best of thenhead SEACOMBE NORTH BIRKENHEAD CLAUGHTON Birkenhead NOCTORUM

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## Liverpool

LIVERPOOL CITY CENTRE

BALTIC TRIANGLE

WAVERTREE

TOXTETH

#### PART 1: FIRST STEPS

AT THE BEGINNING OF THE PROJECT, WE CONDUCTED EXTENSIVE RESEARCH TO GATHER INFORMATION ABOUT THE LAND PLOT AND THE SURROUNDING AREA. THE INVESTIGATION PRIMARILY FOCUSED ON THE SOCIAL STRUCTURES, SUCH AS SOCIAL ACTIVITIES, LEISURE, RECREATIONAL ACTIVITIES, AND EDUCATIONAL INSTITUTIONS. SUCH RESEARCH WAS DONE SINCE SOCIAL STRUCTURES PLAY A SIGNIFICANT ROLE IN THE STABILITY, DEVELOPMENT, AND PROGRESS OF SOCIETIES AS WELL AS SHAPE THE SOCIAL ENVIRONMENT AND INFLUENCE INDIVIDUAL BEHAVIOUR. APART FROM THAT, WE ANALYSED THE LOCAL COMMUNITY AND ITS NEEDS FOCUSING ON ETHNICAL AND SOCIAL GROUPS AS WELL AS ON OTHER ASPECTS, SUCH AS AGE, OCCUPATION, EDUCATION AND PHYSICAL ABILITIES.

IN THE PROCESS OF THE RESEARCH, IT WAS DETERMINED THAT BOTH THE LAND PLOT AND THE AREA AROUND IT HAD NO FACILITIES SUCH AS SCHOOLS, LIBRARIES, APARTMENTS, PLAYGROUNDS, ENTERTAINMENT CENTRES, ETC., FOR LOCAL FAMILIES AND YOUNG PEOPLE. MOST PROBABLY, THIS WAS ONE OF THE MAIN REASONS FOR THE MIGRATION OF THESE SOCIAL GROUPS TO LIVERPOOL, THE CITY THAT IS LOCATED JUST ACROSS THE RIVER MERSEY. CURRENTLY, THERE IS A SIGNIFICANT IMBALANCE BETWEEN THE NUMBER OF ELDERLY PEOPLE, FAMILIES, AND YOUNG PEOPLE. BECAUSE OF THAT. WE DECIDED TO BASE OUR CONCEPT ON SOCIAL STRUCTURES.

**CONCEPT STRATEGIES** 



THE MAIN OBJECTIVE OF THIS PROJECT WAS TO ENSURE THAT PEOPLE OF ALL AGES AND CULTURES COULD VISIT THE SITE, ENGAGE IN DIFFERENT ACTIVITIES, AND POTENTIALLY BECOME RESIDENTS OF THE COMPLEX. CONSEQUENTLY, THIS SHOULD INCREASE THE NUMBER OF FAMILIES AND YOUNG PEOPLE RESIDING IN THE AREA AS WELL AS IMPROVE THE LIFE QUALITY OF THE ELDERLY. THUS, FAMILIES WILL STOP MIGRATING TO LIVERPOOL, AND YOUNG PEOPLE, IN TURN, WILL DISCOVER NEW OPPORTUNITIES IN THE TOWN OF WALLASEY.





SOCIAL SITUATION

#### MAIN DESIGN PRINCEPLES

#### SITUATION BEFORE CONCEPT



WHEN DEVELOPING THE CONCEPT AND DISTRIBUTING FUNCTIONS ACROSS THE COMPLEX, WE DECIDED TO ESTABLISH THREE MAIN SPACES THAT WOULD CONNECT THE NEARBY FUNCTIONS.

AS CAN BE OBSERVED, THE THREE OVAL-SHAPED ZONES ARE PRECISELY THESE MAIN SPACES. THE CHOICE OF THE OVAL SHAPE WAS BASED ON ITS SYMBOLIZATION OF THE BEGINNING OF A PROCESS AND THE EMERGENCE OF LIFE IN EMPTINESS.

THESE AREAS CONNECT THE BUILDINGS, WHICH, IN TURN, MIMIC THE SHAPE OF THE OVAL. ALL BUILDINGS ARE ALIGNED IN A SINGLE LINE AND ARE LOCATED CLOSER TO THE ROAD TO PROVIDE MORE SPACE NEAR THE RIVERBANK. ADDITIONALLY, OUR SITE INCLUDES AN EXPANDED PROMENADE, WHICH ONCE EXISTED OR WAS SUPPOSED TO.

APART FROM THAT, WE ALSO DESIGNED A PIER FOR SMALL BOATS AND MOTORBOATS, WHICH WILL HAVE AN OPPORTUNITY TO DOCK NEAR THE SITE. IN THE DIAGRAMMS ALSO CAN SEE WHERE IN LANDPLOT IS PUBLIC AND SEMI-PUBLIC SPACES



FIRST OVAL IS A "PLAY" AREA AND INCLUDES A VARIETY OF PLAYGROUNDS FOR KIDS. THE SECOND OVAL IS THE LEARN, WATCH, AND TOUCH PARK, WHICH ALSO INCLUDES A STADIUM WITH A BASKETBALL COURT, A SKATE PARK, AND FOOD COURTS. THE THIRD OVAL CALLED THE "PERFORMANCE AND EDUCATION" AREA INCLUDES AN AMPHITHEATRE, A LABYRINTH, AN EXHIBITION SPACE, AND AN OPEN MEETING AREA. AROUND THE FIRST OVAL, THERE ARE OFFICE BUILDINGS AND APARTMENTS SITUATED NEXT TO EACH OTHER AND THE LIBRARY RIGHT IN FRONT OF THEM. AROUND THE SECOND OVAL, THERE IS A SCHOOL AND A PARKING HOUSE. AROUND THE THIRD OVAL, THERE IS A MULTIFUNCTIONAL HALL SPACE AND AN ART AND MUSIC SCHOOL.



