

Nikita Ham



*Rest*

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*Peace?*

The Death and Life of Urban Cemeteries

# Colofon

REST IN PEACE?

The Death and Life of Urban Cemeteries

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Author: Nikita Ham

student number: 4882091

Research Studio: Design of the Urban Fabric

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Department of Urbanism

Faculty of Architecture and the Built Environment

Delft University of Technology

First mentor: Machiel van Dorst (Urban Studies)

Second mentor: Francesca Rizzetto (Urban Design)

*All the visual and photographic material has been produced by the author if not stated otherwise.*

# *Abstract*

In contemporary cities, death has become increasingly removed from everyday life. Cemeteries are often spatially and socially segregated, limiting opportunities for collective remembrance and reflection. At the same time, urban space is under growing pressure to accommodate multiple functions. This thesis explores how cemeteries can be reimagined as integrated and accessible urban spaces that reconnect death with daily life while supporting social, cultural, and ecological values.

Through a combination of fieldwork, expert interviews, and experiential, historical, financial, legal, and sociological analyses, the research develops a comprehensive understanding of the spatial functioning of contemporary Dutch urban cemeteries. To bridge research and design, a pattern language is developed that can be applied by professionals in the funerary and urbanism fields to both transform existing cemeteries and plan new ones. Based on this framework, six main design strategies are established.

The research then zooms in on four locations in Rotterdam South to explore how the integration of death into daily life can take shape within an existing urban context. First, a transformation strategy for the existing Zuiderbegraafplaats is presented. This is followed by design proposals for three sites where burial is currently not permitted, exploring new spatial relationships between remembrance, everyday use, and the city.

# Acknowledgments

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And lastly, mom and dad, thank you for your unconditional support throughout my time at TU Delft, and my sister Fiona for keeping me grounded.



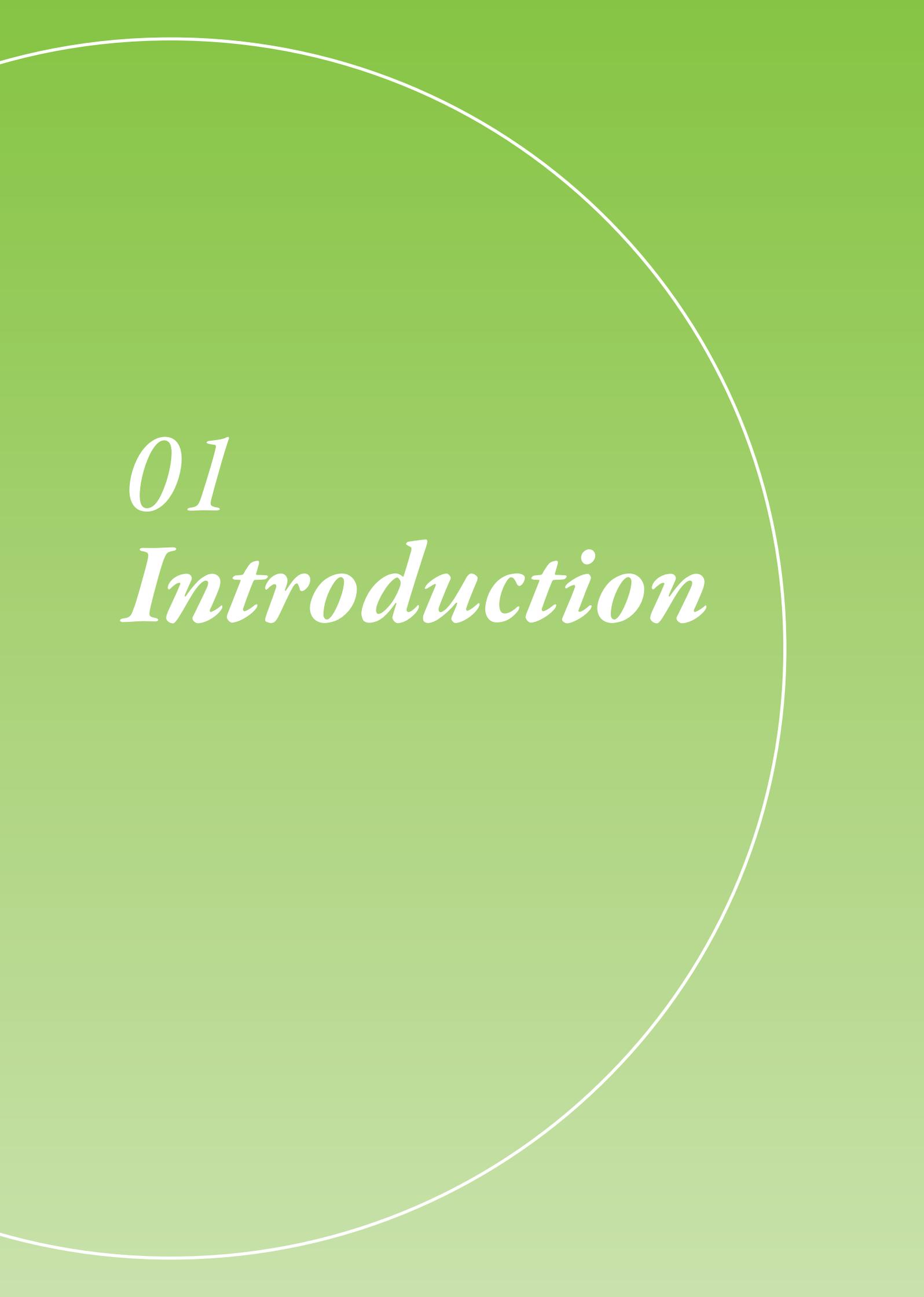
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*01*  
*Introduction*

# 01 Introduction

## 01 fascination

As long as I can remember, I have been fascinated with what happens after life and places that remember the dead. When my parents took me to the cemetery for a visit, I would point out funny names on tomb stones, calculate at what age they passed away and which stone I found the prettiest. As a child I was told not to think about death ‘because you are still so young.’ But did I not see graves on those cemeteries from young children, decorated with teddy bears and marbles?

The initial inspiration for this project was a coffin-shaped mattress at the Dutch Design Week. The artist’s message was to memento mori every night you go to bed. I was moved by the in-your-face tactic of the artist.

Some years later I saw a video of Marina Abramovic’s performance *Nude with Skeleton*. In the video, you see Abramovic lying on the ground naked with a skeleton on top of her. She is hyperventilating. “In our cultures, we try to avoid any kind of notion of dying except when it really happens,” Abramovic explains in an interview with the Royal Academy of Arts (2023). With her performance, she is breaking the taboo, just like I try to do in this report.

As planners and designers of cities, we have responsibility over what people see and experience on a daily basis. You make the decisions which functions deserve space, which have a central position, and which ones you hide. The way we plan our city has (unintentionally) influenced the way we look at death, by pushing it outwards. Now is the time to embrace death in our daily lives again.

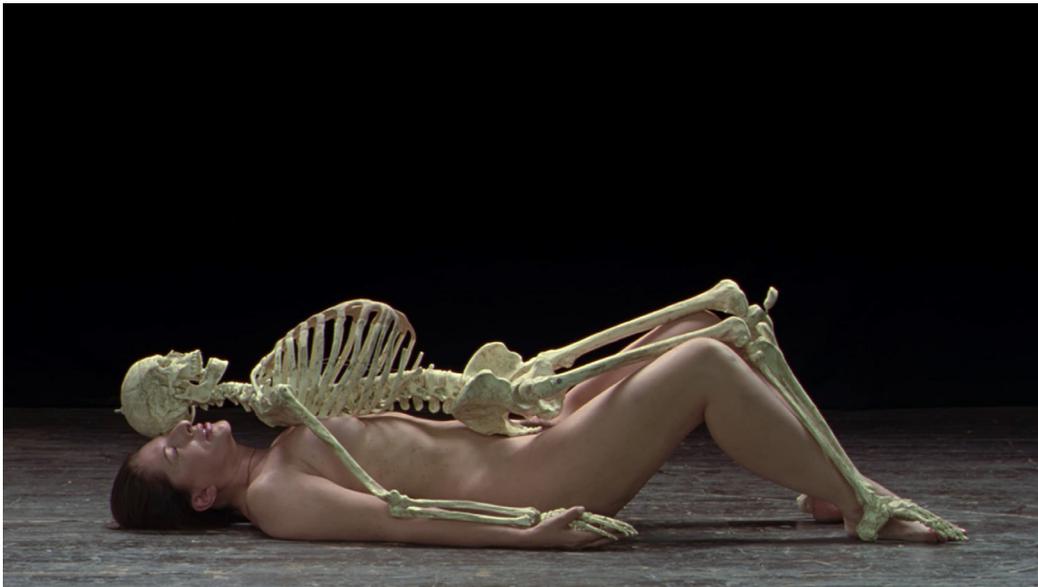
I will end with a quote from architect Christopher Alexander (1977), who summarises my motivation for this project in one sentence: “No people who turn their backs on death can be alive.”

