What future for the past?

Transforming Sliedrecht's Historic Water Tower for a Sustainable Tomorrow

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Content

- Heritage line
- Problem statement
- Research & design
- Master plan
- Approach
- Plans
- Conservation assessment

Water heritage line



Water heritage line



Picked site (t' zaagje)



Water tower 1886



Delta shipyard 1975



Problemstatment

Participation meeting outcome





Design of AA planadvies : https://watertoren-terrein.nl/

How can the Sliedrecht Water Tower be **preserved** and **adapted for contemporary use** while maintaining its **values**?

Values

Analysis

Value assesment

Conservation assessment

Analysis

Materialization and damage assessment

Transformation

Analysis

Masterplan

Values

Historical and age value

1889

1910

1966

2025

water

buildings

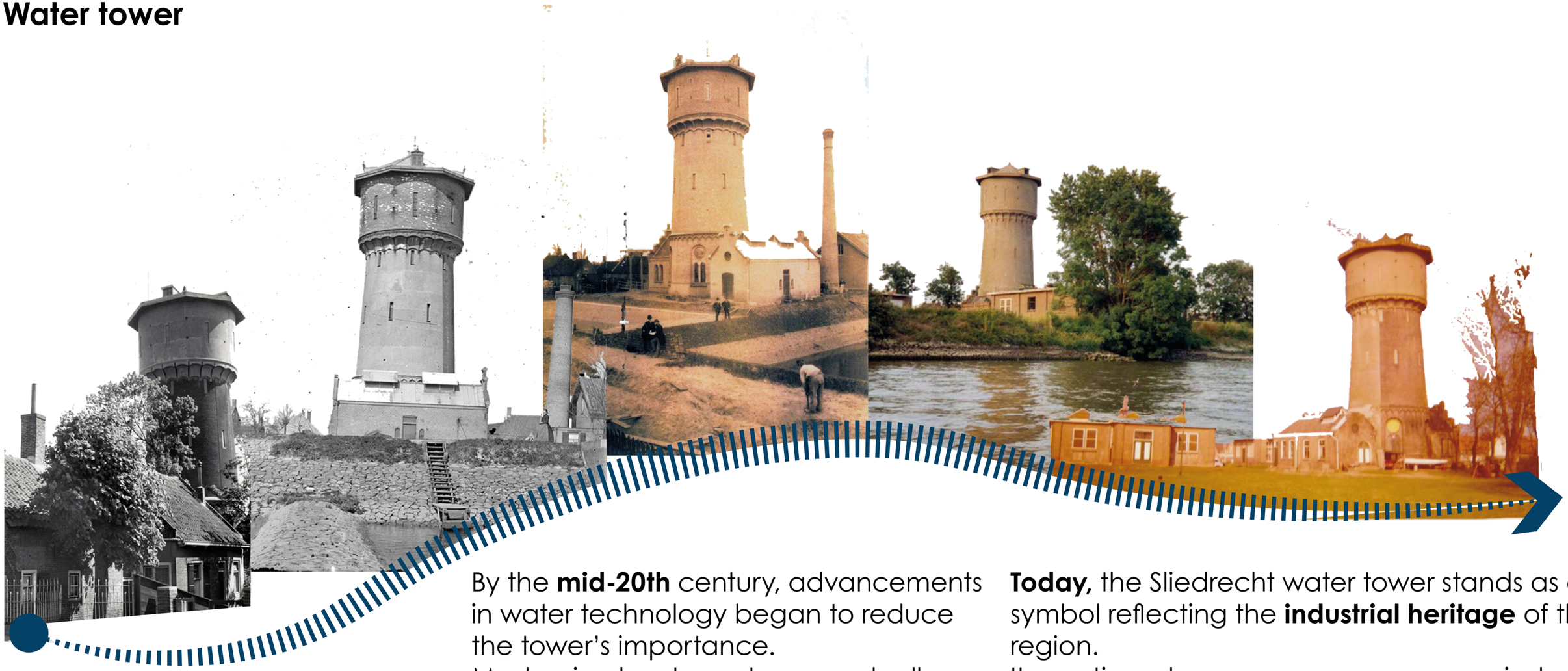
dike

het zaagje

waterloren

Delta shipyard

Water tower



Built in **1886,** the water tower was constructed to supply **clean water** to the residents of Sliedrecht.
One of the 20 oldest water towers in the Netherland.

By the **mid-20th** century, advancements in water technology began to reduce the tower's importance.
Modernized water systems gradually replaced the need for such elevated water storage.

Today, the Sliedrecht water tower stands as a symbol reflecting the **industrial heritage** of the region.
Its continued presence serves as a reminder of the town's historical journey in **infrastructure development and public health.**

Social and cultral value



"If you enter Sliedrecht from the Sliedrecht-East exit, the first thing you see is the water tower.
We, as residents of Sliedrecht, call the water tower the Statue of Liberty of Sliedrecht."

Wout van Rees





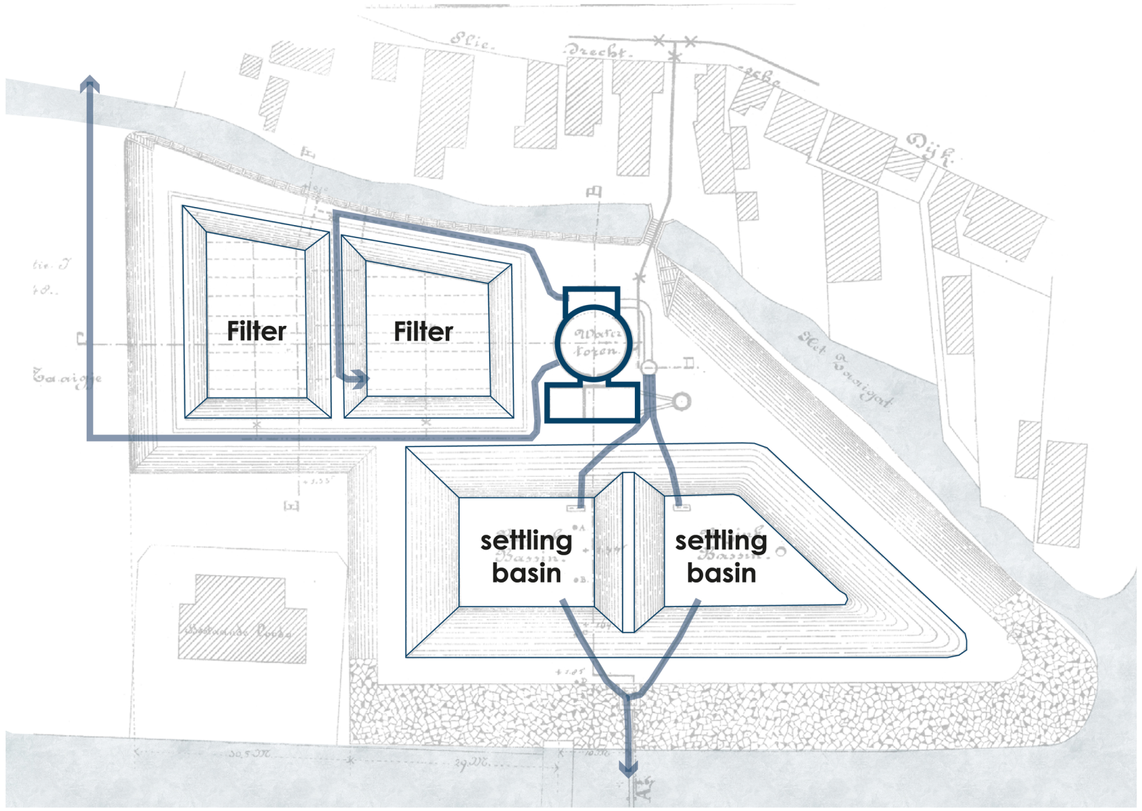
"As a child, I always looked at the tower and wondered what it looked like inside. Now I hope it will be preserved for future generations."

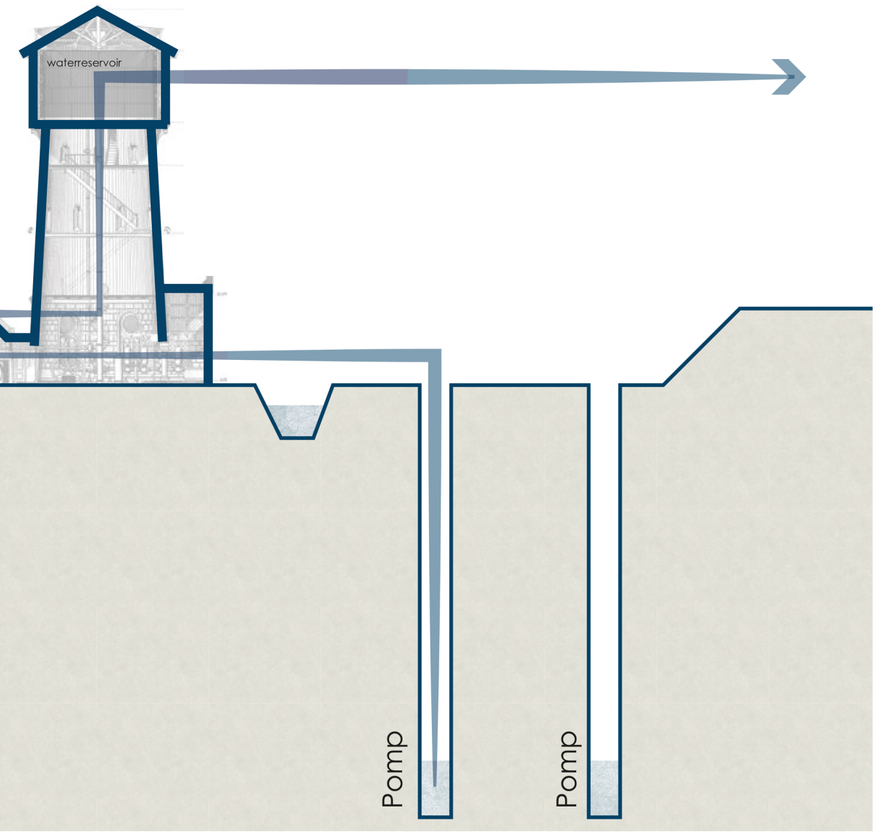
Local resident

"This tower tells the story of our struggle against water and the progress in drinking water supply. Preserving it is of great importance to our cultural heritage."