AROUND THE THIRD OVAL, THERE IS A MULTIFUNCTIONAL HALL SPACE AND AN ART AND MUSIC SCHOOLTHESE THREE OVALS CREATE A COMPREHENSIVE SPACE WHERE ONE CAN LEARN, PLAY, AND ENTERTAIN, AS WELL AS ENJOY CULTURAL EVENTS. SUCH DISTRIBUTION PROMOTES HARMONIOUS DEVELOPMENT AND MEETS THE DIVERSE NEEDS OF RESIDENTS AND VISITORS.

THESE THREE OVALS CREATE A COMPREHENSIVE SPACE WHERE ONE CAN LEARN, PLAY, AND ENTERTAIN, AS WELL AS ENJOY CULTURAL EVENTS. SUCH DISTRIBUTION PROMOTES HARMONIOUS DEVELOPMENT AND MEETS THE DIVERSE NEEDS OF RESIDENTS AND VISITORS.

#### PART 3: LANDSCAPE FOR LEARN, WATCH AND TOUCH PARK



TO VISUALLY SEPARATE THE SMALL PATHWAYS AND FOOD COURTS FROM OTHER SURFACES, WE USED SLATE PAVING SLABS. THESE SLABS ADD A NATURAL AND TEXTURED APPEARANCE, ENHANCING THE AESTHETIC APPEAL OF THESE AREAS. THE DISTINCT LOOK OF SLATE PAVING CREATES A PLEASANT AND INVITING ATMOSPHERE FOR LEISURELY WALKS AND DINING. THE AREAS DESIGNATED FOR BENCHES ARE COVERED WITH COMPOSITE DECKING. COMPOSITE DECKING OFFERS A COMBINATION OF DURABILITY AND VISUAL APPEAL, WITH A WOOD-LIKE APPEARANCE THAT COMPLEMENTS THE PARK'S OVERALL DESIGN. IT IS RESISTANT TO WEATHERING AND REQUIRES MINIMAL MAINTENANCE, MAKING IT A PRACTICAL CHOICE FOR SEATING AREAS. THE PICTURE ALSO REPRESENTS THE PLANT LIFE WITHIN THE PARK. AFTER RESEARCHING THE NATIVE PLANTS OF GREAT BRITAIN, WE CONCLUDED THAT THE MOST WIDESPREAD TREES ARE THE GREAT MAPLE, ASH, AND ENGLISH OAK. CONSEQUENTLY, WE SELECTED THESE THREE SPECIES TO BE PLANTED THROUGHOUT THE PARK. THEIR PRESENCE NOT ONLY PROVIDES SHADE AND BEAUTY BUT ALSO SUPPORTS THE LOCAL ECOSYSTEM.

IN ADDITION TO TREES, WE INCORPORATED OTHER TYPES OF GREENERY. ORNAMENTAL CEREALS WERE CHOSEN FOR THEIR DECORATIVE QUALITIES AND LOW MAINTENANCE REQUIREMENTS. THESE PLANTS ADD TEXTURE AND VARIETY TO THE LANDSCAPE, CREATING VISUALLY INTERESTING GREEN SPACES THAT ENHANCE THE PARK'S AESTHETIC. THE LIGHTING DESIGN IS ANOTHER CRITICAL ASPECT OF THE PARK'S LAYOUT. TO ILLUMINATE THE WIDER AREAS, WE INSTALLED 7-METER-HIGH STREET LAMPS. THESE TALLER LAMPS ENSURE THAT THE MAIN PATHWAYS AND PROMENADES ARE WELL-LIT, FACILITATING SAFE AND COMFORTABLE NAVIGATION FOR VISITORS. FOR THE SMALLER PATHWAYS AND FOOD COURTS, WE USED 30-CENTIMETER-HIGH LAMPS. THESE

IN ORDER TO SHOWCASE THE LANDSCAPE IN GREATER DETAIL, WE SELECTED THE LEARN, WATCH, AND TOUCH PARK AS A REPRESENTATIVE EXAMPLE. THE PICTURE OF THE PARK HIGHLIGHTS SEVERAL TYPES OF MATERIALS USED TO COVER ITS VARIOUS SURFACES, EACH CHOSEN FOR ITS SPECIFIC PROPERTIES AND SUITABILITY FOR THE DESIGNATED AREAS.

FIRSTLY, THE PROMENADE AND INNER PATHWAYS ARE COVERED WITH CONCRETE. CONCRETE WAS CHOSEN FOR ITS DURABILITY AND RESILIENCE, MAKING IT AN IDEAL MATERIAL FOR HIGH-TRAFFIC AREAS. ITS ABILITY TO WITHSTAND HEAVY USE AND VARYING WEATHER CONDITIONS ENSURES THAT THE PATHWAYS REMAIN SAFE AND ACCESSIBLE OVER TIME.

