

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information		
Name	Eva van der Cammen	
Student number	5658993	
Studio		
Name / Theme	AR3AH115 Graduation Studio Revitalising Heritage	
Main mentor	Lidy Meijers	Architectural design
Second mentor	Koen Mulder	Building technology
Third mentor	Wido Quist	Research
Argumentation of choice of the studio	<p>My interest in heritage and urban transformation was initially fostered during my studies at the Willem de Kooning Academy, where I had the opportunity to work as an intern at IAA Architecten in 2019. This experience involved the redesign of an old milk factory, which led to my interest in heritage and the adaptive reuse of similar buildings.</p> <p>During my studies at Delft, I had the opportunity to engage with a range of studios. For my graduation project, I selected the theme of Revitalising Maritime Heritage, which reflects both my passion for heritage preservation and my deep connection to water.</p>	

Graduation project

Title of the graduation project

T' ZAAGJE

The adaptive redesign of a maritime industrial building

Goal

Location:

Rivierdijk 120/146 Sliedrecht, Delta Shipyard

The posed problem,

The industry forms a boundary between the water and the neighbourhood, limiting the relationship between people and the waterfront.

research questions and

“How can the adaptive reuse of maritime industrial buildings and sites enhance the relationship between the local neighbourhood and the waterfront?”

- How has the interaction between people and waterside areas developed over time?
- What benefits could a stronger connection to the waterfront bring to the neighbourhood and its residents?

design assignment in which these result.

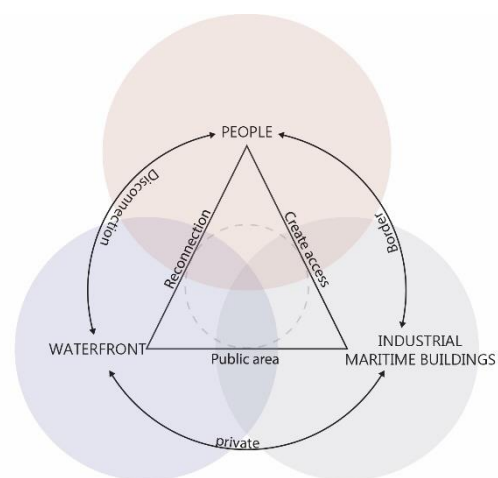
Maritime heritage is integral to Dutch cultural and historical identity, reflecting the nation's historic relationship with water. Over time, socio-economic and cultural changes have shaped the landscape structures and buildings along the riverbanks, such as dykes, canals, harbors, shipyards, and trade facilities. In South Holland's Waterdriehoek region—spanning Kinderdijk, Dordrecht, and Biesbosch—a study explores the value and development potential of this heritage, emphasizing preservation and adaptive reuse.

The studio project investigates revitalizing maritime heritage through historical research, intervention methods, and designing new programs and scenarios. The focus is on integrating maritime complexes within urban and landscape contexts, balancing opportunities for renewal with the challenges posed by modern developments. This initiative seeks to honor the area's industrial legacy while addressing the region's future needs.

The location selected for my project is the Delta shipyard, situated in the outer dike area of T' Zaagje in Sliedrecht. This area is notable for its historical significance as it contains both an old shipyard and an old water tower. The primary focus of the project will be on the shipyard, with the development of a masterplan for the entire T'Zaagje area also being a key objective.

During my site visit, I observed that maritime industrial buildings frequently act as barriers between the waterfront and the surrounding neighbourhoods. Based on these observations and with the values of the heritage line of the Waterdriehoek, I have established the following goals:

1. Reconnect the neighborhood and its residents with the water.
2. Provide access to the industrial maritime buildings, thereby preserving their heritage.
3. Create a public space by the water



With these goals in mind, I have developed the following program of requirements for the old Delta shipyard. The building's adaptive redesign will include a makerspace that preserves its heritage by facilitating work with various materials such as wood and metal. This makerspace would also offer a number of small studios that people reserve for a longer period of time. Additionally, several office spaces will be incorporated to accommodate startups and small businesses. A café will also be introduced, designed to be accessible both from land and by water, enhancing connectivity and usability for the community.