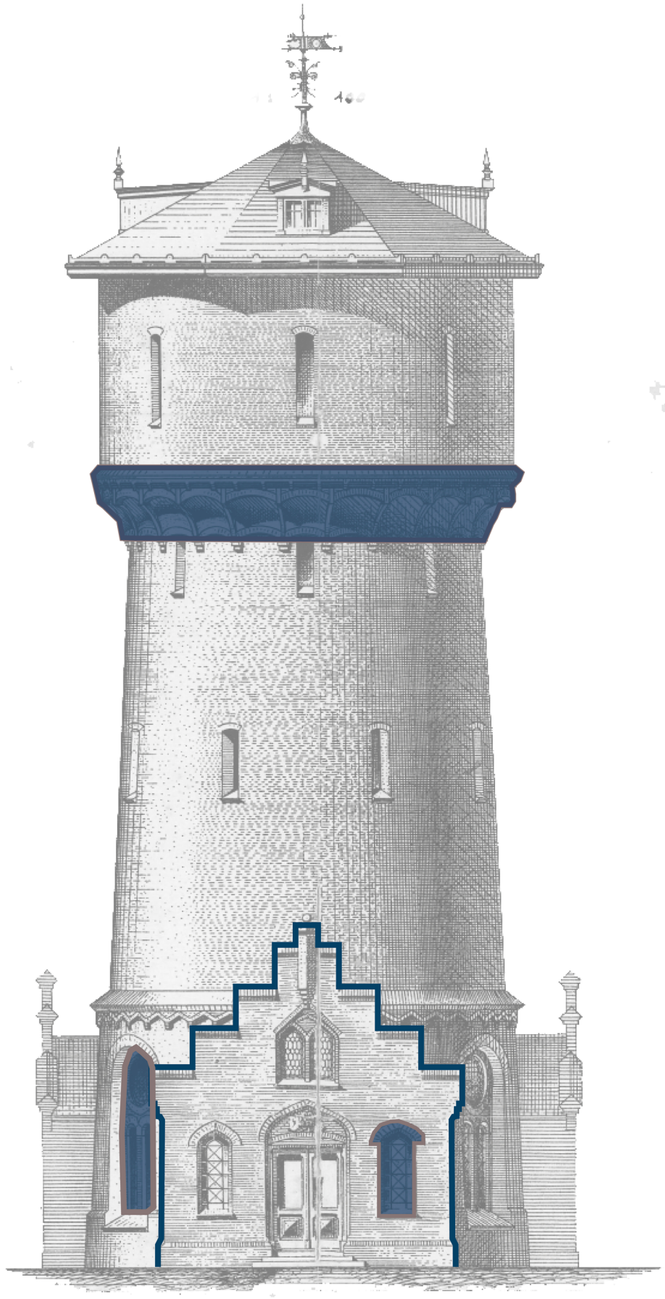
Historical Association Sliedrecht

Functional value





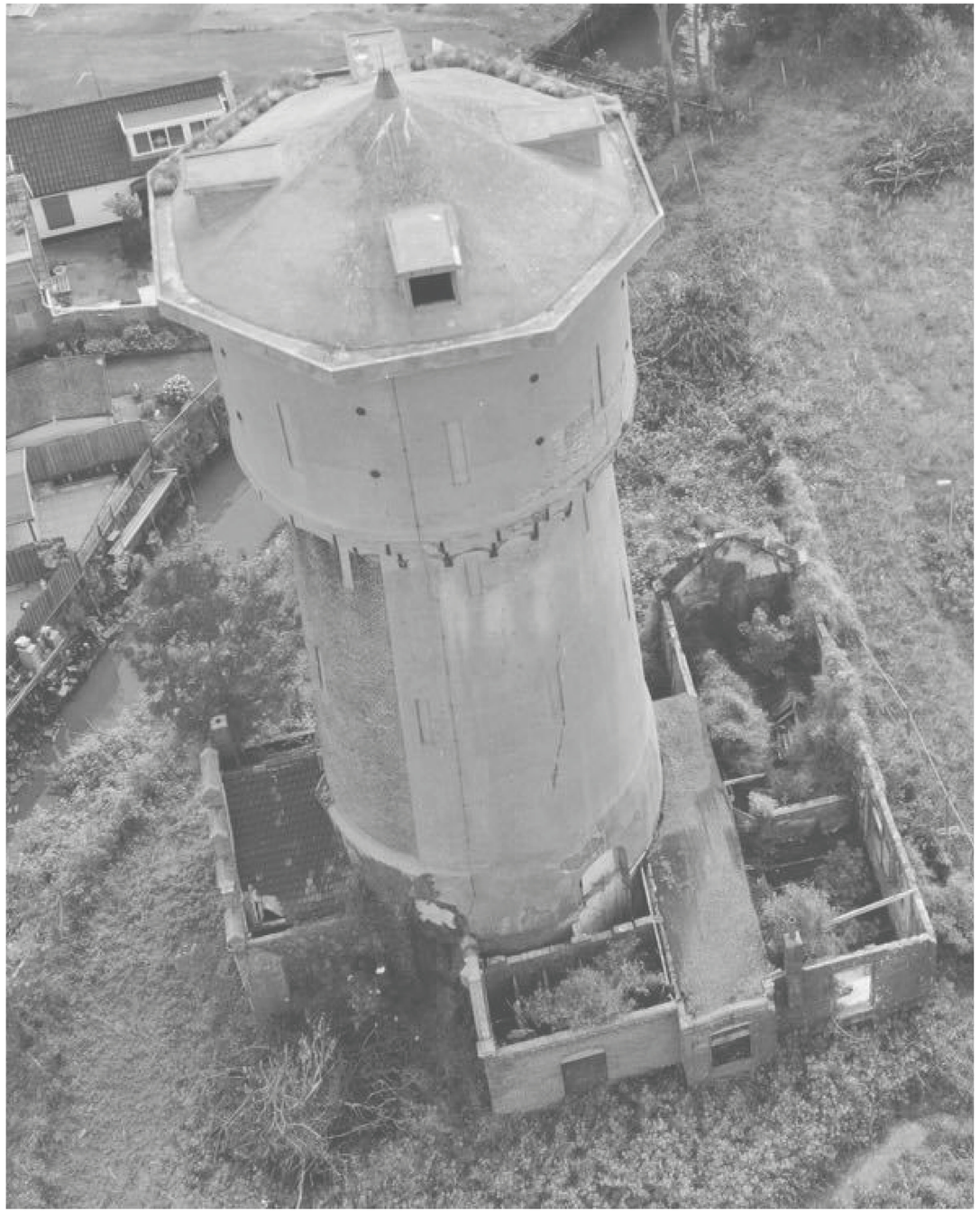
Architectural value





Categorization of values and attributes of the Sliedrecht water tower

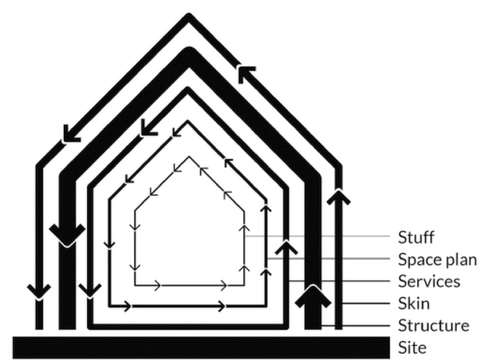
	Value	Description
Cultural	Historical value	The Sliedrecht Water Tower was constructed in 1886 and was pivotal in addressing public health challenges. Before its establishment, residents relied on contaminated water sources, which led to waterborne diseases. The tower provided a safe, pressurized water supply that drastically reduced health risks, marking a critical advancement in local infrastructure and public health. Its role in Sliedrecht's growth remained central until it was decommissioned in 1975 (Gemeente Sliedrecht, 2023).
	Age value	At over 130 years old, the Water Tower is one of the oldest industrial structures in the region. Its age gives it a unique place in Sliedrecht's identity, embodying the long-standing relationship between the town and its industrial past. Its longevity is also a testament to the community's dedication to preserving this landmark as part of their collective history (Gemeente Sliedrecht, 2023).
Architectural	Architectural value	The Water Tower's design, created by architect Schotel, is an eclectic blend of industrial and aesthetic principles. While not as ornate as some of Schotel's other works, it features distinctive elements, such as decorative ironwork and large windows, which serve both functional and decorative purposes. These features make it an exemplary piece of late 19th-century industrial architecture (Gemeente Sliedrecht, 2023).
Social	Cultural value	Beyond its architectural and historical roles, the Water Tower has become a powerful cultural symbol for the local community. It stands as a visible representation of Sliedrecht's industrial heritage and progress. The tower's influence extends beyond its physical structure, inspiring local stories and creative works, including a youth novel that incorporates it as a key cultural element (Sliedrecht24, 2023).
	Social value	The Water Tower's social significance is deeply tied to its function in supporting local industry. It was a crucial infrastructure element that enabled industrial activities in the region, marking the shift from manual labor to modern mechanical processes. The tower's closure in 1975 symbolizes the end of an industrial era in Sliedrecht, reflecting broader socio-economic changes in the town (Gemeente Sliedrecht, 2023).
Functional	Functional value	Although it no longer serves as a water tower, its functional potential for adaptive reuse remains high. Proposals for converting the tower into a museum, cultural center, or community venue ensure its continued relevance. Additionally, integrating sustainable features like solar panels and water recycling systems would align with modern environmental goals while preserving the tower's historical value (Gemeente Sliedrecht, 2023).