FOR THE BASKETBALL COURT AND SKATEPARK, WE OPTED FOR SEAMLESS RUBBER. THIS MATERIAL WAS SELECTED FOR ITS NOISE SUPPRESSION AND IMPACT ABSORPTION CAPABILITIES, WHICH ARE CRUCIAL FOR SPORTS AREAS. THE SEAMLESS RUBBER SURFACE REDUCES THE NOISE GENERATED BY ACTIVITIES AND MINIMIZES THE RISK OF INJURY FROM FALLS, PROVIDING A SAFER ENVIRONMENT FOR USERS.



#### PART 4: MULTIFUNCTIONAL HALL

A NOTABLE FEATURE OF THE LANDPLOT IS THE MULTIFUNCTIONAL HALL. THIS HALL CONSISTS OF TWO PHYSICALLY SEPARATE YET FUNCTIONALLY AND CONCEPTUALLY UNITED BUILDINGS AND BELONGS TO THE "PERFORMANCE AND EDUCATION" ZONE. WE DECIDED TO DIVIDE THE HALL INTO TWO SEPARATE BUILDINGS BECAUSE THE LARGER PART IS ONLY USED DURING PERFORMANCES, WHILE THE SMALLER ONE FUNCTIONS DAILY.



**BUILDING FUNCTIONS** 



THE LARGER PART OF THE HALL HOUSES A CONCERT HALL, WHICH CAN ACCOMMODATE (NUMBER OF PPL) PEOPLE. THIS MAIN HALL IS DESIGNED WITH STATE-OF-THE-ART ACOUSTICS AND LIGHTING SYSTEMS, MAKING IT IDEAL FOR CONCERTS, THEATRICAL PERFORMANCES, AND LARGE GATHERINGS. THE BACKSTAGE AREA INCLUDES SEVERAL DRESSING ROOMS EQUIPPED WITH MIRRORS, MAKEUP STATIONS, AND LOUNGE AREAS FOR PERFORMERS TO PREPARE COMFORTABLY. ADDITIONALLY, THE LARGER BUILDING FEATURES A CAFE BAR, PROVIDING A STYLISH AND WELCOMING SPACE FOR GUESTS TO ENJOY REFRESHMENTS BEFORE, DURING, AND AFTER EVENTS. THE CAFE BAR OFFERS A RANGE OF BEVERAGES AND LIGHT SNACKS, ENHANCING THE OVERALL VISITOR EXPERIENCE. SPACIOUS AND SECURE WARDROBES ARE AVAILABLE FOR GUESTS TO STORE THEIR BELONGINGS DURING EVENTS. TWO SMALL CONCERT HALLS ARE ALSO INCLUDED IN THE LARGER BUILDING, DESIGNED FOR SMALLER, MORE INTIMATE PERFORMANCES AND EVENTS. THESE HALLS PROVIDE FLEXIBLE SEATING ARRANGEMENTS AND ARE EQUIPPED WITH HIGH-QUALITY SOUND AND LIGHTING SYSTEMS.

THE SMALLER PART OF THE HALL INCLUDES COWORKING SPACES, MEETING ROOMS, AND STUDIOS FOR MASTERCLASSES. THESE SPACES ARE DESIGNED TO ACCOMMODATE FREELANCERS, REMOTE WORKERS, AND SMALL TEAMS, OFFERING A COLLABORATIVE ENVIRONMENT EQUIPPED WITH MODERN AMENITIES SUCH AS HIGH-SPEED INTERNET, ERGONOMIC FURNITURE. AND CONFERENCE FACILITIES. THE MEETING ROOMS CATER TO BUSINESS MEETINGS, WORKSHOPS, AND SMALL GROUP DISCUSSIONS, EQUIPPED WITH PRESENTATION TOOLS. COMFORTABLE SEATING, AND SOUNDPROOFING FOR PRIVACY. THE STUDIOS ARE VERSATILE SPACES FOR VARIOUS EDUCATIONAL AND CREATIVE ACTIVITIES, INCLUDING ART CLASSES, MUSIC LESSONS, AND CRAFT WORKSHOPS, FULLY EQUIPPED WITH NECESSARY TOOLS AND MATERIALS.





## 3RD YEAR SPRING SEMESTER

ENGLAND WALLASEY 2024



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NUKE 1

### FIRST STEPS

#### GRAND SCALE

Liverpool is situated in a geostrategic location, occupying a pivotal position within the United Kingdom. It is connected to other cities by rail, as well as numerous highways. Moreover, Liverpool is a port city, which, along with its existing transportation infrastructure and potential for growth in tourism, will contribute to the city's economic prosperity. Indeed, Liverpool has a long history of leading trade routes, not only to Europe but also to Ireland and the United States. Furthermore, the commercial port facilitates the inland sea transportation of goods. It is possible to



4

NUKE 1

#### Small scale

We will now discuss the smaller scale of our territory, which is located in the area of old factories, hangars and other similar structures that do not particularly attract the population to move there to live, study or work. The current terrain contributes to crime and disadvantage. However, there are advantages to the area, such as the infrastructure. The territory is situated to the west and east of the city centre, with bridges providing convenient access by car and foot. To the north, a tunnel connects the area to the city centre. Public