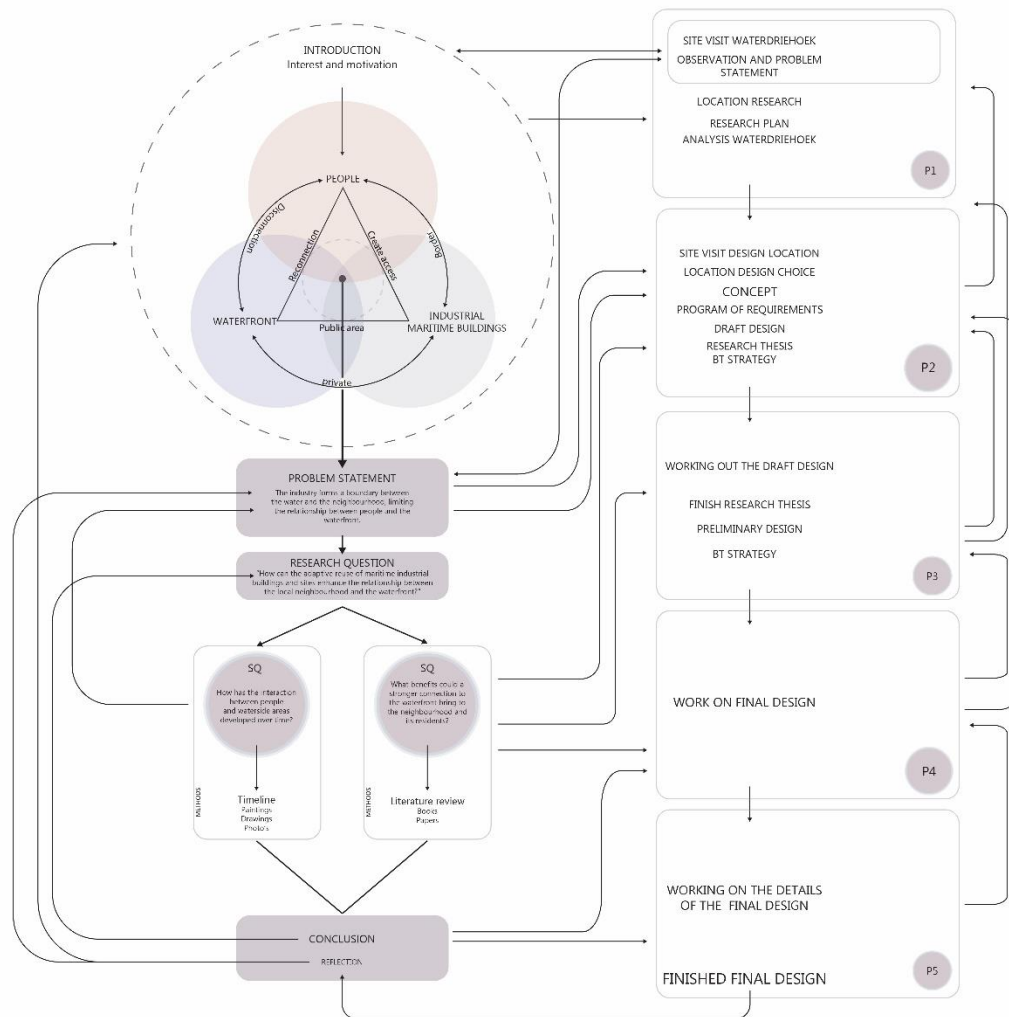
Process

Method description

Research

The research aims to explore how adaptive reuse of maritime industrial buildings can strengthen connections between people and waterfronts. The study examines the evolving relationship between people and water in the Netherlands by analyzing historical depictions (paintings, drawings, photos) of Dutch interactions with waterways. Additionally, it investigates the well-being benefits of proximity to water, drawing on Wallace J. Nichols' book *Blue Mind* (2020) and other scholarly sources on "healthy blue space."

Case studies of adaptive reuse projects near water will be analyzed to identify factors influencing success or failure. These insights will help answer the primary research question, offering a strategic framework to foster stronger public connections to waterfronts through adaptive reuse. Findings will be relevant for both adaptive reuse and other projects near water.



Design

My design process begins with thorough research into the location, its cultural and historical values, and the characteristics of the buildings themselves. Based on the findings from this value assessment, I develop a detailed program of requirements. Using this as a foundation, I create a masterplan for the area, integrating insights from the research.

In parallel, I initiate work on the shipyard by exploring various ideas through initial sketches. Over time, I transition to 3D sketches, creating simple, adjustable volumes. These 3D sketches are accompanied by basic floorplans and perspective renderings to explore design possibilities further. The primary objective for P2 is to establish a clear and cohesive concept for the buildings. This concept incorporates design strategies rooted in my research, with a focus on building technology, materiality, and the principles of the R-strategies.

Literature and general practical references

In conducting this research, I consulted multiple papers and books. For the design phase, I drew upon various theories to establish a clear value assessment for T' Zaagje, the water tower, and the shipyard. Below is a list of key sources utilized in this process.