The transformation

Valuation based on the heritage value matrix

	AGE value	HISTORICAL value	INTENTIONAL COMMEMORATIVE value	NON-INTENTIONAL COMMEMORATIVE value	USE value	NEW-NESS value	(relative) ART value	RARITY value [+]	OTHER relevant values [+]
SURROUNDINGS / SETTING [+]	Oldest industrial area in Sliedrecht	Strong historical connection to water management	Symbol of Sliedrecht's role in hydraulic engineering	Landmark visible in the wider region	Potential for preservation and development			Unique geographical structure	Community concerns about overdevelopment
SITE		Strategic location during industrialization	Part of Sliedrecht's growth into a modern town		Not in use since 1975	Site degradation due to neglect			Significant for social and cultural interaction
SKIN (exterior)	19th-century materials	Original brickwork with plaster protection		Shows decay and weathering, adding historical depth		Potential for modern materials in renovation	Decorative masonry & window tracery		
STRUCTURE	Technological advancements of the 19th century		Symbol of industrial craftsmanship	Steel + masonry combo reflects period tech	Structural potential for adaptive reuse	Modern adaptation is costly		Few original water towers remain	
SPACE PLAN	Original spatial organization visible	Historic layout of water tower and annexes		Interior voids tell story of past use	Flexible for transformation				Some rooms are inaccessible due to decay
SURFACES (interior) [+]	Some original elements lost	Retains industrial atmosphere		Industrial wear tells a story	Reuse for new functions possible		Decorative iron elements remain		
SERVICES	Outdated and non-functional	Historic function of water supply	No longer in active use		Needs complete modernization	Expensive to restore plumbing & electrics			Historical role in clean water supply
STUFF	Many original elements missing	Some historic tools remain	No significant commemorative items	Remaining artifacts reflect past use			Little artistic significance		
SPIRIT OF PLACE [+]	High due to landmark status	Reflects industrial & water heritage	Strong civic identity	Emotional connection for older generations					Needs strong storytelling for public engagement



Users and functions

1759
Apartment

1505
age: 0-15

1910
age: 25-45

1575
age: 15-25

224
Semi-Detached House

2345
age: 45-65

1291
Linked House

decrease of 1.67%

2005
age: 65+

206
Detached House

Me :)

"As someone who has previously experienced the area, I can say there is a real need for a space where people can relax and find peace"

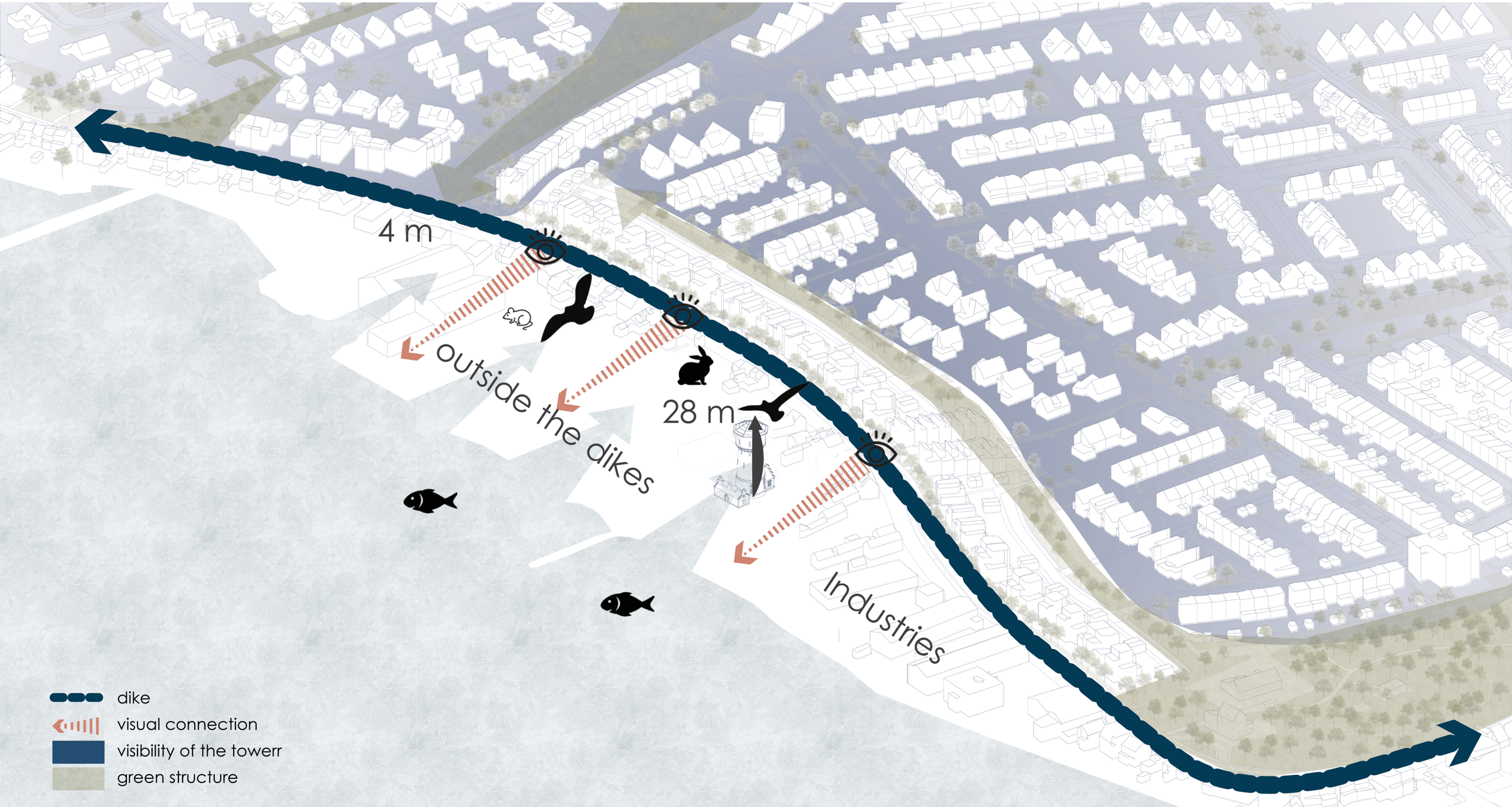
Ms. van Rees

"As someone born and raised in the area, I can say there is a strong need for a playground and a pancake house."

cafe/ restaurant

Sliedrecht 26.261
Sliedrecht oost 8.840

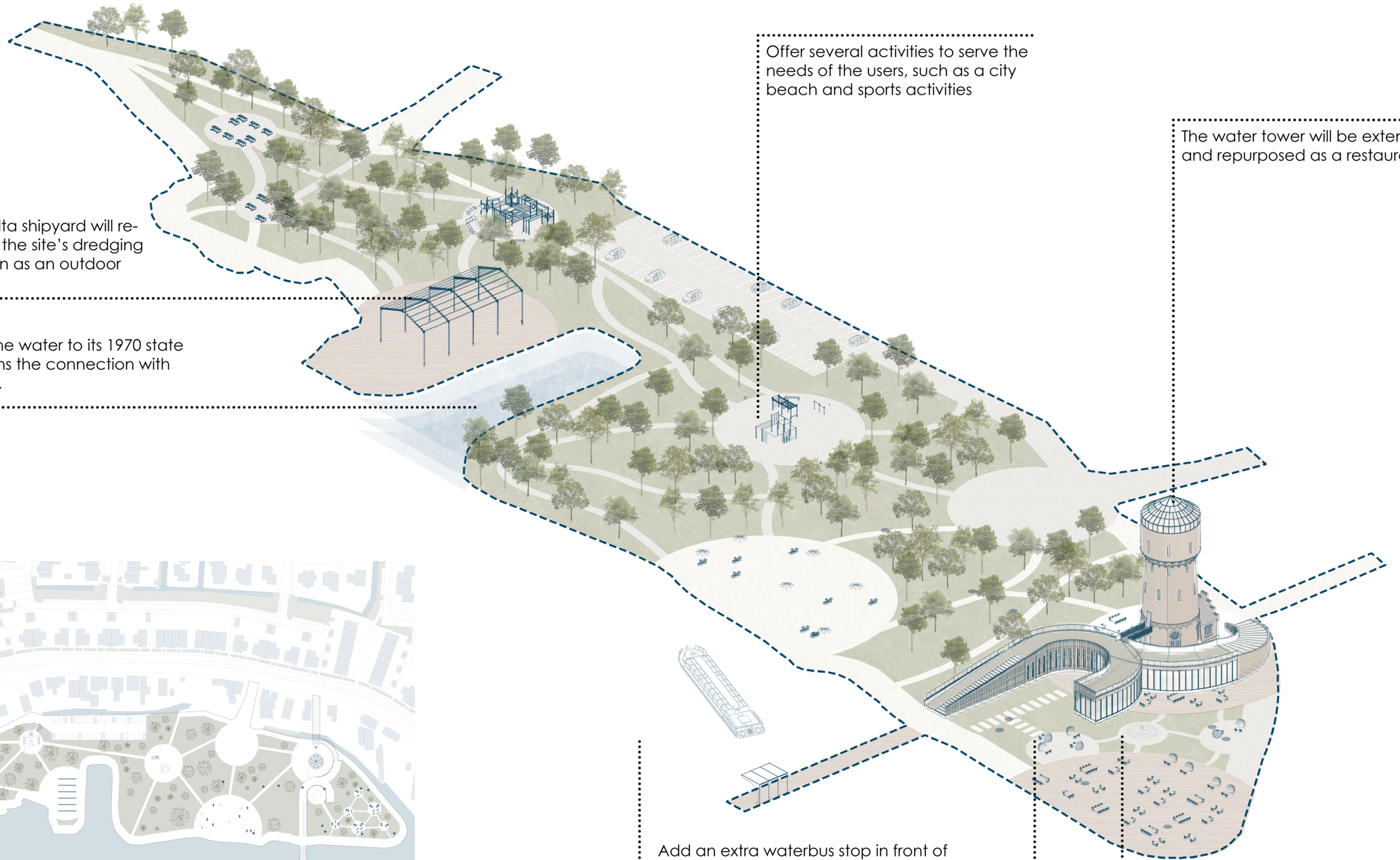
What is there already?