Nikita

*For the Love of God by Damien Hirst.  
Photographer unknown*



*We Were Born  
To Die by Jiheon  
Chae. Exhibited on  
the Dutch Design  
Week 2021. Photo:  
Seoungjun Lee*



*Marina Abramovic performs Nude with Skeleton (Abramovic, 2005)*

## 02 positionality

*This report talks about death, dying, rituals and grief, which are very personal and emotional topics. In this chapter I explain my position towards these subjects to acknowledge that my position as a person always has influence on me as a researcher.*

At the moment I am 25 years old.

I was born in The Netherlands with atheist parents, both were raised Catholic. As a child, my parents took me to cemeteries and funerals occasionally. At home we said we ‘believed in the monkeys’, referring to Darwin’s evolution theory. I was told after death is nothing.

I have said goodbye to my grandma, grandpa and two uncles, this is the nearest I have come to death. I have never lost a parent, sibling, or friend, therefore I myself haven’t experienced grief in its full form.

I am afraid of death, have been since I was a child, the belief in rebirth used to soothe me. The fear grew again in the last few years, you could call this project my exposure therapy.

I am not sure if there is something of a ‘soul’, but there might be energies.

I have never been very sick or close to death myself.

Before this project, I had not visited a cemetery in a long time. I thought they were scary. I used to visit my grandma’s grave when I was younger, which I did again with my dad this year (recorded in chapter 03.10).



*Photo: Marieke Russchen*

## 03 glossary

Concepts understood in the context of this report.

### **CEMETERY**

Comes from the Greek *κοιμητήριον* which means 'sleeping place'. In the Dutch language, the most commonly used word *begraafplaats* (which translates best to 'graveyard') insinuates that the place revolves around the burial function. However, for this report the cemetery is taken in its broadest sense that beside disposal, the cemetery is also a place of sacredness, in the form of remembrance and grief (illustrated in the diagram on the right).

### **URBAN CEMETERY**

A cemetery that lies in the middle of a city.

### **DEATH**

What comes after life.

### **TO DIE**

The act of moving from life to death.

### **DISPOSAL**

The practice and process of dealing with the remains of a deceased human being.

### **SACREDNESS**

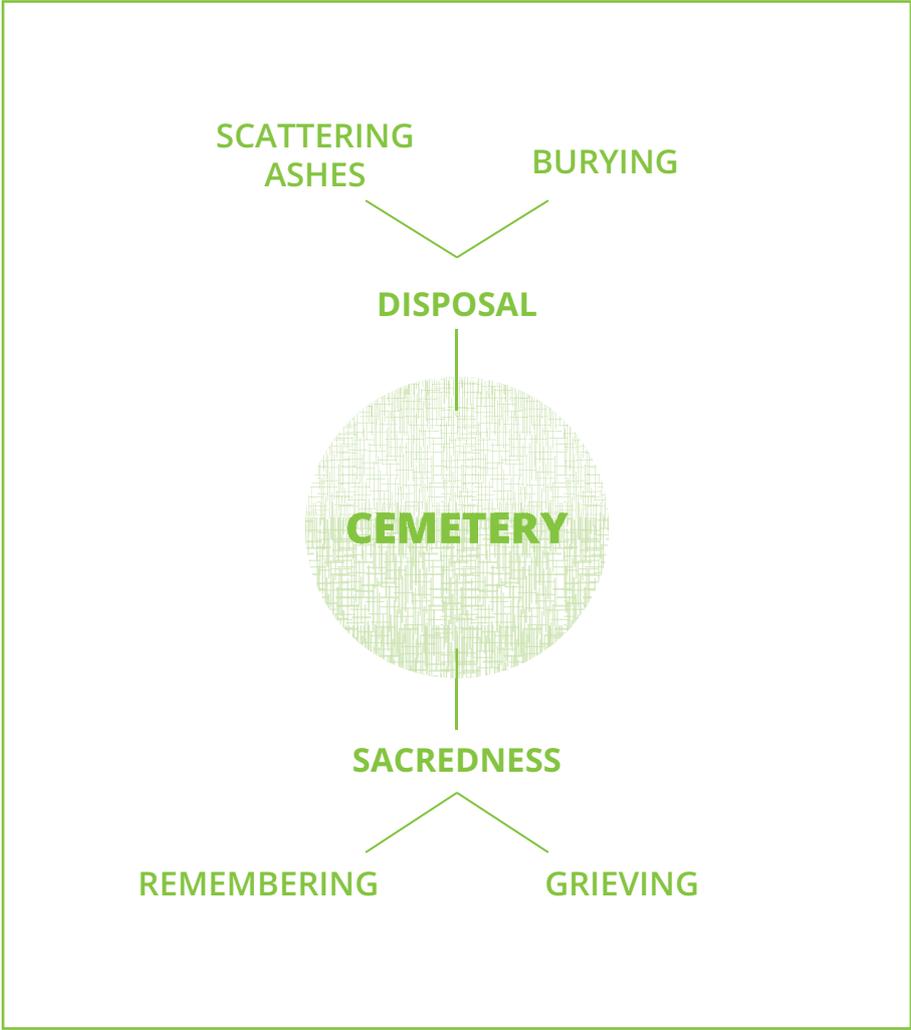
The quality of being considered holy and deserving respect. Strongly related to spirituality.

### **TO REMEMBER**

The act of remembering someone who passed away or a tragic event that transpired.

### **TO GRIEVE**

To feel intense sorrow, for example when someone has passed away.



*Cemetery, as understood in this report*

## 04 problem field

### THE SOCIAL

Life expectancy is often used as a measure of a country's development. In the Netherlands, women currently live an average of 82.6 years and men 79.6 years, well above the global average of 71.4 years (WHO, 2022). This can be explained by the medicalisation and the progression of hygiene and technology in the past century, which have added ten years to our predicted lifespan. The increased focus on medical interventions aim to prolong life and control the dying process.

#### **The Death Taboo**

But as early natural death became rare, death was increasingly removed from public life. This has led to its gradual retreat into the private and institutional sphere, rendering it unfamiliar and mysterious. The process accelerated when people no longer died at home, among family, but instead in the hospital (Ariès, 1974). Today, we rarely encounter death directly, yet in popular culture, it's everywhere. Murder mysteries, violent video games, or the record of 83,871 on-screen deaths counted in the sci-fi movie *Guardians of the Galaxy* confront us daily with fictionalised death. We depict it constantly, but we no longer experience it. Geoffrey Gorer (1955) described this phenomenon as *The Pornography of Death*. He argued that while the 20th century saw the decline of sexual taboo, it simultaneously witnessed the rise of a new one: death. Where once children were encouraged to contemplate their own mortality and reflect on the cautionary deaths of others, death is now largely absent from public discourse. The notion of death did not fit the 'collectively pursued economic progress' that characterised the time (Kamphuis, 1999).

#### **Fear of Mortality**

Today, this taboo has weakened, but it hasn't vanished. Many adults still avoid the topic, often with the intention of sparing their children, but perhaps also to spare themselves. With the secularisation of Dutch society, death has become an ending rather than a transition and we are extending it as long as possible.

In *The Denial of Death*, Ernest Becker (1973) argued that much of modern culture is shaped by a deep, often subconscious fear of mortality. From dying for one's country (as a path to heroic immortality), to joining a religion (which provides symbolic immortality through beliefs in afterlife) or creating lasting works of art, books, art or buildings. Even regular exercise and cosmetic surgery can be seen as acts of resisting the reality of mortality.

#### **The Cemetery as a profit-driven Machine**

As Max Weber described in 1919, secularisation has led to the disenchantment of the world, in which spirituality is lost. The shift toward rationality, bureaucracy and science also impacted our cemeteries. They are now regarded as profit-driven machines. It can be questioned if this negative image also is a consequence of the death taboo.

This view on the cemetery has consequences not only for the places themselves but also for those who work within them. In one episode of the *Podkist* podcast, a crematorium employee reflects on the lack of public appreciation for her work. During the COVID-19 pandemic, there were national moments of applause for healthcare workers. In her crematorium, she and her colleagues were also working overtime, but no one clapped for them (Mathijssen, 2024).