Calogiuri, Giovanna, en Stilian Chroni. "The impact of the natural environment on the promotion of active living: An integrative systematic review". Research article, BMC Public Health, 2014.
<https://doi.org/10.1186/1471-2458-14-873>.

Foley, Ronan, en Thomas Kistemann. "Blue Space Geographies: Enabling Health in Place". *Health & Place* 35 (1 augustus 2015): 157–65. <https://doi.org/10.1016/j.healthplace.2015.07.003>.

Kaplan, Stephen. "The Restorative Benefits Of Nature: Toward An Integrative Framework". *Journal Of Environmental Psychology* 15, nr. 3 (1 september 1995): 169–82. [https://doi.org/10.1016/0272-4944\(95\)90001-2](https://doi.org/10.1016/0272-4944(95)90001-2).

Kuipers, M.C., en W. De Jonge. *Designing From Heritage: Strategies For Conservation And Conversion*, 2017.

Lynch, Kevin A. *The Image Of The City*, 1960. <https://ci.nii.ac.jp/ncid/BA01382449>.

Nichols, Wallace J. *Blue Mind - The Surprising Science That Shows How Being Near, in, On, Or Under Water Can Make You Happier, Healthier, More Connected, And Better At What You Do*. S. Hirzel Verlag eBooks, 2020.
<https://doi.org/10.3813/9783777629346>.

Plevoets, Bie, en Koenraad Van Cleempoel. *Adaptive Reuse Of The Built Heritage: Concepts And Cases Of An Emerging Discipline. Built Heritage*. Vol. 6. New York, Verenigde Staten: Routledge, 2019.
<https://doi.org/10.1186/s43238-022-00054-0>.

Wong, Liliane. *Adaptive Reuse: Extending The Lives Of Buildings*, 2016.
https://openlibrary.org/books/OL29316013M/Adaptive_Reuse.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track, and your master programme?

The connection between my project and my master track lies in the focus on heritage and the maritime industry. My approach extends beyond the scale of the building itself to include its immediate environment. I explore the building's historical role within its context and examine how it is perceived today. What values does the building retain—both tangible and intangible? Using the insights gained from my value assessment, which is grounded in various strategies, I guide the redesign of the old shipyard. This process ensures that the redesign respects the building's heritage while addressing its contemporary and future potential.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

The Waterdriehoek is one of the heritage lines in South Holland, established to protect the area's maritime heritage, which played a crucial role in its growth and development. T' Zaagje exemplifies how a space that may not be highly valued by the local community can still hold significant tangible and intangible historical value.

With its new function as a makerspace, the shipyard serves as a living reminder of its historical purpose. It also offers an educational opportunity: schools can visit the site, where children can use the education and presentation room to learn about the building's history and the critical role the

maritime industry played in the Waterdriehoek region. Following this, children can engage in hands-on activities, such as crafting their own small wooden boats, making the experience both informative and interactive.

In addition to its educational function, T' Zaagje will also include housing, as outlined in the masterplan below. The placement of these residences aligns with the municipality of Sliedrecht's development plans.