Ecological system

Name	Habitat Zone	Dominant Soil Type	Ecological Needs		Name	Habitat Zone	Dominant Soil Type	Ecological Needs	
Alder	Lowland Peat Plain	Peat	Moist to wet soil, full sun, tolerates flooding, nitrogen-fixing		Great reed warbler	Lowland Peat Plain	Peat	Dense reed beds near freshwater for nesting, insects for food	
Willow	Lowland Peat Plain	Peat	Wet soils, full sun, commonly found near water bodies		Purple heron	Lowland Peat Plain	Peat	Marshes with tall vegetation for nesting, fish and amphibians as prey	
Reeds	River	Alluvial soil (silt and clay)	Shallow water or wet soil, full sun, tolerant of nutrient-rich conditions		Black-tailed godwit	Lowland Peat Plain	Peat	Wet meadows and grasslands, nests on ground, feeds on invertebrates	
Swamp scrubs	River	Alluvial soil (silt and clay)	Wet or waterlogged soils, partial to full sun, often in acidic conditions		Natterjack toad	Lowland Peat Plain	Peat	Sandy or light soils, shallow temporary pools for breeding, open sunny habitats	
Brown and peat moss	Freshwater Tidal Deposits	Peaty clay and silt	Acidic, waterlogged, nutrient-poor conditions; shade-tolerant		Moor frog	Lowland Peat Plain	Peat	Ponds and ditches for spawning, needs adjacent moist land for foraging	
Cylinder moss	Lowland Peat Plain	Peat	Moist, shaded environments, typically on acidic soils		Otter	Freshwater Tidal Deposits	Peaty clay and silt	Clean rivers and wetlands, abundant fish, secluded resting and breeding spots	
Water soldiers	Freshwater Tidal Deposits	Peaty clay and silt	Floating aquatic, prefers still or slow-moving freshwater, needs full sun		Bittern	Freshwater Tidal Deposits	Peaty clay and silt	Extensive reed beds, feeds on fish and amphibians, needs undisturbed wetlands	
Sea clay plain vegetation	Sea Clay Plain	Marine clay	Clay-rich soils, salt-tolerant, often exposed to wind and sun		River clubtail	Freshwater Tidal Deposits	Peaty clay and silt	Clean, slow-flowing rivers with sandy substrate, larvae live buried in sediment	
Screech owl	Lowland Peat Plain	Peat	Needs tree cavities or nest boxes for breeding, prefers wooded areas near open spaces Needs tree cavities or nest boxes for breeding, prefers wooded areas near open spaces						

Master plan (keep and value history)



The ruins of the Delta shipyard will remain to showcase the site's dredging history and function as an outdoor exhibition area

Bringing the water to its 1970 state strengthens the connection with the water.

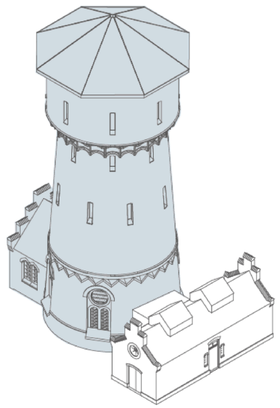
Offer several activities to serve the needs of the users, such as a city beach and sports activities

The water tower will be extended and repurposed as a restaurant.

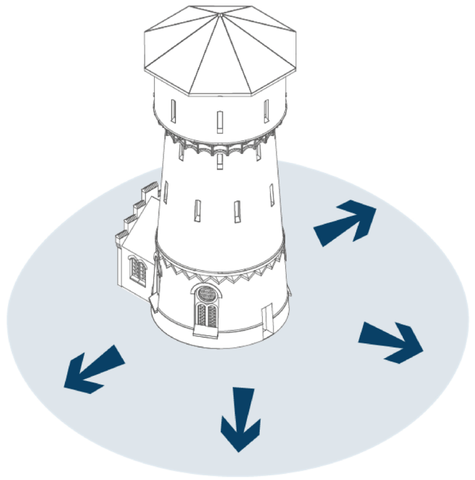
Add an extra waterbus stop in front of the tower to strengthen the physical as well as the emotional connection with the other city parts.

Elements from the water tower's history that reflect the history of the site

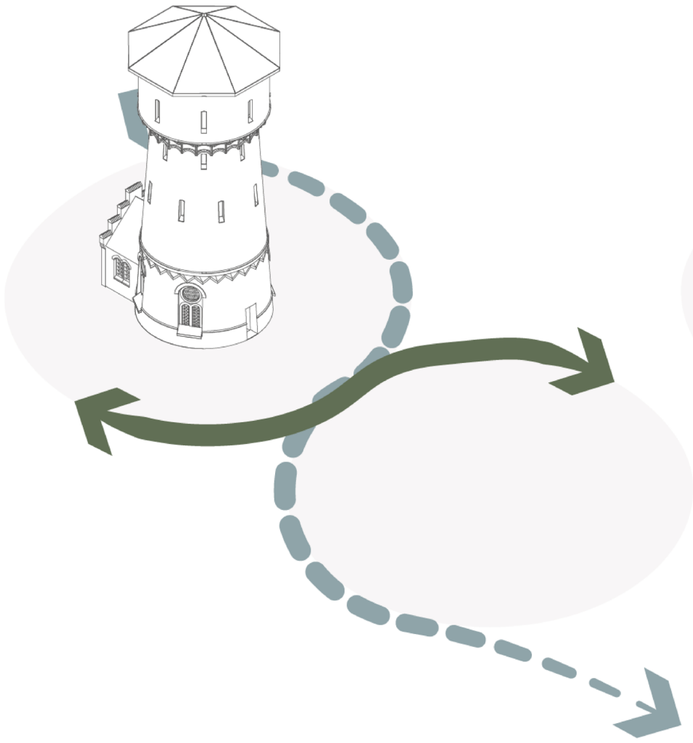
What will happen to the tower?



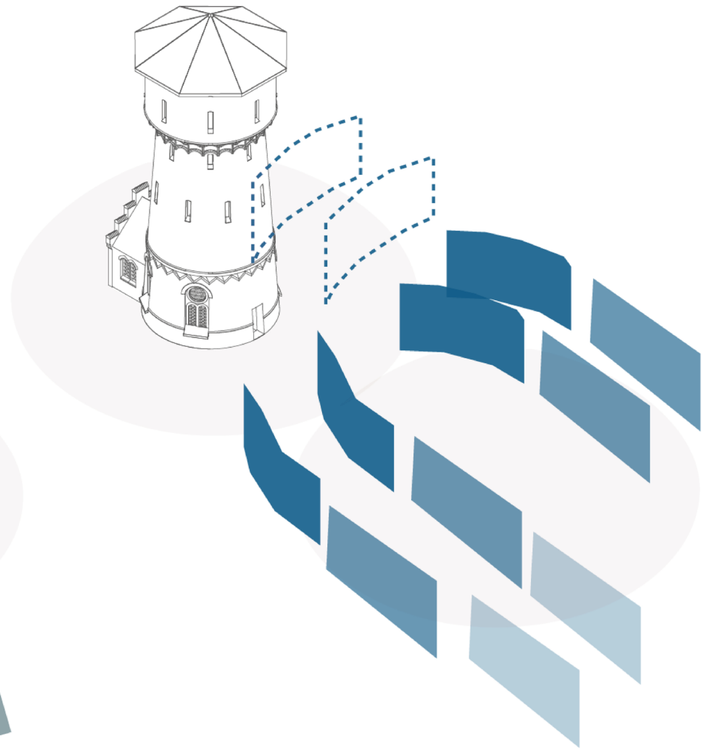
Preserve the shaft and the historical entrance