*Screenshot from Call of Duty: Black Ops. We depict death constantly, but we no longer experience it. (Volkspider, 2010).*



*Medieval frescoes depicting a Danse Macabre in the Holy Trinity Church, Hrastovlje, Slovenia. Painted by Johannes de Castua, completed 1490. Picture from ourworldheritagebe (2017).*

## THE SPATIAL

The medicalisation of life and death, discussed on the previous page, has also influenced the population development of the Netherlands. With people living longer, population growth began to rise. Today, the Dutch population continues to grow, but since 2022 the main driver has shifted to immigration, as natural growth has become slightly negative (CBS, 2024). Immigration introduces new cultures to the country, adding to the diversity already shaped by historical ties with regions such as Suriname and Indonesia.

### Same but different

Different cultures bring different rituals around death. In some traditions, funerals are loud, expressive, and celebratory: there is singing, dancing and communal gathering to honour the life of the deceased. This can cause friction in cemeteries where Dutch customs favour quiet and solemnity. Yet some view these differences as an enrichment of funerary culture, sees cemetery director Theo van Werkhoven (appendix A1).

There are also practical and religious differences. For example, Islamic tradition requires eternal graves, where the dead rest undisturbed until the Day of Judgment. In response, many cemeteries—especially in cities—now include Islamic sections, and several exclusively Islamic cemeteries have been established, with the largest located in Arnhem.

### How the cemetery left the city

The taboo around death also affects how cemeteries are used. Some people actively avoid them. At Museum Tot Zover, located on the grounds of De Nieuwe Ooster cemetery in Amsterdam, a staff member shared that some people avoid the museum simply because they

are unwilling to cross the cemetery gates.

Today, cemeteries are fenced-off, secluded from daily life. But this was not always the case. Between the 14th and 18th centuries, cemeteries were vibrant public spaces. As Ragon (1983, p. 143) notes, they were open to all, filled with social activity, and deeply embedded in communal life—anything but macabre.

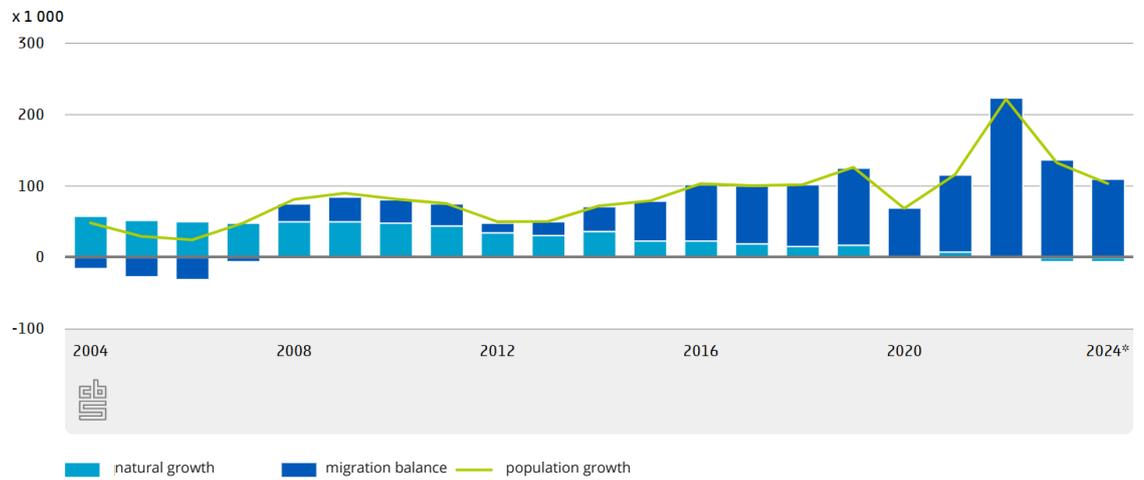
This changed in the 19th century, when European cities began banning burials within city limits. Cemeteries were suspected sources of infection during outbreaks of plague and cholera (Kamphuis, 1999, p. 19). New regulations required cemeteries to be at least 40 meters from buildings or forests. Many were also encircled by canals, sometimes to raise ground levels, other times for security, or perhaps, as Ragon argued, to contain the dead.

### The cemetery as urban enclave

Whether due to hygiene or symbolism, cemeteries were deliberately planned as separate from the city. Although cities have since expanded around them, these spaces still function as enclaves. Despite no longer posing a health risk, the cemetery remains a 'City of the Dead': mono-functional, inward-facing, and often disconnected from the urban fabric. Most have a single entrance, high fences, and little overlap with public space.

By contrast, in some nearby countries, cemeteries are treated as public parks. It might be because of a lack of urban green space that citizens have no choice but to spread out the picnic blanket on the cemetery, but it makes these places lively. Even in the Netherlands, change might be underway. In Rotterdam, densification and the pressure on urban green have sparked interest in rethinking cemeteries as public space, says landscape architecture expert Sander Klaassen from the municipality of Rotterdam (appendix A5).

## Population development



*Population development in The Netherlands (CBS, 2025)*



*Wi-kan-doe coffin carriers from Suriname.*

<https://surinaamse-uitvaart.nl/wi-kan-doe/>

## THE ENVIRONMENTAL

The climate crisis and the biodiversity crisis are among the most urgent challenges facing cities today. In urban areas, climate change has already led to negative effects on human health, livelihoods, and critical infrastructure (IPCC, 2023). Heat extremes are becoming more frequent and intense, a development that is reinforced by large areas of paved surfaces, also known as the urban heat island (UHI) effect.

Green infrastructure is one of the most effective tools to improve urban liveability under conditions of heat stress. Vegetation helps cool the city through shading and evapotranspiration, while access to green space has also been shown to reduce stress, anxiety, and other mental health problems (WHO, 2021). At the same time, urban green space is under increasing pressure due to densification and competing spatial claims.

### Stable green

Cemeteries are also urban green space and are generally protected from redevelopment because of their sacred status. This makes them stable green spaces within the urban fabric, less vulnerable to densification pressures. Despite their ecological potential, Dutch cemeteries are rarely recognised for their contribution to urban green infrastructure. They are often treated as semi-private and mono-functional spaces, even as multifunctionality becomes increasingly important in compact cities (Haaland & van den Bosch, 2015).

Urban cemeteries are even more effective in

cooling their surroundings than public parks. This is largely due to the maturity and density of their vegetation (Stumpe et al., 2024). Interestingly, the church didn't allow trees inside the cemetery until the late nineteenth century, when they were first understood as purifiers of air (Ragon 1983, p. 116).

In relation to the biodiversity crisis, only a limited number of urban cemeteries have begun to actively address their ecological role. While Dutch cemeteries are encouraged to contribute to biodiversity enhancement (RCE, n.d.), high maintenance costs and a preference for neat appearances often result in open areas being managed as closely mown lawns. Such landscapes are ecologically poor and support little biodiversity. By transforming these areas into more diverse and structurally rich plantings, cemeteries could play a meaningful role in strengthening local biodiversity while simultaneously supporting climate adaptation in cities.

### Environmental impact of burial practices

Lastly, both burial and cremation have negative environmental impacts, although these are relatively small compared to the overall environmental footprint of other activities during a person's lifetime (Keijzer, 2017). Nevertheless, there is a growing demand for more natural and sustainable approaches to death and body disposal. In the Dutch context, natural cemeteries are gaining increasing popularity (Trouw, 2025). In addition, new disposal techniques are emerging: resomation is expected to be legalised under forthcoming legislation, while human composting is still awaiting national legal approval (Enklaar 2025).