5

Nuke 1

#### NUCLEAR ENERGY

The United Kingdom's decision to invest IN NUCLEAR POWER REPRESENTS A STRATEGIC MANOEUVRE, PARTICULARLY IN ITS QUEST TO ACHIEVE CARBON NEUTRALITY BY 2050. NU-CLEAR POWER PROVIDES A RELIABLE AND EN-VIRONMENTALLY FRIENDLY REPLACEMENT FOR FOSSIL FUELS, RESULTING IN A SIGNIFICANT REDUCTION IN GREENHOUSE GAS EMISSIONS. As a dependable and continuous source of ELECTRICITY, IT SERVES TO COMPLEMENT THE INTERMITTENT NATURE OF RENEWABLE ENERGY SOURCES SUCH AS WIND AND SOLAR, THEREBY EN-SURING A CONSISTENT AND RELIABLE SUPPLY OF ENERGY. FURTHERMORE, THE CONSTRUCTION AND EXPANSION OF NUCLEAR INFRASTRUCTURE CAN STIMULATE ECONOMIC GROWTH, CREATE HIGH-LY SPECIALISED EMPLOYMENT OPPORTUNITIES. AND PROMOTE TECHNOLOGICAL ADVANCEMENT. By diversifying its energy portfolio, the UK CAN ENHANCE ITS ENERGY SECURITY, RE-DUCE ITS DEPENDENCE ON IMPORTED FUELS, AND ESTABLISH ITSELF AS A LEADER IN THE GLOBAL SHIFT TOWARDS SUSTAINABLE ENERGY SYSTEMS. INVESTING IN NUCLEAR POWER IS A PRAGMATIC AP-PROACH TO MEETING THE COUNTRY'S GROWING EN-ERGY NEEDS AND IS ESSENTIAL TO ACHIEVING LONG-TERM ENVIRONMENTAL AND ECONOMIC GOALS.



NUKE 2

### MASTERPLAN

WITH REGARD TO THE MASTERPLANE, IT MAY BE CONSIDERED AS CHAOTIC AS THE ATOM IN NUCLE-AR ENERGY. WHILE THE INDIVIDUAL ROADS MAY APPEAR TO BE A CONFUSING JUMBLE, THEY COLLEC-TIVELY FORM A COHERENT CHAIN OF MOVEMENT. The role of the proton is analogous to that OF A HUMAN BEING, WHO AT FIRST GLANCE AP-PEARS TO MOVE CHAOTICALLY. HOWEVER, THIS AP-PARENT CHAOS IS IN FACT STRUCTURED, WITH ALL ROADS ULTIMATELY LEADING TO OUR INSTITUTE OF NUCLEAR ENERGY. THE ABSENCE OF A PRO-TON WOULD PRECLUDE THE EXISTENCE OF ENER-GY. CONSEQUENTLY, IT IS IMPERATIVE TO ENGAGE AS MANY INDIVIDUALS AS POSSIBLE IN EXPLORING THE TERRITORY, INVESTIGATING OUR INSTITUTE, AND ACQUIRING AN UNDERSTANDING OF THE PO-TENTIAL APPLICATIONS OF NUCLEAR ENERGY. THIS UNDERSTANDING CAN BE ATTAINED THROUGH ED-UCATIONAL PURSUITS AND THE UTILISATION OF NUCLEAR ENERGY IN PRACTICAL APPLICATIONS.



Nuke 3

## TOWERS & INSTITUTE FOR ADVANCED NUCLE-AR ENERGY RESEARCH

The design concept for the waterfront COMPLEX IS BASED ON THE PRINCIPLES OF SEAM-LESS INTEGRATION AND BALANCE. THE DIS-X-shaped TOWERS TINCTIVE **SYMBOLISE** INNOVATION AND COLLABORATION, WHILE OPTI-MISING SPACE AND PROVIDING EXPANSIVE VIEWS. The implementation of the design philoso-PHY'S PRINCIPLES RESULTS IN THE CREATION OF A COHESIVE ATMOSPHERE THAT FOSTERS INNOVATION AND EFFICIENCY, WHILE PRIORITISING THE IMPOR-TANCE OF SAFETY AND WELL-BEING. THE PROJECT'S COMMITMENT TO A MORE SUSTAINABLE FUTURE IS EVIDENT IN ITS USE OF ENVIRONMENTALLY FRIENDLY MATERIALS AND THE IMPLEMENTATION OF PASSIVE DESIGN PRINCIPLES. THE CONSEQUENCE OF THIS APPROACH IS THE CREATION OF A DYNAMIC AND IN-SPIRING ENVIRONMENT THAT SIMULTANEOUSLY EN-COURAGES THE PURSUIT OF EXCELLENCE IN RESEARCH








## D10



# THE EARTH'S FINGERPRINT



### Dune The Earth's Fingerprint

Year: 2024 Team: Tomass Bakevics & Aleksejs Sviridekno Tutors: Ilze Paklone, Efe Duyan, Jonas Buechel Riseba 3rd Year Studio

The concept of improvement and the source of inspiration for our team was the nature near the epicenter of change. Looking at satellite images, we were struck by the beauty of the coastline with the Irish Sea. The way the water meets the sand and creates unique patterns on the shore, like an artist on a canvas. These forms resemble dunes in the desert, vast hilly expanses blown by winds, heated by the sun, shining brightly. This made us think...





How are dunes formed?

We have to look back at the wild winds in the seas and oceans.

The direction of the winds remains constant, as its main driving force is the ocean currents.



The only things that change are temperature and wind.

And then there is the moon, which controls the movement of water levels.

These combinations of elements form the dunes.

A dune as the fingerprint of the Earth.