Keep distance from the tower

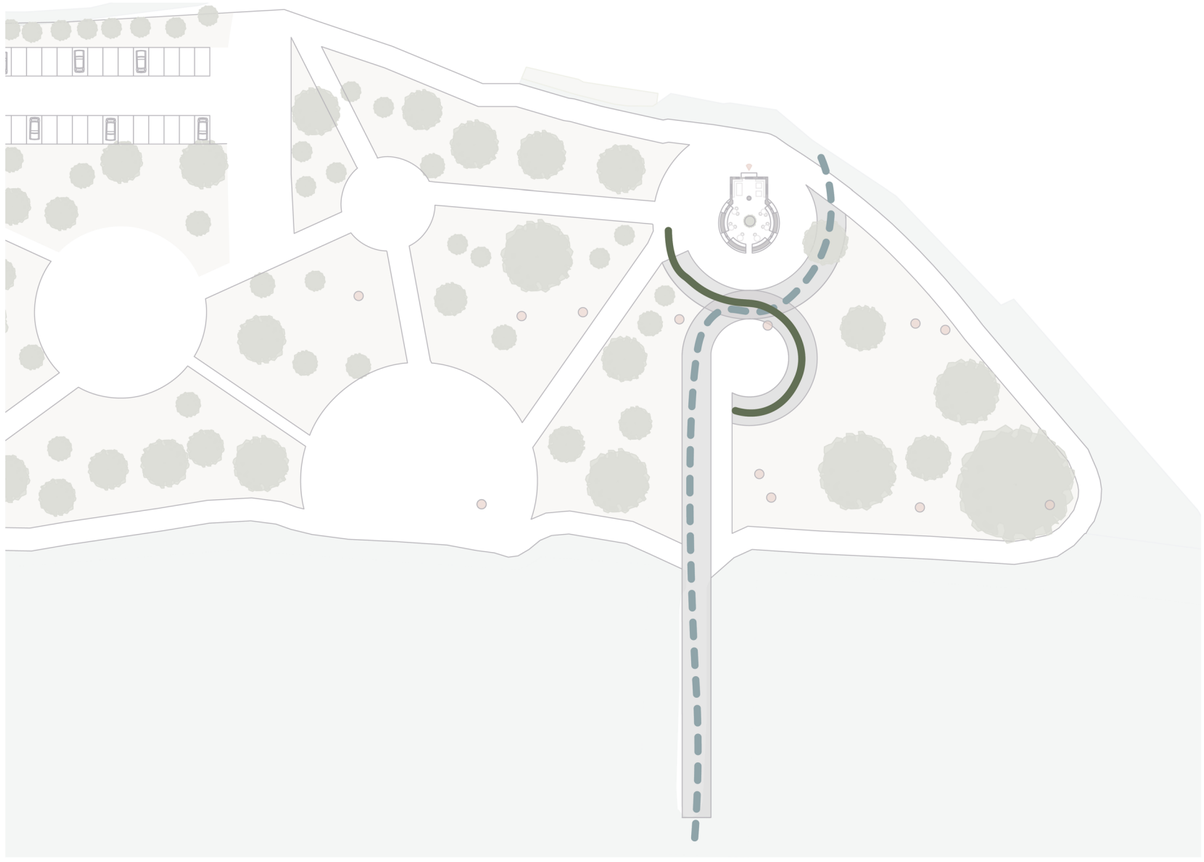


Connect ecological structures through water and vegetation

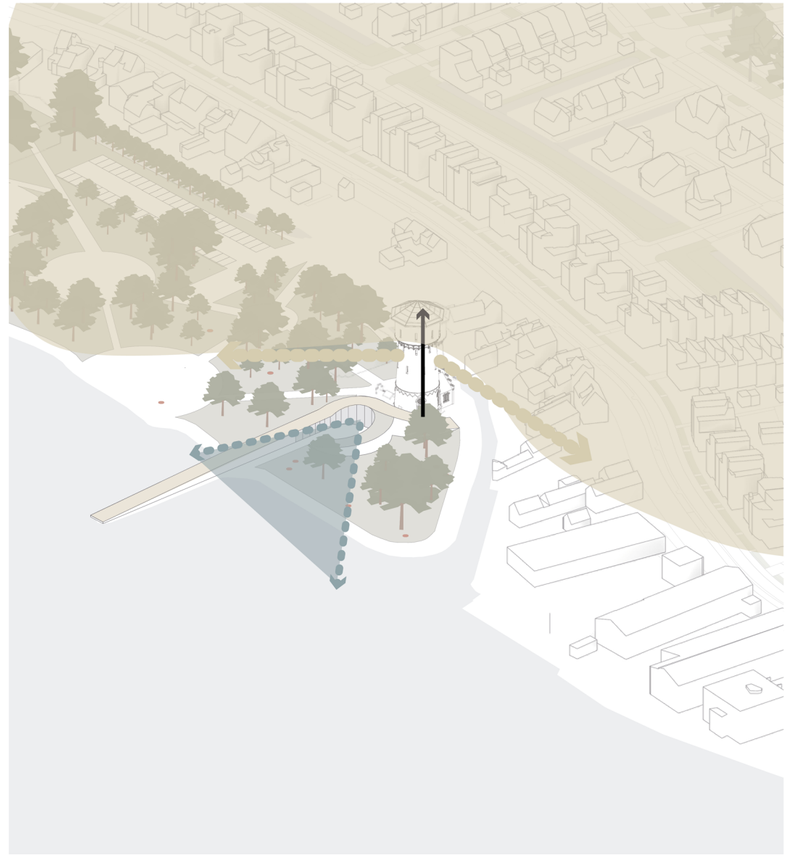


Use contemporary building methods (modular).

Contextual dualities

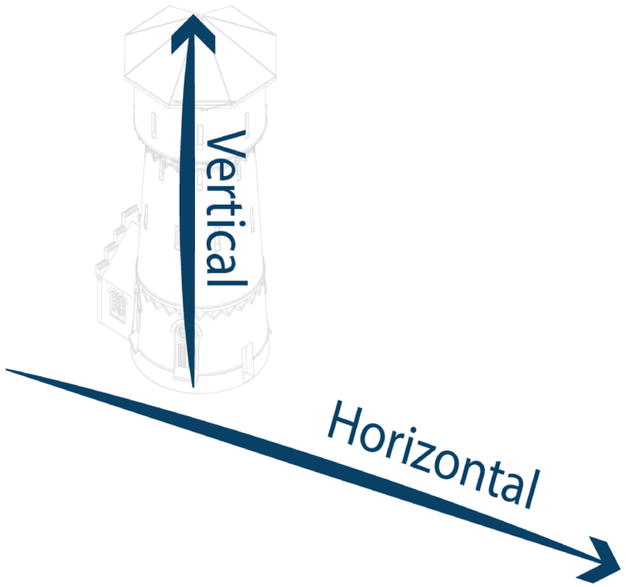


Water vs. Land
A landscape design that seamlessly transitions between solid ground and fluid waterfront elements, reinforcing the tower's heritage.

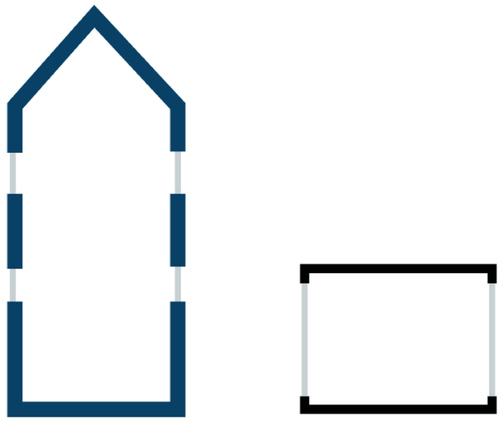


Urban vs. Natural
Views of the town's industrial areas vs. river landscapes from upper levels.

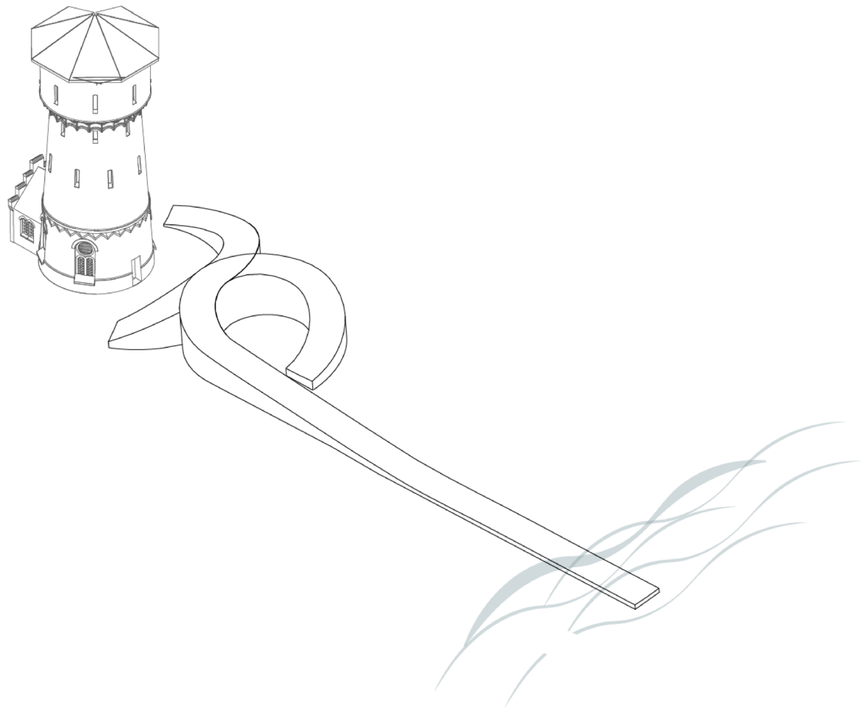
Spatial dualities



Vertical vs. Horizontal
he tower's strong verticality contrasted by horizontal extension

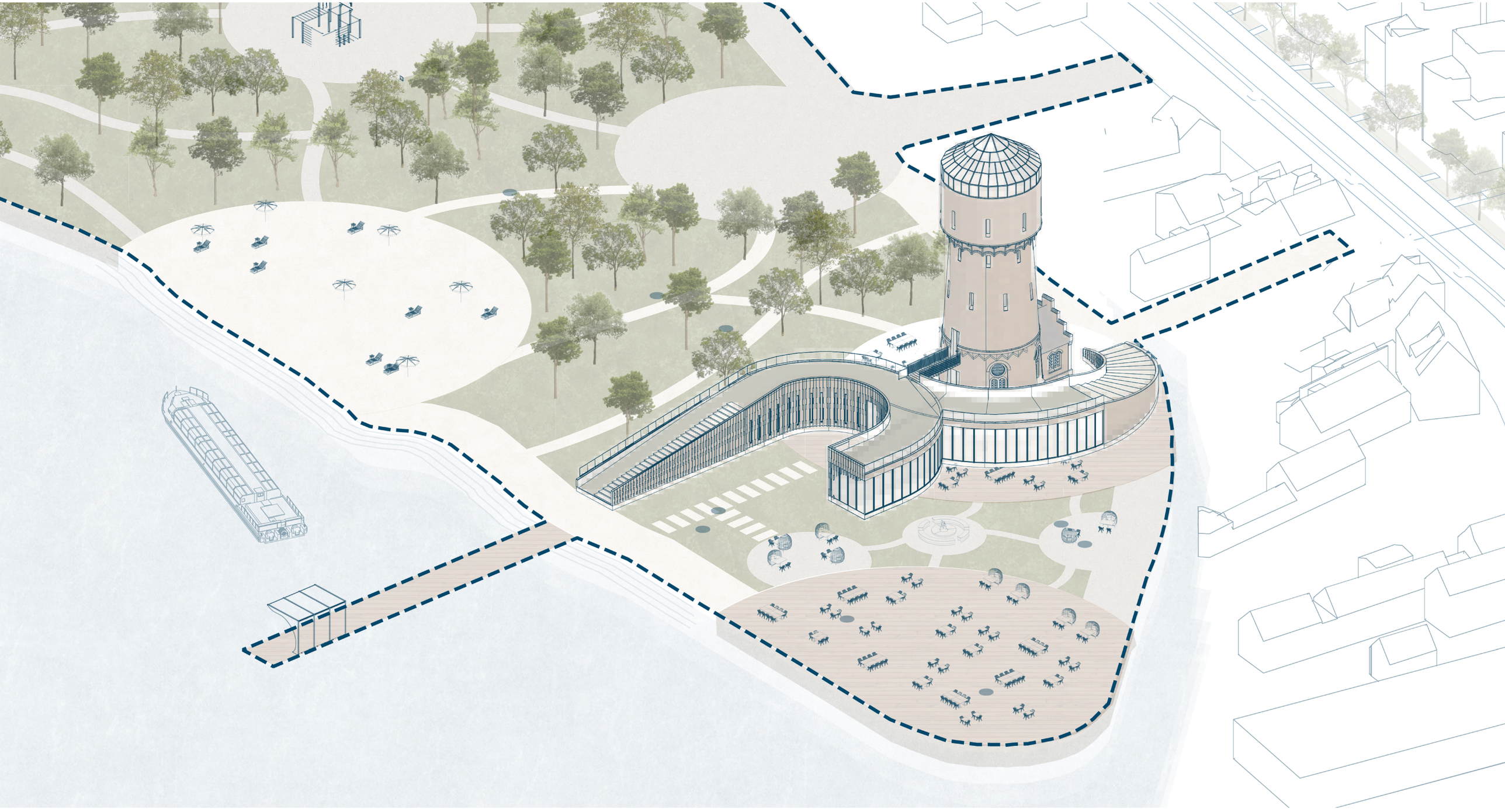


Open vs. Enclosed
Retaining the enclosed historic structure while introducing open viewing extention



Rigid vs. Fluid
Geometric paths and structured circulation blending into organic water features and soft green spaces.