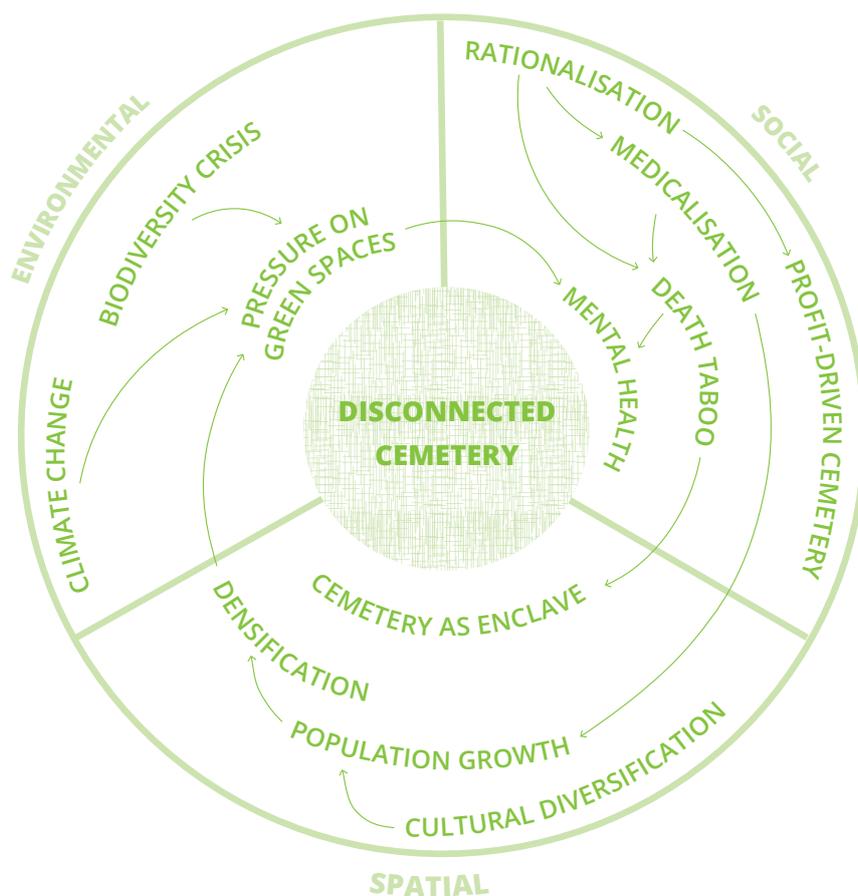
*Educational posters about urban heat island effect. Rotterdamse Dakendagen, 9 June 2025.*



*Bee hives in the natural part of Hofwijk cemetery, Rotterdam. Picture by author*

## 05 problem statement

In contemporary cities, **death has become increasingly removed from everyday life**. Cemeteries are often spatially and socially separated, limiting opportunities for collective remembrance and reflection. At the same time, urban space is under pressure to serve multiple functions. This raises the question of **how cemeteries can be reimagined as integrated, accessible places** that reconnect death with daily life while supporting social, cultural, and ecological values.



*Problematisation framework*

## 06 research aim and sub-questions

*Research aim:*

to make places connected to death  
part of daily life again,

focusing on reconnecting urban  
cemeteries<sup>1</sup> to the urban fabric,

by designing spatial interventions<sup>2</sup>  
in Rotterdam-South<sup>3</sup>

### RESEARCH QUESTIONS

SQ1. How have historical, cultural and spatial dynamics influenced the development of and our attitude towards Dutch cemeteries?

SQ2. How can cities strengthen the relationship between citizens and the cemetery through the social, spatial and environmental sphere?

SQ3. How should a cemetery in Rotterdam-South look like in the future?

## 07 reading guide

### **Fieldwork journal**

The fieldwork journal (fragments on the left) is a separate book that gathers all observations and analyses connected with fieldwork. The first part explores six cemeteries in The Netherlands, the second part analyses cemeteries in London, Berlin, Stockholm and Copenhagen.

### **Chapter 3 - Unfolding the Cemetery**

This chapter opens the black box and collects all information necessary to understand the Dutch cemetery and the funerary world. This includes historical, legal, economical, spatial, social, and technical analyses.

Chapter 3 answers SQ1: *How have historical, cultural and spatial dynamics influenced the development of and our attitude towards Dutch cemeteries?*

### **Chapter 4 - Design strategy**

This chapter combines the information of chapter 3 and the findings from the fieldwork journal into the tools we need to design for the research aim, in the form of a pattern language. The chapter concludes with a design strategy table on the goals Life in the Cemetery and Death in the City and answers SQ2: *How can cities strengthen the relationship between citizens and the cemetery through the social, spatial and environmental sphere?*

### **Chapter 5 - Life in the Cemetery**

In this chapter the tools from chapter 4 are applied on the context of Zuiderbegraafplaats. After getting to know the Zuiderbegraafplaats, this chapter proposes a transformation for the cemetery for 2080 to integrate in the urban fabric.

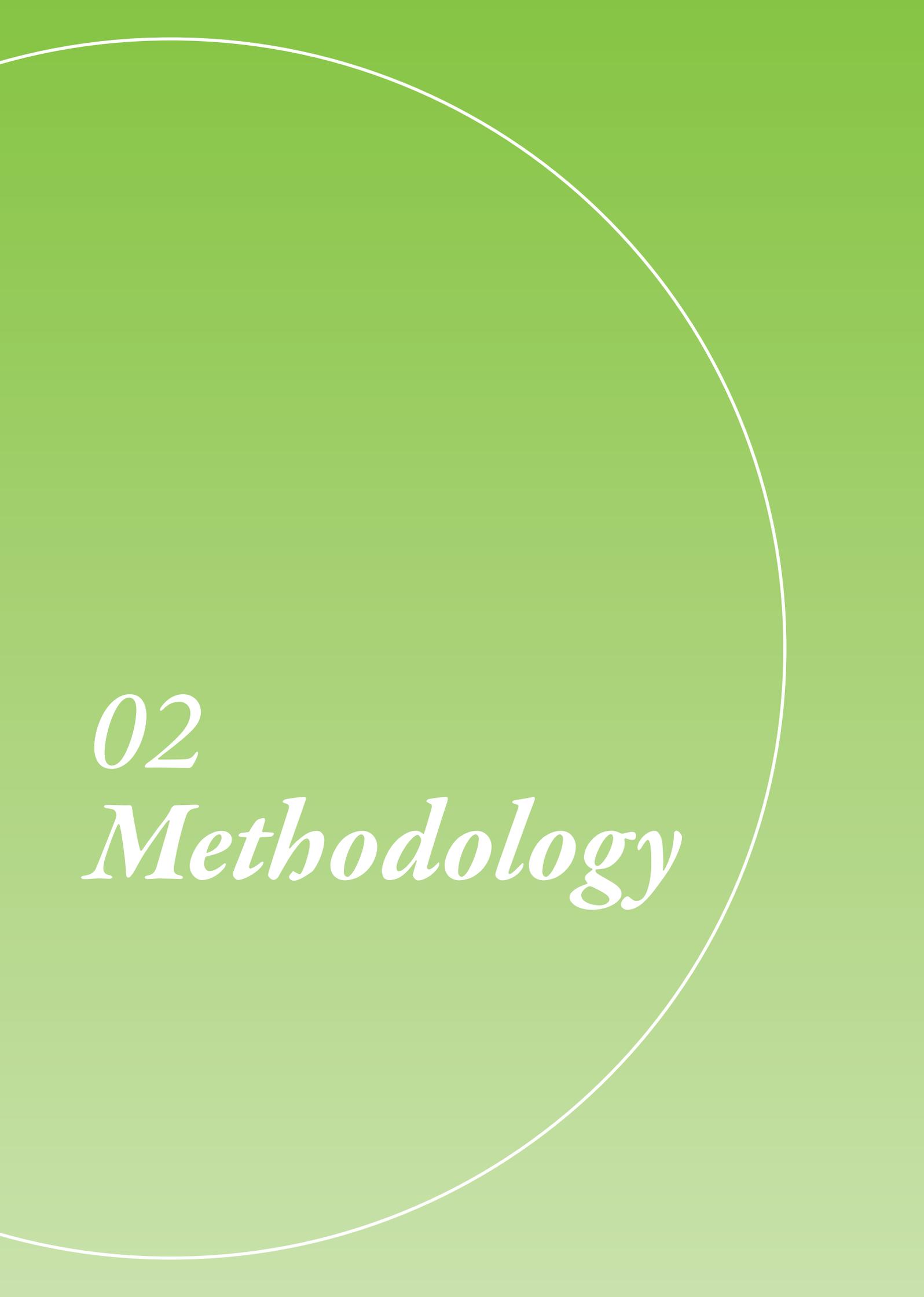
### **Chapter 6 - Death in the City**

In this chapter the tools from chapter 4 are applied on the context of Rotterdam-South. focuses on adding death in the city. First the current deathscape of Rotterdam is analysed. Lastly, three design interventions are presented: courtyard Pendrecht, Handelsplein and Walhalla square.