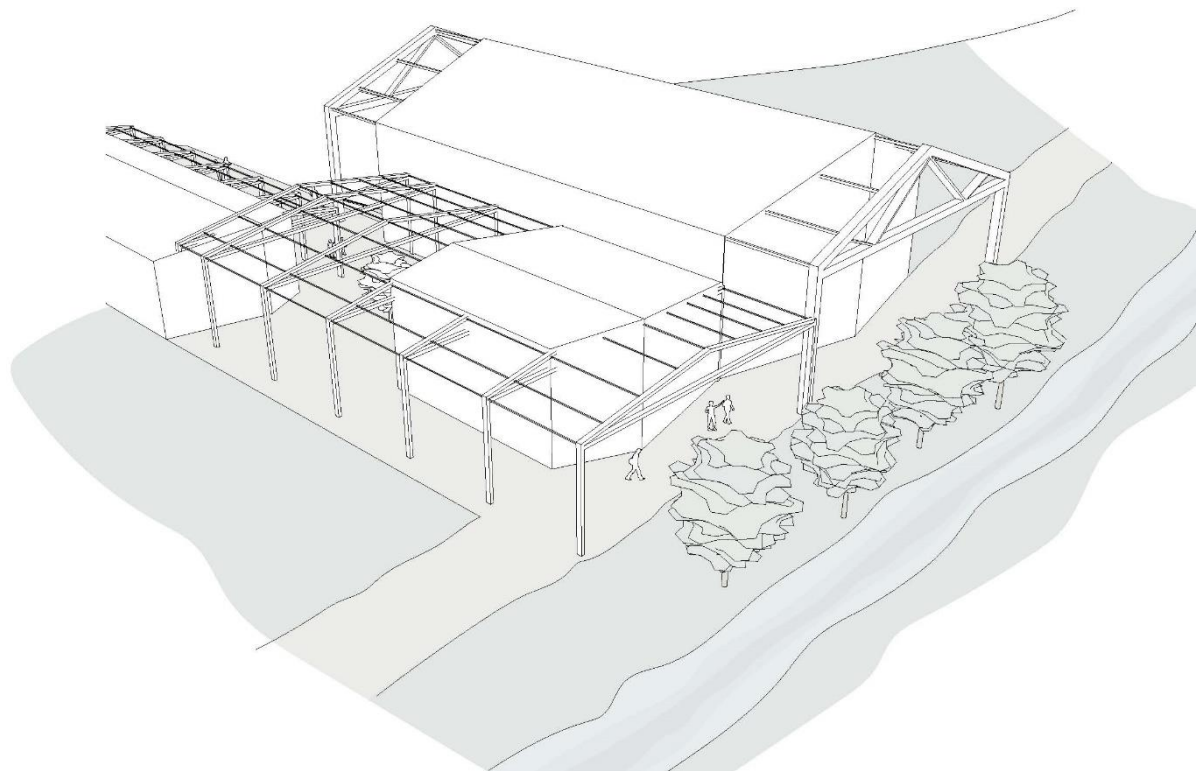
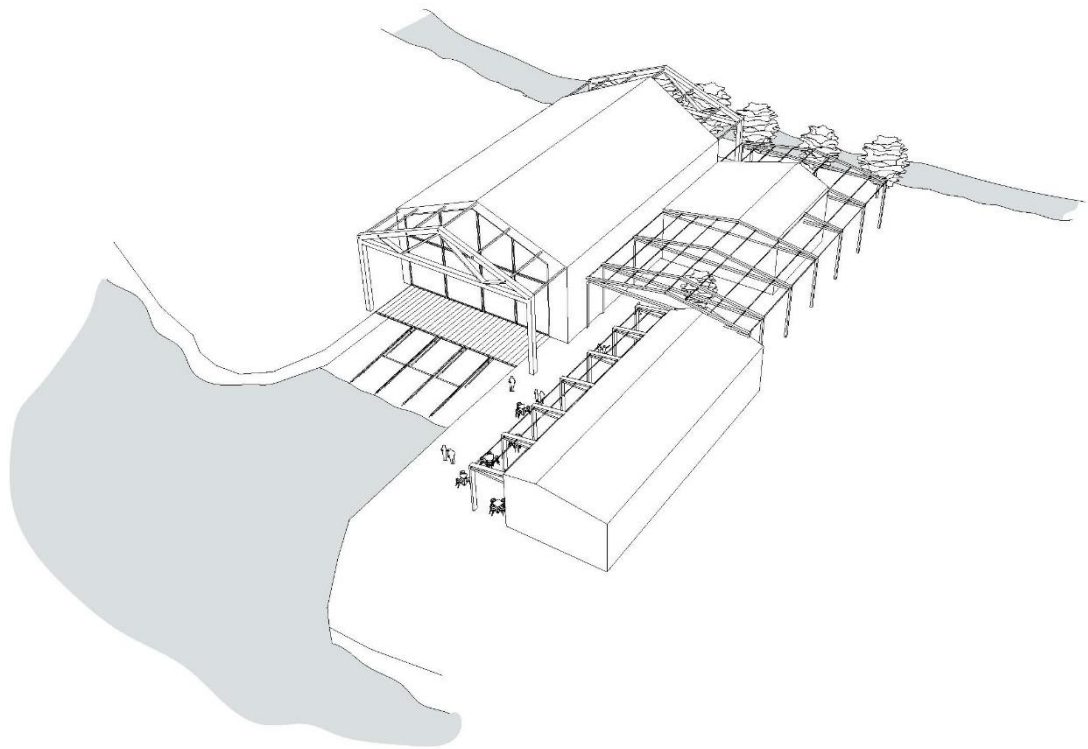
Through my design proposal for T' Zaagje, my objective is to preserve and celebrate the rich history of the site. The new plan aligns with the goals of the Waterdriehoek heritage line, ensuring that the heritage of this unique place remains alive for future generations.



Delta shipyard



Masterplan T' Zaagje



Design proposal for Delta Shipyard