### Dune As a Symphony

The specific location of our team's concept was discussed for a long time, as our site represents an established ecosystem with significant buildings and enterprises. Ultimately, we identified the commercial zone, which housed the warehouse, storage tanks, and similar structures, as the weak link. Our team decided to completely eliminate them, as this would give us approximately half of the entire area, providing us with freedom of action and creativity.

After a long process of studying and analyzing the environment of our site, it was decided to build something iconic, a place that could be called a symbol and distinctive feature of both Wallasey and the left side of the Mersey as a whole. This decision was made due to the contrast between the two waterfronts, where the Liverpool side looked very memorable and unique.

We decided that our symbol would be a philharmonic hall. We considered music as the tool that would bring new life and transform the entrenched commercial and industrial foundations of Wirral Waters. With this decision, we want to initiate a wind of change for the local residents of Wallasey and Birkenhead and bring more color and emotion to their gray everyday lives. This was the birth of our concept. We began working with exclusively organic forms, and over time, without even realizing it, we created the outlines of the philharmonic hall, first on paper, then in its full volume, which seems to transcend the boundaries of three-dimensional space. The main building is surrounded by a park, which also cannot be called ordinary; it is formed by various elevations and depressions, resembling the silhouette of a desert, where paths through the dunes lead to the main element - music. The eastern part of the park plays in the rhythm of Fortissimo, with playgrounds, tennis courts, basketball courts, volleyball courts, and football fields; this place is charged with sound and energy. The western part sets the pace at Pianissimo, a place of rest, satisfaction, and tranquility, where one can walk in an unhurried atmosphere and ponder pleasant thoughts. In the center of the desert is an oasis, which will attract more people on hot days.













- In general, this is the description we want to leave It will remain as something absolutely i
  - T









e about this project, or more accurately, this symphony. unique, unforgettable, and ephemeral.



# D11





### BIRKenHIGH Residential project

location year autor tutors Birkenhead, England 2024 Alise Birkmane Ilze Paklone, Efe Duyan, Jonas Buechel



In our rapidly growing world, with over 8 billion people, cities are becoming increasingly dense, and the availability of empty building areas is swiftly diminishing. As urban centers across the globe face the challenge of accommodating rising populations while preserving their unique characters, innovative architectural solutions have become more crucial than ever. Against this backdrop, the BIRKenHIGH project emerges as a bold and experimental endeavor, set to redefine urban living by creating a "city above a city."

BIRKenHIGH is strategically situated on Birkenhead's waterfront, right at the edge of the Wirral Waters territory. This remarkable location serves as a bridge between the vibrant and historic city center of Birkenhead, the serene Mersey River, and the industrial charm of Morphet and Egerton docks. The area is rich in character, adorned with charming twoand three-story red brick buildings and a Ventilation Tower, rising over 60 meters, which accentuates the contrasting levels and architectural masses of the cityscape.



The site's unique character, with its functional buildings and vibrant local community, preservation was deemed essential. Thus, the concept for BIRKenHIGH naturally emerged: to save the existing urban landscape and rise above it, creating a "city above a city." Inspired by the birch tree, from which Birkenhead derives its name, this innovative framework introduces new ideas and ways of living, enhancing the existing landscape without disrupting its inherent beauty.







BIRKenHIGH stands as a testament to the harmonious coexistence of tradition and modernity. Elevated 20 meters above the ground, the structure lightly touches the earth at only a few points, much like acupuncture in architecture. This design philosophy ensures that the cherished elements of the existing cityscape remain intact, allowing new life and activity to flourish above. Central to the project's design are the tree-like columns, inspired by the slender and graceful birch trees. Crafted from white reinforced concrete, these columns offer both structural support and aesthetic beauty. They symbolize growth and stability, reflecting Birkenhead's natural surroundings. More than just functional, these columns serve as sculptural elements that seamlessly blend with the environment, creating a visual connection between the ground and the elevated structure.









On top of the BIRKenHIGH structure, visitors will discover a network of lush parks and meandering walking paths that invite them to immerse themselves in the serene beauty of their elevated surroundings. These green spaces offer a peaceful retreat from the bustling city below while providing breathtaking panoramic views of Liverpool and Birkenhead. Strolling through these elevated gardens, residents and visitors alike can enjoy a unique perspective on the urban landscape, taking in the iconic Liverpool skyline across the Mersey River and the charming, historic architecture of Birkenhead beneath.



One of the highlights of BIRKenHIGH is its eight glassdomed structures, each designed to flood the space with natural light and house a variety of different facilities. These domes include modern libraries, upscale restaurants, hotels, and urban gardens. The library, a central feature, boasts expansive glass walls that let in an abundance of natural light, creating a bright and inviting atmosphere for reading and reflection. With their transparency and openness, these domes invite the sky into the space, crafting an airy and expansive environment that bridges nature with urban amenities.





In conclusion, BIRKenHIGH is far more than an architectural project; it is a brave experiment in creating harmonious urban spaces. In the 21st century, where available building space is rapidly diminishing and urban density is increasing by the minute, BIRKenHIGH offers a viable solution to this global challenge. By building vertically and utilizing the airspace above existing structures, cities can expand and innovate without compromising their historical and cultural integrity. BIRKenHIGH provides a glimpse into the future of cities—a future where tradition and innovation coexist, and where urban development respects and enhances the existing landscape.