Chapters 5 and 6 answer SQ3: *How should a cemetery in Rotterdam-South look like in the future?*





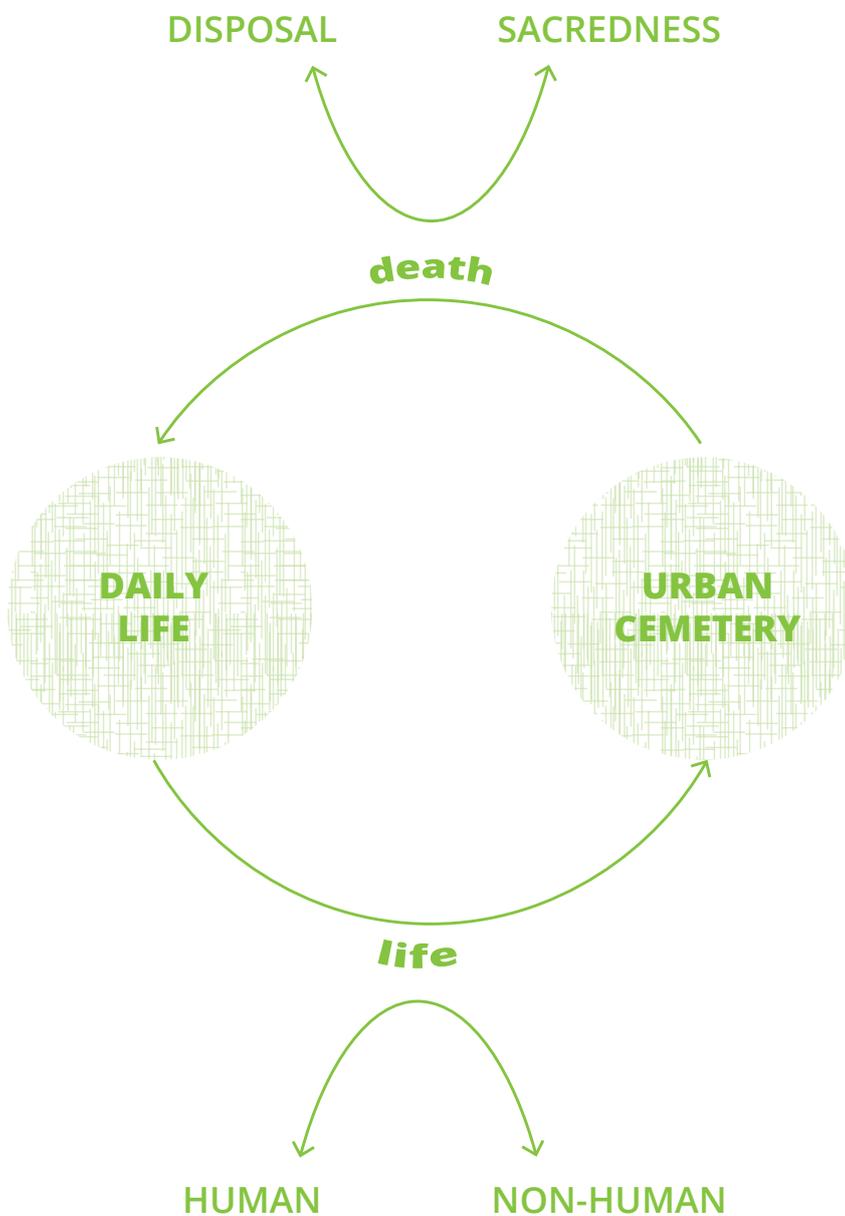


*02*  
*Methodology*

# 02 Methodology

## 01 conceptual framework

To make cemeteries more relevant is to make these places more visible, accessible and usable. This project aims to do this by attracting life to the cemetery as we know it, and adding more death to daily life. The hypothesis is that this way, the boundary between cemetery and city blur, normalising being in contact with the dark edges of life.



## 02 methodological approach

This research adopts a diverse methodological approach to address the complexity of the topic. By combining different methods, it aims to capture both practical and experiential dimensions. Preference was given to on-site methods as they allow engagement with the physical and sensory qualities of the cemetery. The methods emphasise the urban designer becoming rooted in the context, inspired by Jan Gehl's behavioural research strategy in his book *Life Between Buildings*.

### **Fieldwork**

To gain an understanding of the appearance, functioning, and contemporary use of cemeteries, fieldwork was conducted through a combination of ethnography, photography, videography, and sensory analysis. These methods were brought together in a **fieldwork journal**, emphasizing the subjective nature of how cemeteries are experienced. As the research also explored the notion of mental and perceived boundaries within space, personal impressions and emotional responses to locations were systematically recorded.

It was a deliberate methodological choice not to interview cemetery visitors or conduct surveys, due to the sensitive nature of their visits. To compensate for this lack of direct interaction, particular attention was paid to physical traces of use. In the cases of Bosdrift, St. Laurentius, Zomerlanden, and the Zuiderbegraafplaats, field visits were complemented by on-site expert interviews, creating a valuable link between experiential observation and professional insight. In these instances, the interviewed experts were considered as representatives of the users of their cemeteries.

In the second stage of the research, fieldwork was carried out in cemeteries in several European cities. The purpose was to broaden the understanding of what a cemetery can be and to learn from examples where cemeteries are more closely integrated into the urban fabric. In total, eleven cemeteries were examined and compared in the fieldwork journal. Not all sites were analysed in equal depth, as some revealed overlapping insights that could be combined. The aim was to make the view on the cemetery as diverse as possible, by seeing many different kind of cemeteries. Underneath is the complete list of cemeteries I visited during the project, which influenced the decisions and conclusions.

### **NL**

Jaffa, Delft

General Cemetery Crooswijk, Rotterdam

St Laurentius Catholic cemetery, Rotterdam

Hofwijk, Rotterdam

Zuiderbegraafplaats, Rotterdam

Natural Cemetery Zomerlanden, Hoeksche Waard

Natural Cemetery Den en Rust, Bilthoven

Catholic cemetery, Maasland

General Cemetery, Maasland

Nieuwe Ooster, Amsterdam

Essenhof, Dordrecht

Bosdrift, Hilversum

### **ABROAD**

Highgate, London

Bunhill Fields, London

St Jacobi, Berlin

Meža Kapi, Riga

Norra, Stockholm

Järva, Stockholm

Skogskyrkogården, Stockholm

Assistens, Copenhagen

*(present in fieldwork journal)*

### ***Expert interviews***

The interviews conducted in this study were unstructured, because each interviewee has different backgrounds and areas of expertise. As mentioned, it was a deliberate choice not to interview visitors on cemeteries. Instead, this perspective is represented collectively by some of the experts consulted. This approach is justified by the professionals' close engagement with clients, which are individuals nearing the end of life and their relatives, people visiting a grave, and visitors with other motives. This provides the interviewed experts with a nuanced and representative understanding of their wishes. See appendix A for the conclusions from the interviews.

<b>INTERVIEW</b>	<b>AIM</b>
Theo van Werkhoven Cemetery Director St Laurentius Catholic cemetery	-How to mix different cultures on a cemetery -The social function of the cemetery
Anita van Loon Funeral Foundation Director Hilversum	-How to revive an inactive cemetery -The business case of a cemetery
John Vogel & Robin Assenberg Managers Cemeteries Delft	-Practicalities of working on a cemetery -How people look at cemetery workers
Marina Fidder Relationship Manager Natural Cemetery Hoeksche Waard	-Understanding the goal of natural cemeteries. -How a natural cemetery works
Sander Klaassen Expert Landscape Architecture Municipality of Rotterdam	-The municipality's attitude towards her cemeteries in comparison to public parks/green -Current projects with cemeteries
Ingrid Addicks & Ton van Dam Administrator & Asset manager Zuiderbegraafplaats	-Discuss cases for multi-functionality -Insight in financial situation
Bart Brands Expert cemetery design Karres + Brands Landscape design	-Developments in cemetery design -Multi-functionality on the cemetery -How to design for rituals

### ***Literature review***

The literature review forms a continuous thread throughout the research, providing academic grounding and contextual depth. Sources include historical analyses, philosophical theories, books, essays and news articles. The primary aim is to identify the knowledge gap that this research seeks to address.

### ***Spatial analysis***

There can be no urban project without spatial analysis. For this research, information is mapped on different scales using QGIS, fieldwork data and Google Maps.

### ***Pattern language***

There are numerous ways to synthesise findings from multiple methods into a format that is cohesive and useful. In this research was opted for drawing up a pattern language because it creates structure and enables the opportunity to identify relationships between different types of interventions. The principles are gathered from fieldwork, interviews, research by design and literature and function as design tool for location-based designs in the final part of the project.

### ***Research by design***

Starting the design process, research by design was used to imagine new cemetery typologies. This happened mainly in the form of sketching extreme scenarios, focusing on multi-functionality. In a later stage the sketching became more location-based, experimenting with the design principles in combination with tackling situation-specific design challenges.