The design



The design



The design



The design



Modules



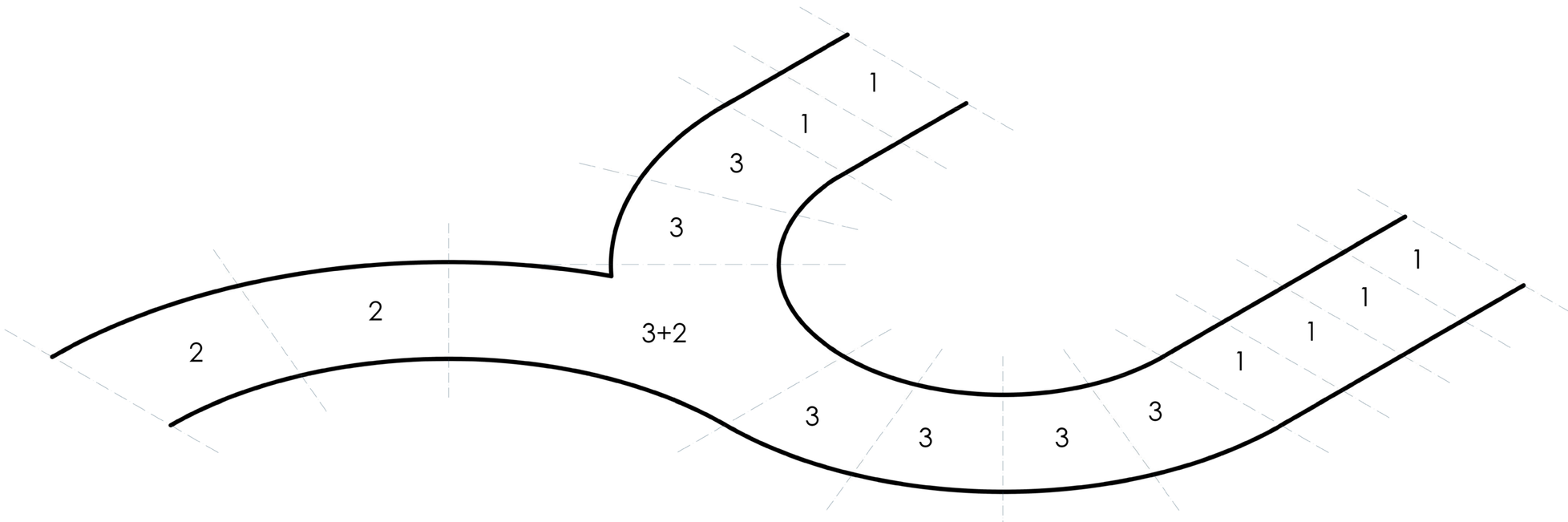
module 1



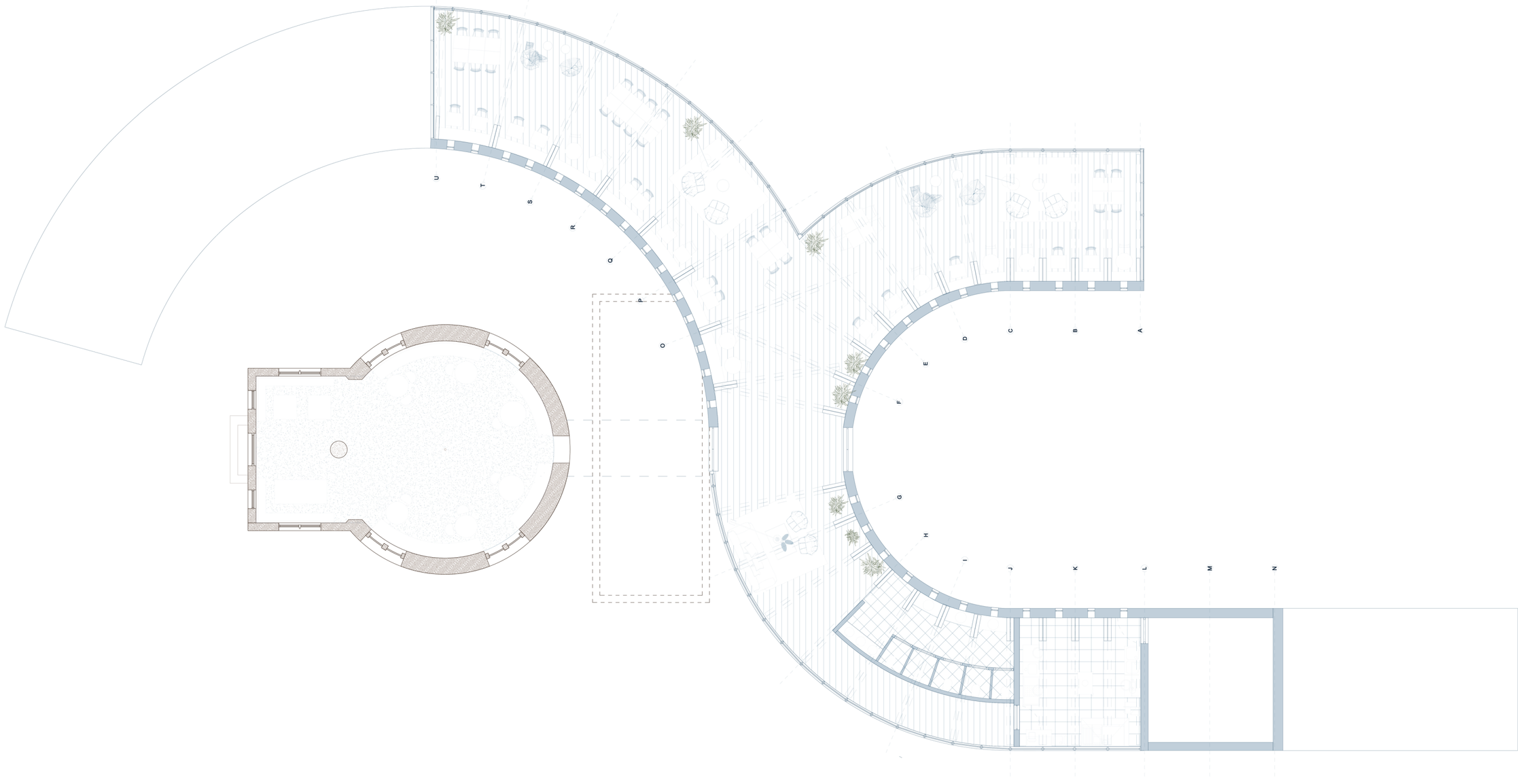
module 2



module 3



Floor plans



1 5 10m

Experience



Experience



Floor plans







1 5 10m

Experience

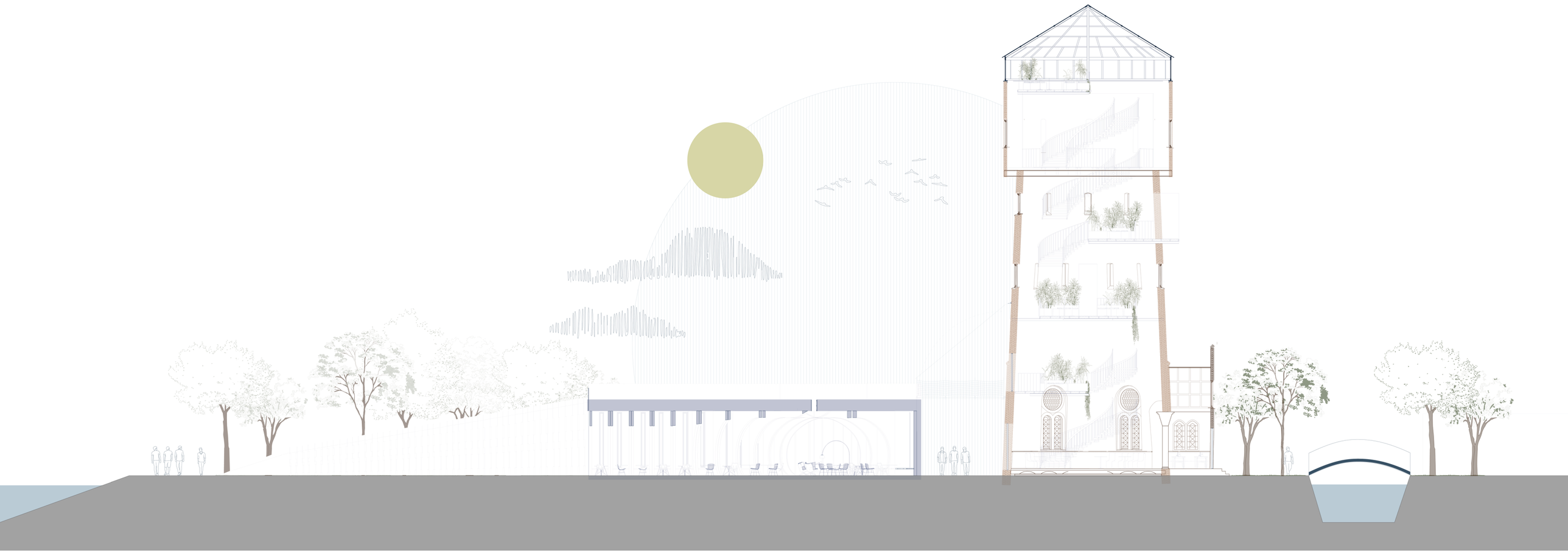




Experience



How does it work togather



1 5 10m

Façades

West facade



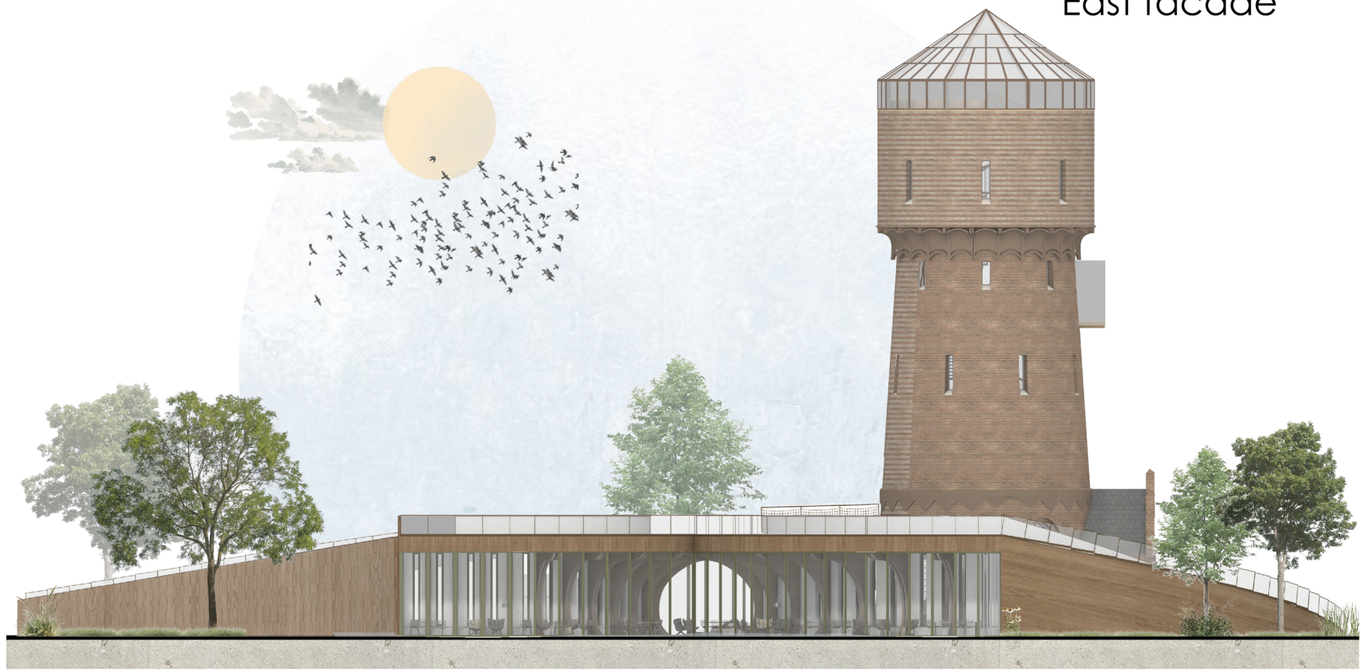
North facade