## D12



## **PLANTING A "SEED "**

RISEBA University Academic Bachelor Degree Study Program ARCHITECTURE Bachelor of Engineering Sciences in Architecture III YEAR SPRING SEMESTER DESIGN STUDIO

Authors: Tina Deaka and Emilija Kiselova

Tutors: Jonas Buchel, Ilze Paklone, Efe Duyan

PLANTING A SEED URBAN DESIGN LAB "HYDROCITY" INVESTIGATING URBAN EDGE CONDITIONS

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"PLANTING A SEED" is more than an urban design project—it's a framework for a sustainable, inclusive, and vibrant future for Birkenhead. By addressing historical disconnections, fostering community engagement, and prioritizing green spaces, this initiative aims to create a thriving neighborhood. As Vittoria Dock transforms, it will stand as a model for how thoughtful, community focused design can breathe new life into urban areas.



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### CONTEXT

After thorough analysis of the area we quickly realized we have to shift our focus outwards and aim to transform not only the territory within the boundaries of our plot, but in the neighborhood surrounding it. Where our project becomes an impulse to change and our design - a framework for the future.

Our plot is located along the Vittoria dock in Birkenhead, in Liverpool, UK. It is a 10.7 hectares large area that currently hosts a few companies related to material processing and distribution. The area is mostly commercial, with a few public transport routes around, university campuses and daycare centers further in the residential part of the neighborhood.





TRAIN STATION "BIRKENHEAD PAR<mark>K"</mark>

A key feature of the project is its connection to Birkenhead Park. Designed by Joseph Paxton and opened in 1847, Birkenhead Park was the first publicly funded civic park in the world. Its design influenced the creation of Central Park in New York, highlighting the importance of accessible urban green spaces.





### WAREHOUSE

A key feature is a repurposed warehouse that will serve as a hub for recycled materials. These materials will be used to build new houses on the plot, promoting environmental responsibility.

### HOUSING

The project includes 3-5 story residential buildings, possibly for social housing, to offer affordable living options.

### PROGRAM

There is a brick wall that stretches along our plot that originally separated the dock area from the community to prevent theft. Though the rails have been out of use for some time, the wall remains. It was the first thing that caught our attention and we worked on ways we can make the area and waterfront more accessible.

We decided on openings in the brick wall for entrances, while preserving most of it as a symbol of its historical past and to emphasize the arrival to the plot.

Our proposal includes new housing development, office and workshop spaces, an adaptive area for creative activities within gantry crane boundaries, a large cultural venue on one side and a warehouse on the other.

### OFFICE + WORKSHOP

There will also be low-story spaces for offices, co-working areas, and commercial activities. These spaces aim to attract entrepreneurs and support local businesses.

### WATERFRONT

Viaducts that stretch above the water, bringing visitors and residents closer to the waterfront. These elevated roads will continue the existing streets that lead to Birkenhead Park.



Gantry crane currently used by a steel company that we plan to repurpose for material transportation within the boudaries of it, promoting an idea about a everchanging construction site

### CULTURAL VENUE

An abstract building designed for hosting circuses, festivals, and other events. This venue not only serves as an event space but also connects to an inner corridor that leads to another historic building. This building, originally part of the industrial landscape, is now used for arcade rooms, rehearsal spaces, and other festival-related activities.





### ZONING

We aim to create a unique connection between the old warehouse and the public building at the end of the plot. The warehouse serves as a dynamic hub for collecting, reusing and producing materials, which are then supplied to the public building. This synergy fosters a vibrant creative ecosystem where raw materials are transformed into artistic expressions. The public building becomes a canvas for the whole surrounding as an cultural monument for art.

This continuous flow of resorces and creativity encourages the community to expand and push the boudries of artistic expression, turning Vittoria Dock into a beacon of vitality and creative freedom.



### MOBILITY

Mobility is a central feature of Vittoria dock design, ensuring that people can move freely and easily throughout the area. The layout encourages padestrian access, with well connected pathways and open spaces that allow residents and visitors to reach any destination within the dock effortlessy. Dedicated bike lines, bike parking facilities support and promote cycling as a primary trasport.



This approach removes the barriers created by previous walls that divided the space, making it more accessible and welcoming. By prioritizing ease of movement and accessibility for pedestrians, cyclists, and drivers, Vittoria Dock becomes a place where everyone can navigate comfortably and sustainably.





**IO YEARS** 

20 YEARS

After a brief analysis of the surroundings, we concluded that first changes would happen in the commercial area that currently consists of a junk yard and a few car repair shops. It felt that it can become a great foundation for new office buildings and educational institutions with a gradual growth in housing developments and later densify until it becomes fully functional urban space.



DENSITY GROWS

**30 YEARS** 

**50 YEARS** 

FLOODED

13

### LANDSCAPE

Our design approach is to use color schemes and materials to blend different areas. For instance, use similar hues for the eco-pavement and pedestrian roads to maintain visual coherence.

Ensure tactile paving and bike lanes are clearly marked and lastly, incorporate permeable pavers in walkways to manage stormwater efficiently and use durable materials.






### **URBAN BLOCK**

The residential buildings within Vittoria Dock are designed as flexible 10,000x10,000mm blocks, allowing residents to customize their homes and surroundings creatively. These blocks can be used to construct houses, courtyards, or other extensions to suit individual needs and preferences, with options ranging from one to five stories high. Building materials, including facades and structural components, are sourced from the warehouse, ensuring sustainability and consistency in design.