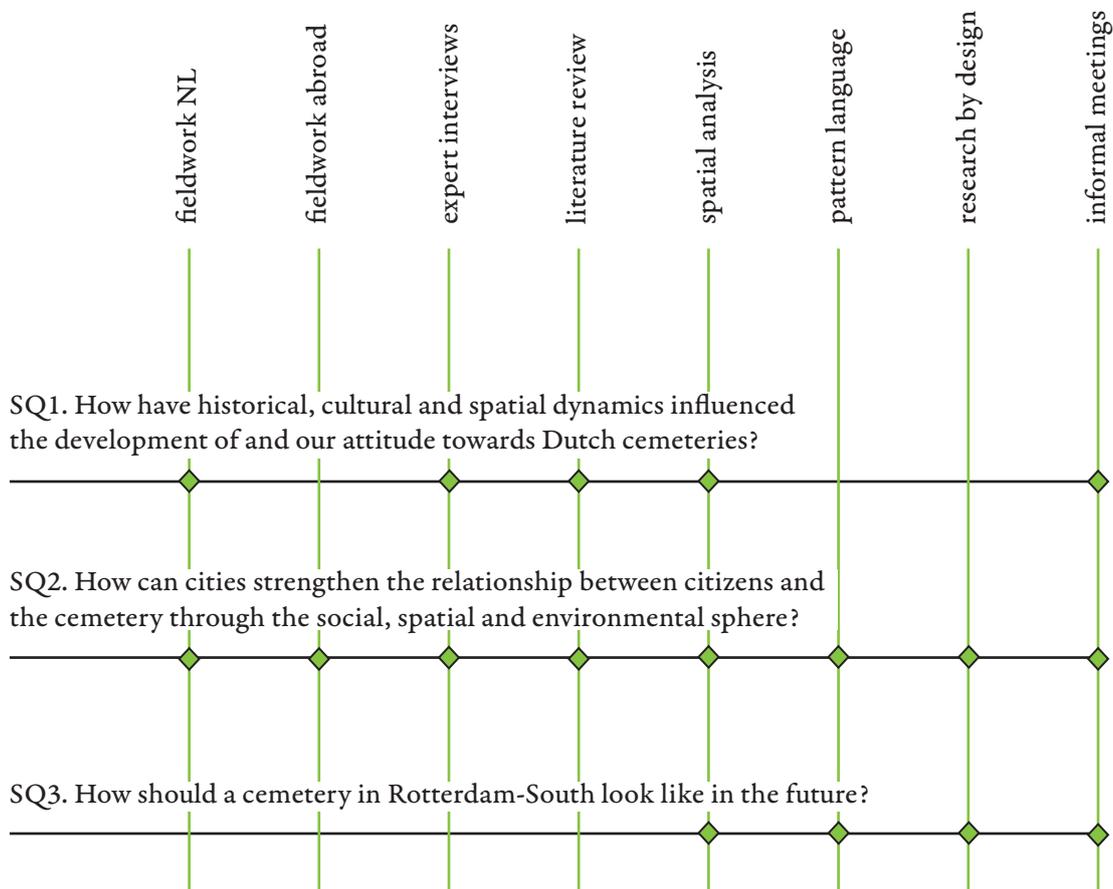
In the process of research by design, a workshop was conducted with fellow students. The instruction was to come up with new design typologies by combining a design principle with an unrelated but defined topic. The aim of the workshop was to generate new cemetery imaginations and test this process in group setting.

### ***Informal meetings***

Finally, throughout the entire process, the research was influenced by informal conversations with people in educational or personal settings. These meetings are not mentioned in any specific place in the research, but they did help to sketch the general picture of the overall view on the subject. In appendix B, some findings and quotes are collected.

## 03 integrated research approach

This diagram shows the most important methods for every sub-question.



## 04 theoretical framework

### **Deathscape**

Deathscape is a concept first coined by Kate Hartig and Kevin Dunn (1998), which continues on Appadurai's (1996) theory of Scapes. It entails all places in city that have to do with death, however (in)visible.

### **Disenchantment**

Max Weber (1919) talks about Disenchantment of the World (*Entsauberung der Welt*) to argue that the rationalisation of modern society, where scientific and rational explanations replace mystical and religious beliefs and spirituality is minimised. In this research this theory is used as one of the causes for the disconnection between city and cemetery.

### **New Death Movement**

The modern death care is profit-driven, medicalised, de-ritualised and shaped by patriarchal norms, and this is a problem according to the New Death Movement because it distorts our relationship with mortality and nature. They encourage more spiritual and feminine approaches to death and have more acceptance of natural cycles of decay and renewal (Westendorp & Gould, 2021).

### **Ecofeminism**

Françoise d'Eaubonne (1974) introduces eco-feminist theory by stating that the oppression of women and the degradation of green are interconnected. They believe that by challenging patriarchal structures and promoting a more holistic, sustainable way of life, it is possible to create a more just and equitable society for both humans and the planet. For this research, eco-feminism can be used to articulate design values for a more sensitive approach to transform or design cemeteries.

### **Smooth City**

René Boer's Smooth City critique describes how contemporary cities prioritise pleasant, marketable environments while removing spaces associated with discomfort or complexity. Cemeteries, which evoke grief and mortality, are pushed to the urban margins because they disrupt this polished image. This exclusion weakens citizens' emotional and ecological connection to death and undermines the city's ability to accommodate the full cycle of life.

## 05 analytical framework

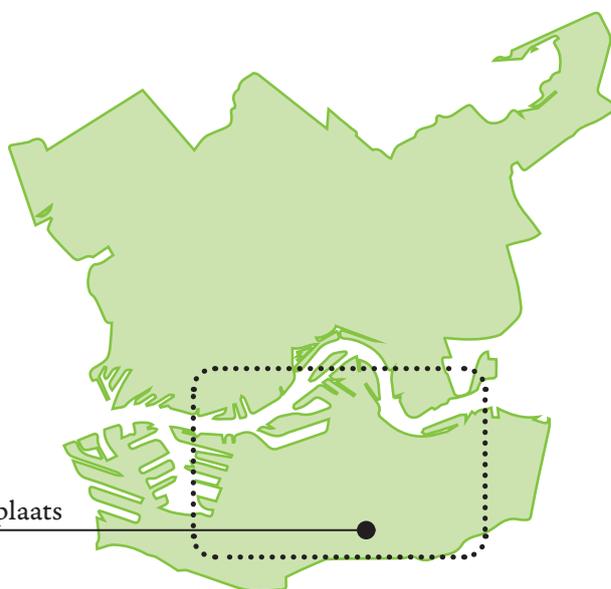
This research focuses on Dutch urban cemeteries with a focus on the Rotterdam context. This is because many of the problems stated in the problem field are found in this city. Rotterdam is one of the most multi-cultural Dutch cities, growing and developing rapidly.

Within Rotterdam we zoom in towards the south of the river Maas, a second city centre which works completely different from the north.



In the south the second-biggest cemetery of Rotterdam can be found. The Zuiderbegraafplaats opened in 1940, a few months earlier than planned because of the bombing of Rotterdam on May 14th.

Zuiderbegraafplaats



RELIGIE

## Rotterdam krijgt eerste islamitische begraafplaats: plek voor eeuwige rust op groen eiland



Herman Vriend

11 november 2024, 16:36 • Aangepast 12 november 2024, 21:22  
• 4 minuten leestijd

*The Muslim community of Rotterdam has lobbied for an Islamic cemetery for years and finally got a location assigned. (Vriend, H. 2024)*



### Ruim honderdduizend gedichten vallen uit de lucht in Rotterdam

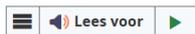
**MET VIDEO** 106.000 gedichten regenden vandaag, exact 85 jaar na de verwoesting van de binnenstad, naar beneden op de Rotterdamse Binnenrotte. Terwijl een helikopter over de stad vloog, raapten honderden mensen de gedichten van de grond.

Christiaan Broersma 14-05-25, 22:23 Laatste update: 15-05-25, 17:39

*Rotterdam has a long history in remembering tragic events (Broersma, C. 2025)*



## Meer groen in de stad



Meer groen in de wijken ter grootte van 30 voetbalvelden. Daarin wil het stadsbestuur investeren. En de teller staat op 17,4 hectare groen, gerealiseerd, in uitvoering of in voorbereiding.