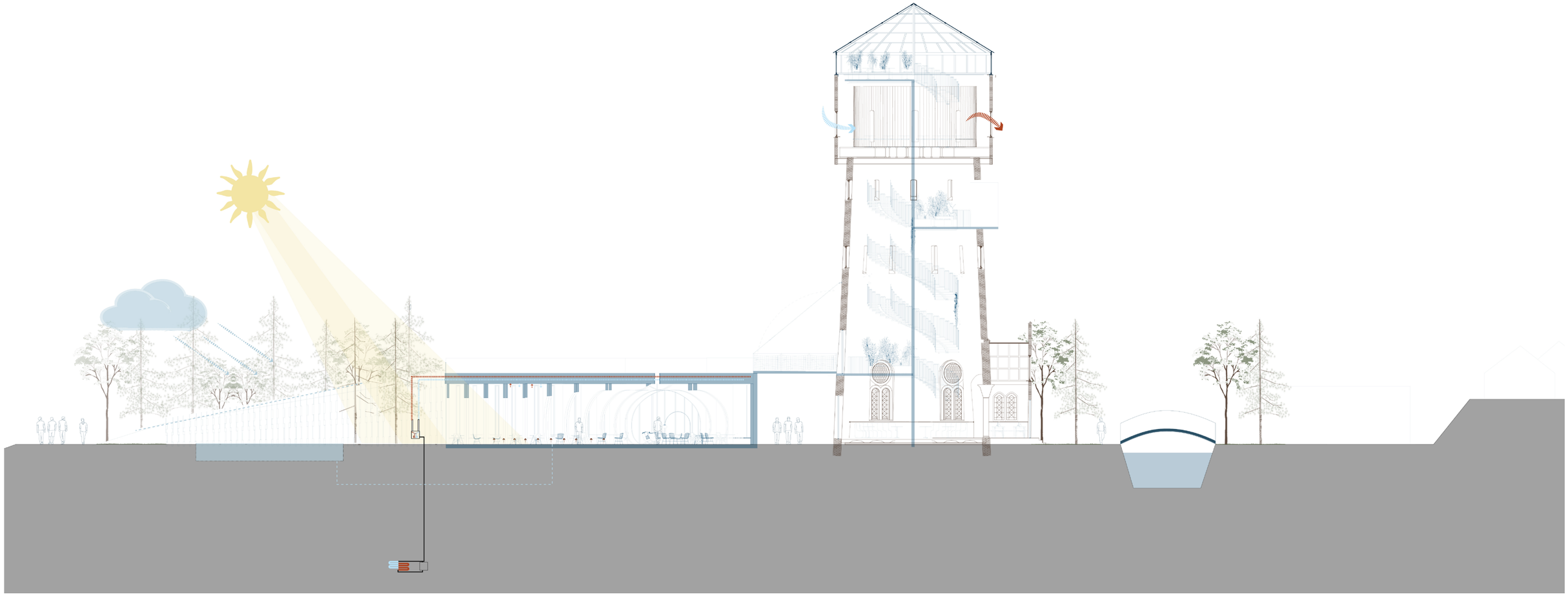
Shouth facade



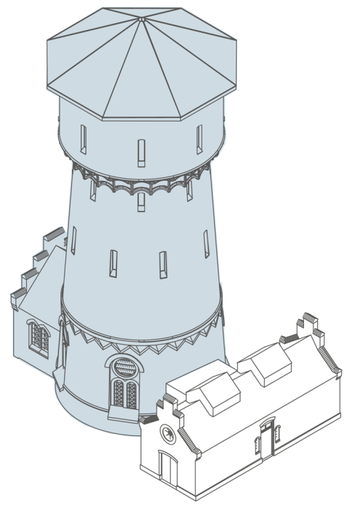
East facade



Climate and regulation



Conservation assessment



Damage assessment



Conservation strategies

Use digital strain measurements and wind simulations to assess impact.---->
Use digital strain measurements and wind simulations to assess impact.

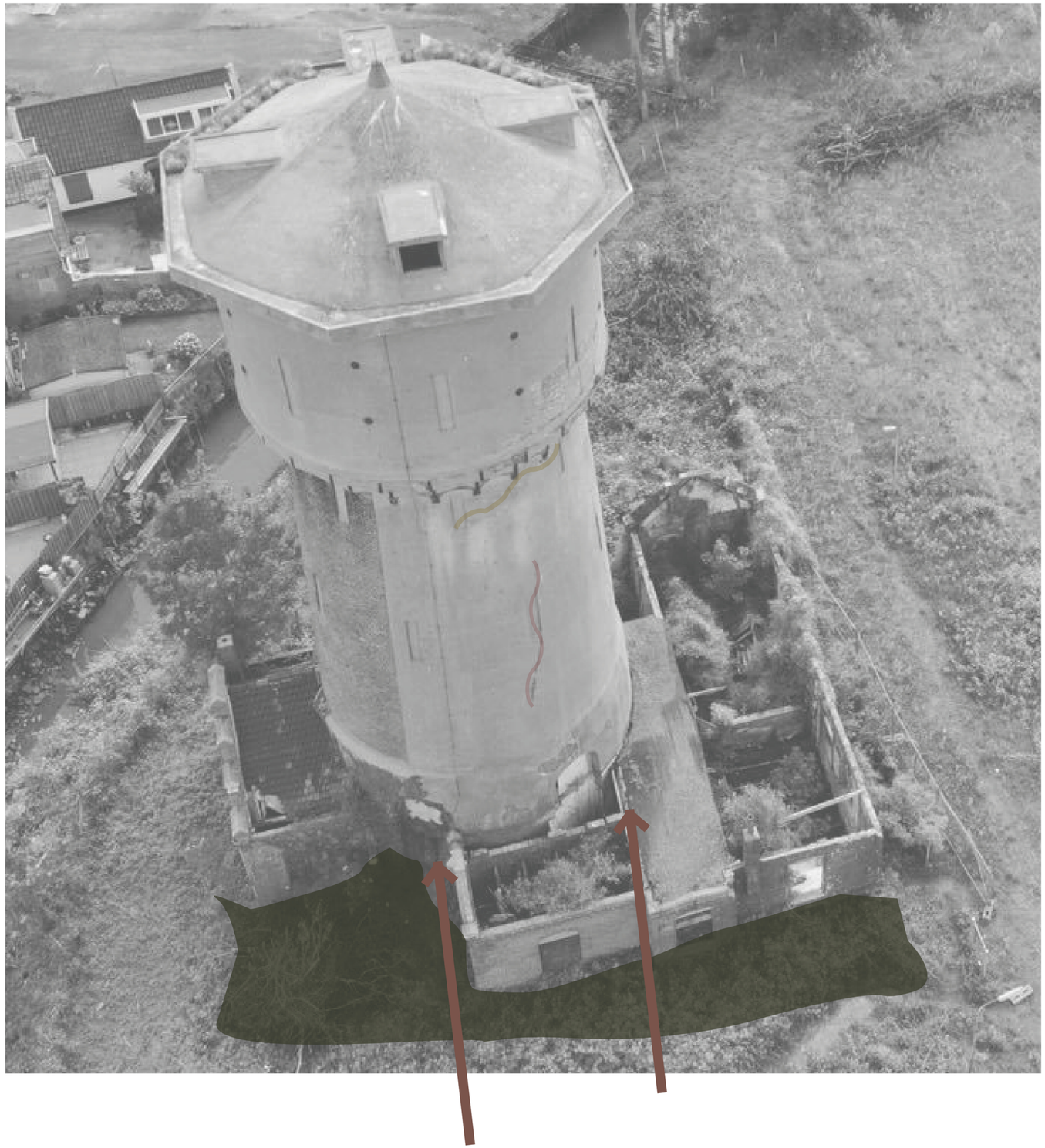
Inject elastic joint mortar to absorb future stress.