Each urban block features a unique courtyard equipped with playgrounds, picnic areas, and spaces for gardening, fostering a sense of community and outdoor living. Residents can choose to have their buildings on the ground or elevated, adding to the diversity of architectural styles. For those building along the waterfront, there is additional flexibility in designing the number of walls and the type of roof, allowing for even greater personalization. This innovative approach encourages residents to create a living environment that truly reflects their lifestyle and needs.











# D13-1

## Wirral Waters: Boat station network as urban intervention

This conceptual proposal addresses the improvement of mobility and connectivity between the planned development zones in Birkenhead, UK, particularly in the context of the Wirral Waters projects. While existing strategies and plans emphasize enhancing transportation links, there remains a lack of detailed proposals for connecting the new developments. Given the current limitations in transport connectivity and the focus on growth around the Great Float area, this concept introduces a water-based transport system utilizing modular ferry stations. These recognizable stations would enhance accessibility to new developments, enabling convenient travel between neighborhoods. The system could potentially extend to the Liverpool side, further improving regional connectivity. Beyond logistical benefits, the ferry service would offer a unique user experience by providing panoramic views of waterfront developments, aligning with place promotion strategies and enhancing the area's appeal.





Birkenhead study tour



Planned projects development



Walking route thought the development areas



Existing public transport proximity to the round route



Proposed water taxi route thought the development areas



Proposed typologies for the water taxi station according to the coastline shape



## TYPE 1

Linear shape for straight coastline

### TYPE 2

L-shape for the narrow water area adopted for the coastline

# **TYPE 2** Square shape for the narrow water area and dead end turn

## **KEY PRINCIPLES**

Transport station and waterfront access



Viewpoint and shelter creates a meeting spot







Transparency supported with vegetation and natural materials







# D13-2

# **DESIGN PROPOSAL:** THE GATE TO BIRKENHEAD





Masters students:

Sintija Kļavinska Kristīne Zane Čible Meldra Bērzāja





Birkenhead's Ferry Terminal, though historically significant, has been overlooked in upcoming regeneration projects, with no current plans to update the site. This neglect contributes to a sense of decline in the area, creating an uneasy feeling for both residents and visitors.



Our design proposal seeks to address this issue by revitalizing the terminal, transforming it into a more accessible and inviting space. By reimagining this prime location, we aim to not only preserve its role as a ferry terminal but also enhance its value for public use, offering improved infrastructure, public amenities, and stronger connections to the surrounding community. This project will give the site a new purpose, making it a vibrant part of Birkenhead's future.

# **CREATION OF FORM**





# **MASTER PLAN**



The site is reimagined with a two-level approach. At street level, a car park is placed to serve the functional needs of the terminal, ensuring convenient access for travelers.



Above parking and ferry terminal functions, an elevated open park will be created, offering a green, public space for residents and visitors.

By raising the site level, it is possible to maintain the necessary infrastructure for the terminal while transforming the ground level into a vibrant park that enhances the user experience and reconnects the area with the local community. This thoughtful design approach blends practicality with public value, revitalizing the space while preserving its core function.

# SECTION



In addition to the park and ferry terminal, the design proposal includes a new building on the site.



This building will serve multiple functions, including office spaces as well as other communityoriented facilities. The introduction of office spaces will not only bring more life to the area but also stimulate economic activity and encourage further regeneration. With a mix of practical functions and public amenities, the building will complement the overall vision of transforming the ferry terminal into a dynamic, accessible hub for both residents and visitors.







# D13-3

# Liverpool SUBSTRATA COMPO S 11.24 A PROJECT FORGED BY GEOLO M Reinis Salins FAD Ma 2024 Aberystwyth 6300 0 Hereford #







Promenade gradually spreading from east to west, it sealed the riverfront, slipways and cliffs to the east of New Brighton. By 1911, another promenade had been constructed in front of what is now the Floral Pavilion Theatre. This extended further onto the foreshore and sealed the circa 1897 promenade. The addition of four ornate cast-iron shelters located on rounded promontories provided somewhere to shelter.

Construction of New Brighton's final prom commenced from 1931. This massive undertaking would include the construction of an open air swimming bath (which was set to become the largest of its type in Europe), a marine lake anad a range of Art Deco style shelters and pavilions.



Construction of New Brighton's final prom commenced from 1931. This massive undertaking would include the construction of an open air swimming baths (which was set to become the largest of its type in Europe), a marine lake and a range of Art Deco style shelters and pavilions.

# Derby pool 1932



Located on Harrison Drive in New Brighton, has historical roots tracing back to a racecourse built by Lord Derby in the early 17th century. In the 20th century, it was known for its Art Deco swimming pool, a popular attraction for both Wallasey locals and Liverpool day-trippers. Despite its popularity, the pool faced storm damage and was eventually closed in the 1980s due to repair costs. It has since been refurbished and now operates as a restaurant, retaining the name "The Derby Pool," and offers views of the bay area.



# smugglers @ Red Nose





Red & Yellow Noses as painted by Harold Hopps in 1900







In 1959, Rock Villa in New Brighton, known for its historical caves formed from the soft stone of the Red and Yellow Noses, was bought by architect Norman Kingham. These smuggler caves, once accessible from the shore, were obscured by the construction of the promenade, leaving entry possible only through the villa's garden. Up until the early '90s, these caves were a destination for local school outings but today, they remain concealed from the public

Tabular Cross bedding - with 'assymptotic toes'. Only the top section of the cliffs painted by Harold Hopps in 1902 remain exposed Mulitcoloured exposures of Wilmslow Sandstone White, Red and Yellow. The colour of the local Triassic sandstones is due to the variable presence of iron minerals coating the quartz sand grains. Red - iron oxide (haematite), Yellow - iron hydroxide (limonite), White - no iron - it has been leached away in groundwaters.