*The city is working on strengthening the green quality of the city. (Gemeente Rotterdam 2025)*



03

*Unfolding  
the Cemetery*

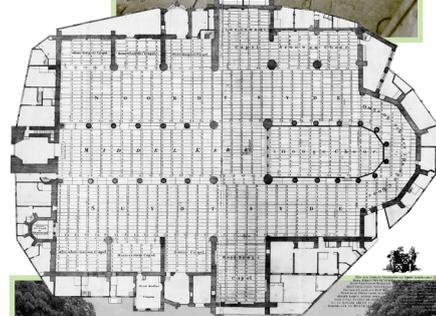
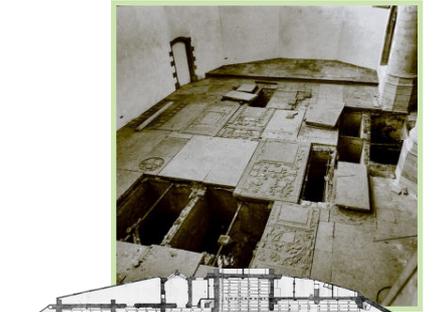
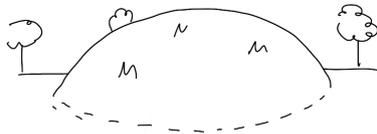
# 01 evolution of the Dutch cemetery

Opened graves inside the Grote Kerk in Dordrecht (vrienden Grote Kerk Dordrecht)  
 Floorplan and graves of the Oude Kerk in Amsterdam, by Justus Vingboons/Nicolaas Listingh in 1863/1711 (graven op internet)  
 Graveyard at the Schildkerk in Rijssen (Roomskatholieke begraafplaats Rijssen)

Hunebed in Groningen, The Netherlands (source: author)



Prehistoric urn found in a burial mound on the Westerheide from 2500-800 b.C. (Museum Hilversum)



## LONG AGO

The oldest tangible funerary object in The Netherlands the dolmen (Dutch: hunebed), primarily found in Drenthe. They were constructed from 3400 to 2850 b.C. with big boulders, brought there from Sweden and Finland by glaciers in an ice age. Somewhat later, burial mounds were common. The early men buried their dead in foetus position, presumably symbolising rebirth or eternal sleep (Houkes, n.d.). Interestingly, male and female graves were buried on a different side. Later, bodies were cremated before burial in an urn field.

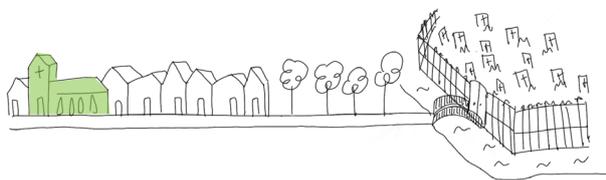
## MIDDLE AGES

In the Middle Ages, burial customs were strongly influenced by religion. Wealthy and influential people were buried inside churches, while others were buried in graveyards outside. The decomposing bodies inside the churches caused unpleasant smells, which led to the nickname “stinky bastards” (Dutch: rijke stinkerds) an expression still used in Dutch today. Cemeteries were vibrant public spaces. They were open to all, filled with social activity, and deeply embedded in communal life: anything but macabre (Ragon 1983, p. 143).

Entrance of the General Cemetery Crooswijk by G. Lengkeek, 1838-1864 (Stadsarchief Rotterdam)  
 General Cemetery Crooswijk under construction, photo by J.W. Theijssen, 1910-1914 (Stadsarchief Rotterdam)  
 Entrance of the St Laurentius Cemetery ca. 1896. (Begraafplaats Laurentius)



all photos author's work



## FROM 1829

From 1829, burial within city limits was forbidden by royal decree. Cemeteries were suspected sources of infection during outbreaks of plague and cholera (Kamphuis, 1999, p. 19). New regulations required cemeteries to be at least 40 meters from buildings or forests. Many were also encircled by canals, sometimes to raise ground levels, other times for security, or perhaps, as Ragon argued, to contain the dead.

## TODAY

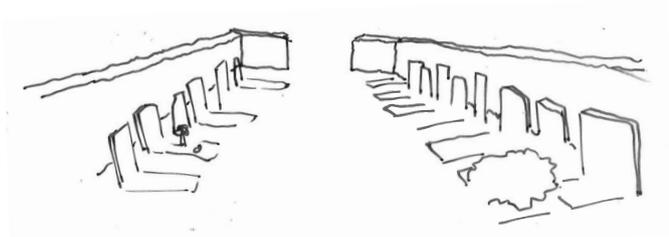
Cities expanded, but cemeteries remained where they were originally established. Physically and socially, they remain as disconnected as when they were first located outside the city. Over the past century, cremation has become increasingly common, reducing the number of traditional burials. At the same time, immigration has introduced a great diversity of burial customs. And a new cemetery typology is gaining popularity: the natural cemetery, where burials take place within a natural landscape.

## 02 cemetery grammar

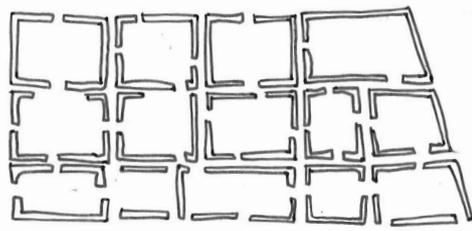
Every cemetery is different, yet they all look quite the same. Which spatial elements are characteristic for the city of the dead?

### Hedges

In contemporary Dutch cemeteries, hedges are image-defining elements. They are mainly used for structure and rhythm, and to frame sections in the cemetery to create 'rooms'.



*Room (kamer) on a cemetery, enclosed by a hedge*



*Connecting rooms, part of the plan of Hofwijk cemetery, Rotterdam*

### Gravestones

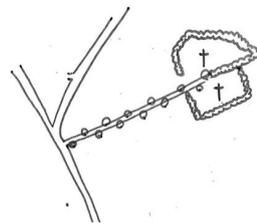
Some cemeteries enforce strict regulations regarding the size, form, and materials of gravestones in order to maintain visual unity and promote a sense of equality.

### Transition zone

Spatial elements help visitors mentally prepare for entering a cemetery and shape the emotional experience of the place. This transition can take the form of a monumental entrance or a gradual approach, where the route and its street layout introduces the atmosphere of the cemetery.



*The road to Jaffa cemetery prepares people for their visit with a grand road leading up to the entrance (drawing tracing from picture from 1961 by Van der Reijken)*



*The road to Jaffa cemetery, Delft before urbanisation around.*

## Typologies

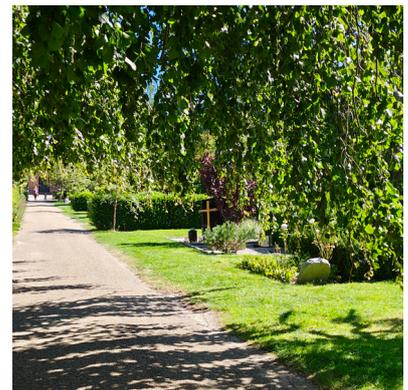
Cemeteries reflect the architectural tendencies and cultural values of their time. Similar to developments in urban planning and public park design, different cemetery typologies have emerged throughout history. Beyond their period of origin, these typologies are also influenced by context, including climate, landscape, and cultural traditions. The six most important typologies are depicted underneath.



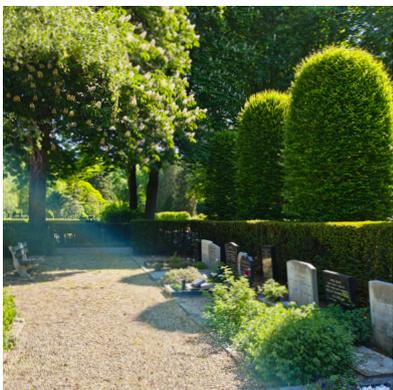
*forest cemetery  
(Meža kapi, Riga)*



*English landscape  
(Bosdrift, Hilversum)*



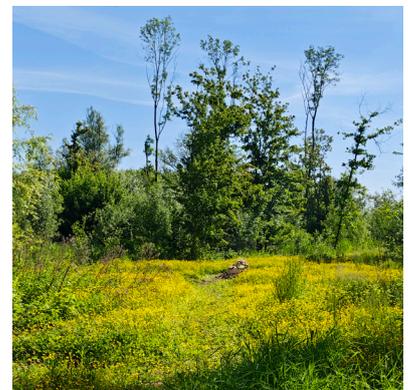
*garden cemetery  
(Assistens cemetery, Copenhagen)*



*modernistic cemetery  
(Zuiderbegraafplaats)*



*landscape cemetery  
(Järva, Stockholm)*



*natural cemetery  
(Zomerlanden, Hoeksche Waard)*

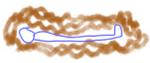
## 03 forms of disposal



**Cremation**, in 2025 the most chosen form of disposition in the Netherlands, is a process using intense heat in a special furnace to reduce a deceased person's body to bone fragments, which are then pulverized into fine, sand-like "ashes" for the family to keep, bury, or scatter.