Reinforce with carbon fiber or steel profiles if necessary.

Addressing Vegetation Growth.---->

Remove vegetation around the base to reduce moisture retention and prevent root damage.

Regular maintenance is essential to stop roots from causing cracks and destabilizing the structure.



Monitor crack progression with gauges and digital leveling.---->

Fill cracks with flexible lime-based mortar to prevent moisture infiltration.

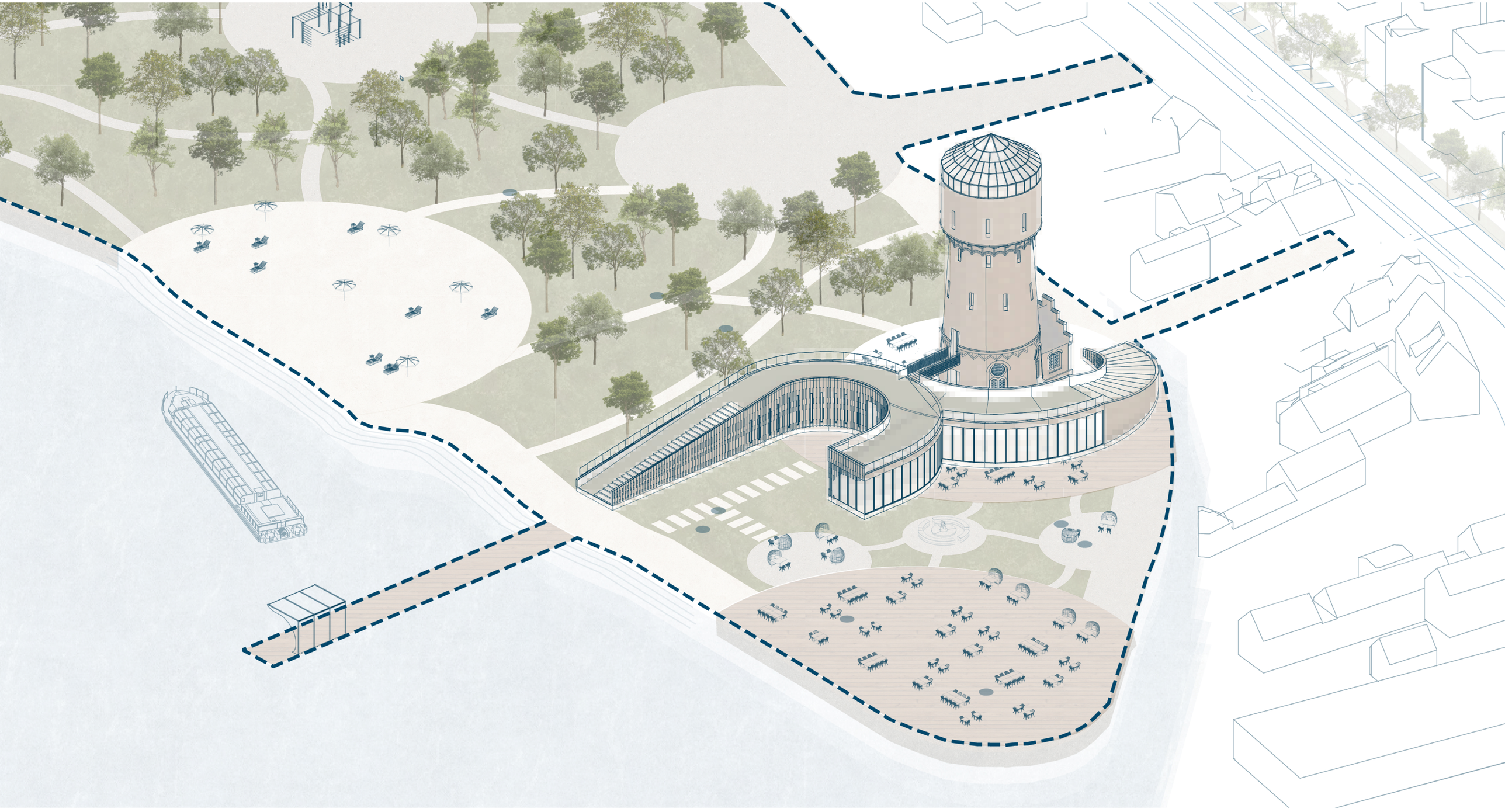
If needed, reinforce with stainless steel anchors or tension rods.

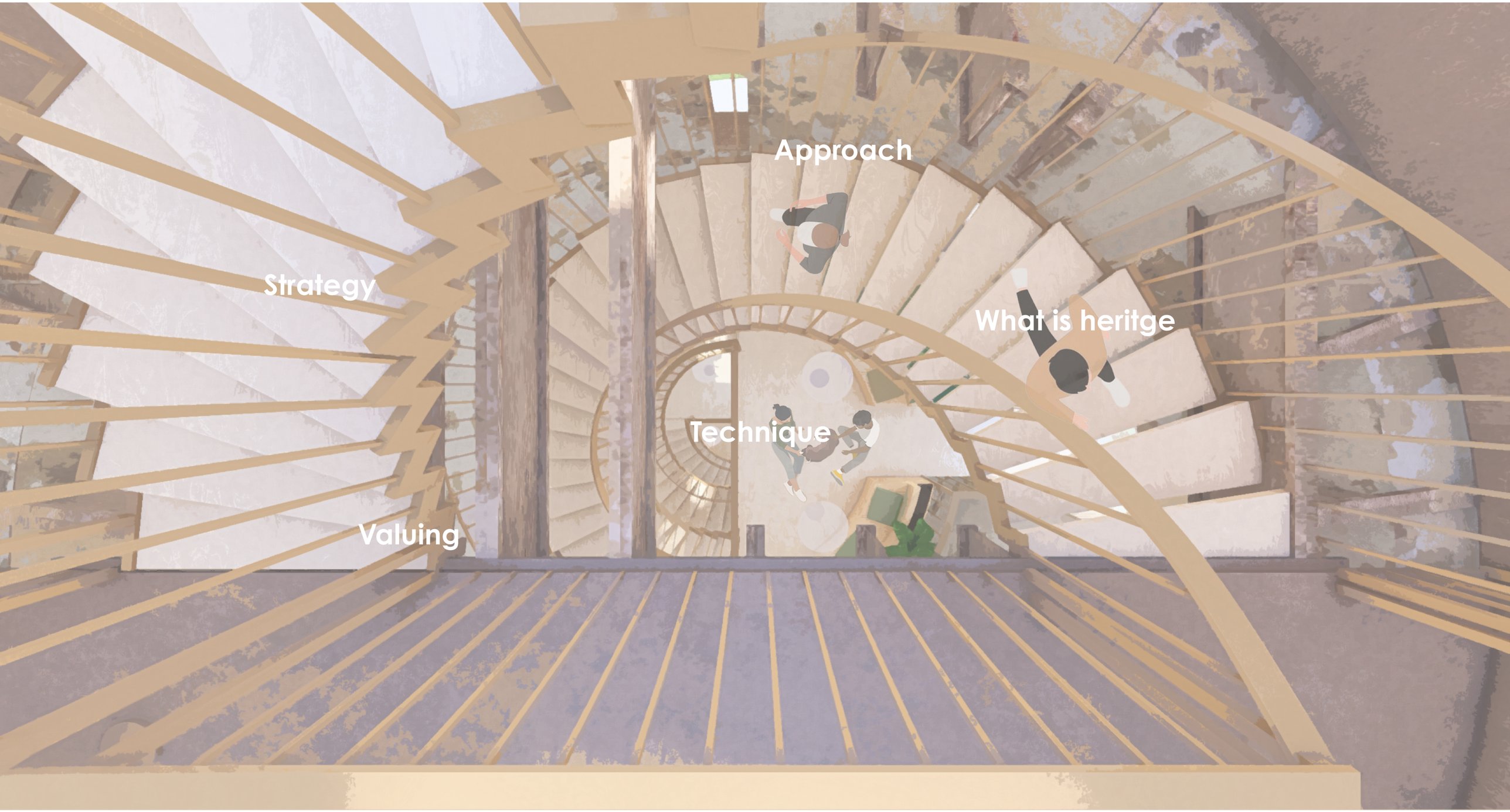
Stabilizing the Foundation The tower's foundation shows signs of settlement and subsidence.---->

A geotechnical investigation is needed to assess soil conditions.

Possible solutions: Underpinning or installing micropiles to stabilize and redistribute loads.

Reflection




Approach
Strategy
What is heritge
Technique
Valuing



Thank you!

:)