The coastal sand dunes are cut off from a supply of new beach sand by modern sea defences and the carpark. The dune complex along this shoreline likely accumulated wind blown beach sand for much of the last 10 thousand years. Dunes have been stabilised by marram and other grasses but are being eroded by footpaths etc.

# **New Brighton Pier**



The New Brighton Pier, initially a basic landing point for workmen, evolved into a popular attraction.. In 1861, the New Brighton Pier Company took over the project. The new pier, opened in 1867, featured shops, cafes, and a pavilion for entertainment. This development boosted New Brighton's popularity as a tourist destination, supported by a tram system for easy access. However, by the 1920s, the pavilion declined, leading to its closure in 1923.

New Brighton Pier, 1946





The decline in part attributed to the loss of the golden sands as a result of expansion from Liverpool Docks altering the currents which created a polluted foreshore.

The pier underwent several alterations before being completely rebuilt in 1931, but by the 1960s, the ferry service diminished, leading to the pier's eventual demolition in 1973
### Life circles: Bidston Moss Park



The restoration of the Bidston Moss landfill site began with the importation of soil-forming materials, primarily paper pulp mixed with soil from the Bridgewater paper recycling plant in Ellesmere Port. This mixture was spread across the site to support the planting of hundreds of trees and the creation of wildflower meadows and boardwalks, all connected by pathways. Bidston Moss has been transformed into a thriving community woodland, located near the area of Bidston in Wirral, Merseyside. Previously, it was a low-lying wetland marsh and later served as a landfill site from 1936 to 1995. Following its closure as a landfill, efforts by the Merseyside Waste Disposal Authority and the charitable trust Groundwork Wirral, among others, have rehabilitated the area into a valuable green space for the community and wildlife. This transformation is part of broader initiatives to restore and repurpose previously degraded or industrial lands for public use and environmental conservation. Bidston Moss now offers surfaced paths for walking and cycling, providing a green oasis in an urban setting. The area supports a variety of wildlife and serves as an important recreational and ecological site for residents and visitors alike.





We are 'urban mining' and recovering materials for reuse as sites are reclaimed. A key focus is materials with emboddied carbon (materials and historic production and transport to site) and aggregates for reuse in site works.

## Vittoria Dock

Construction Period: Built between 1904 and 1908. Victoria Dock was designed to accommodate the increasing maritime trade in the region.

Purpose: Played a significant role in the industrial growth of Birkenhead and the surrounding areas. Used for the import and export of various goods, contributing to the economic development of Merseyside.





Changes and Developments: Over the years, the dock underwent several modifications to improve its capacity and efficiency. Integrated into the larger dock system of Birkenhead, connecting with other docks such as Morpeth Dock and Egerton Dock.

	<ul> <li>Preserving and improving wetlands and water bodies supports</li> </ul>
	diverse species and ecosystem health
	Improvig Water Quality
BIODIVERSITY & NET GAIN STRATEGY	- Marginal plants in water- sensitive urban designs help filter
	pollutants, enhancing water quality for both wildlife and human use
2023 - 2028	Climate Resilience
	- Biodiverse ecosystems, including those with water filtration
	functions, enhance resilience to climate change
	Providing Ecosystem Services
	- Marginal plants contribute to water purification, flood control, and
	habitat provision, essential for human and ecological well- being
	Community Engagement
© WIRRAL	- Involving local communities in conservation efforts through
	education and citizen science fosters stewardship and awareness

**Enhancing Natural Habitats** 



#### #2 URBAN STRATEGY - RUBBER DUCK



## #0.5.5 STRATEGY PARTIAL LANDFILL WITH SOME NEW STUFF TO GIVE REBIRTH SOME OLD STUFF

Enhancing Natural Habitats Improving Water Quality Climate Resilience Providing Ecosystem Services Community Engagement

# **ETERNAL PRESENT**

PIER

Joe Dispenza's concept of "Eternal Present / Remembering Our Future" suggests that by fully immersing ourselves in the present moment and aligning our thoughts and emotions with our desired future, we can influence our reality and manifest our drea





DERBY POOL

RUG

NOW

WATER



Look, kinda cool





















water filtration and cleansing functions of the plants that perform well in phytoremediation and water- sensitive urban design (WSUD) They help in filtering and cleaning water, stabilizing soil, and enhancing biodiversity.



- Common need, effective in filtering pollulants and improving water quality.

talis (Typha spp.) Estalian for harmet apolio and removing t E witte

Retar Lillins (Nymphens spp.) Provide shade and help control agae growth

ulrashes (Schornoplettus spp.) - Elective in stabilizing sediments and filtening water-

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sh Marigold (Caltha palostris) etps in mathematika and provides waty seasar









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Abcorb	anatrien	E drects	formitre	

Water Millel (Myriophyllem tpp.) - Effective of reatment uptake and improving a

Terrestrial Plants for Bioreborition Aneas:

Sadges (Cares spd.)

Rushes (Janous spj.)

Tolevant of ent only and uppluits (consta)







they the



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#### LOST AND GAIN

BRING BACK HEALTY GEOLOGY



Me and You and Everyone























**GREAT HISTORY** 

CHARACTER, PLACE OF BELONGING



don't care what's around