**Resomation** is considered a sustainable alternative to cremation. Instead of using heat, the body is broken down under high pressure in a heated solution of water and potassium hydroxide. Although there is growing interest in this technology in the Netherlands, it is not yet legally permitted. In the United States, where resomation is allowed, the remaining liquid, which is rich in amino acids, is already being used as a fertilizer for agricultural land (Rikken, 2025).



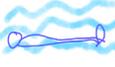
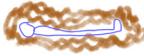
**Human composting** offers a new and sustainable form of body disposition, for which there are two possible processes, aerobic or anaerobic. The body is put into a vessel surrounded by a mixture of wood chips, alfalfa, and straw. The process takes about 40 weeks.

The aerobic process results in a substantial amount of nutrient-rich soil. Though not yet legal in the Netherlands, the American company Recompose (n.d.) states that one body yields approximately 750 liters of usable soil. At Recompose you can choose to take the soil home or donate it to their Land Program, which works together with nonprofit organisations to 'protect and regenerate ecosystems'.

The anaerobic process produces organic fertilizer and energy. In a concept from Columbia University's DeathLAB, the energy is used to fuel a memorial light (Upmeyer, 2019). This makes the disposal process visible and can be used to light up and give meaning to public space. For their Constellation Park, they reimagined the Manhattan Bridge in New York as public memorial in the middle of the city, where the bridge lights up by all the small memorial lights lit up by the composting processes. (DeathLAB 2021a, picture on the right).



**Burial** is disposing of a dead body by placing it in the ground. This happens on cemeteries. Disposition under the ground takes multiple year in favourable circumstances. More information about grave construction is presented in the paragraph Cemetery construction.

	duration	legal in NL?	residue	effects of residue
<b>Cremation</b> 	1-2 hours	Yes, since 1955	ashes	<i>Cremation = pollution Scattering cremation ashes is hurtful for the soil</i>
<b>Resomation</b> 	3-4 hours	No, but yes in Canada, Mexico, UK, SA	calcium & phosphor powder + mineral rich liquid	<i>powder is nutritious for soil (makes it basic), mineral rich liquid also (but more</i>
<b>Human composting</b> 	40 days	No, but yes in Sweden, Germany, USA	anaerobic: organic fertilizer and energy  aerobic: +-150L nutritious soil	<i>soil best usable in city</i>
<b>Burial (with natural coffin)</b> 	5-10 years	Yes	a body under the ground	<i>makes soil more acidic</i>

*Disposal options compared*



*Human composting in vessel (Recompose, n.d.)*



*Resomation in funeral home 't Vijfde Seizoen in Ommeren (Volkskrant, 2025)*



*Constellation park at the Manhattan Bridge in New York (DeathLAB, 2021a)*



*Public life in the memorial area under the bridge (DeathLAB, 2021a)*

# 04 human proportions

*dimensions are in centimeters*



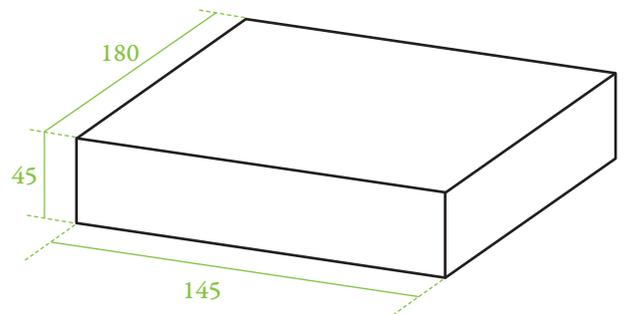
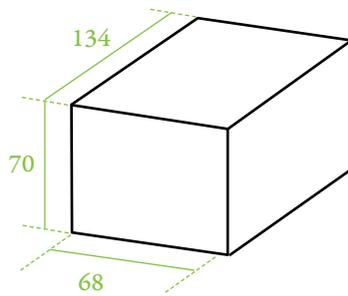
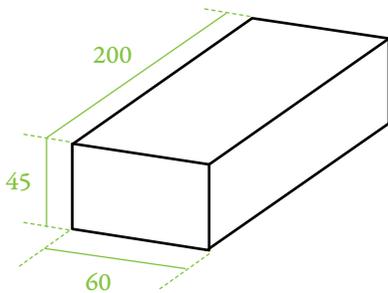
conventional



minimum space



maximum space



For burying, it is stated by Dutch law that a body must be buried in a coffin. Traditionally for western culture, we bury the dead lying down on the back, legs and arms straight. Funnily enough, in yoga this position is called the ‘corpse pose’ (Savasana). In this position, it looks as if the person is asleep, it’s efficient and easy to stack on top of each other.

Not everywhere it is common to lay off a body lying down. Other traditions involve sitting position or as foetus. The position determines the amount of space it takes on the (final) resting place.

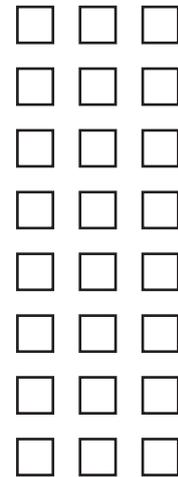
What is the minimum amount of space you can take up with your body? And the maximum amount of space?



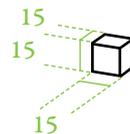
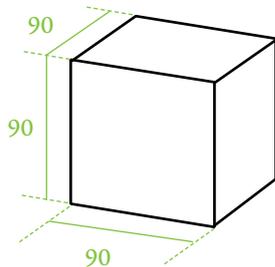
human  
composting



cremation/  
resomation



potential  
efficiency



Other human disposition options end with a product where the body is not recognizable anymore. For human composting, one of the possible end products is vital soil. Recompose, an American company which offers this technology, states that one body yields approximately 750 liters of usable soil.

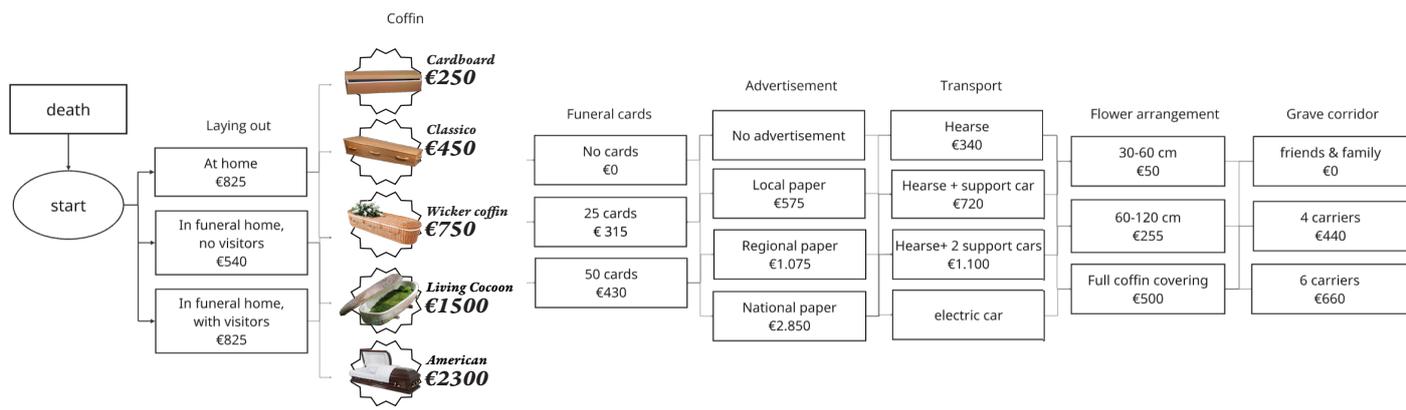
After cremation or resomation, only 3% of the human remains are left. This is mainly the skeleton grinded to powder, which takes up 2,5 to 3,5 liter or 0,15 x 0,15 x 0,15 meter. You can take the powder (cremation: ashes) home in an urn or store the urn in a columbarium on a cemetery. A columbarium niche differs in size but is mostly 30 x 30 x 40 centimeter.

You can also bury an urn, which takes up a lot less space than a coffin burial. The efficiency is part of the reason that cremation has become so popular.

# 05 economics of dying

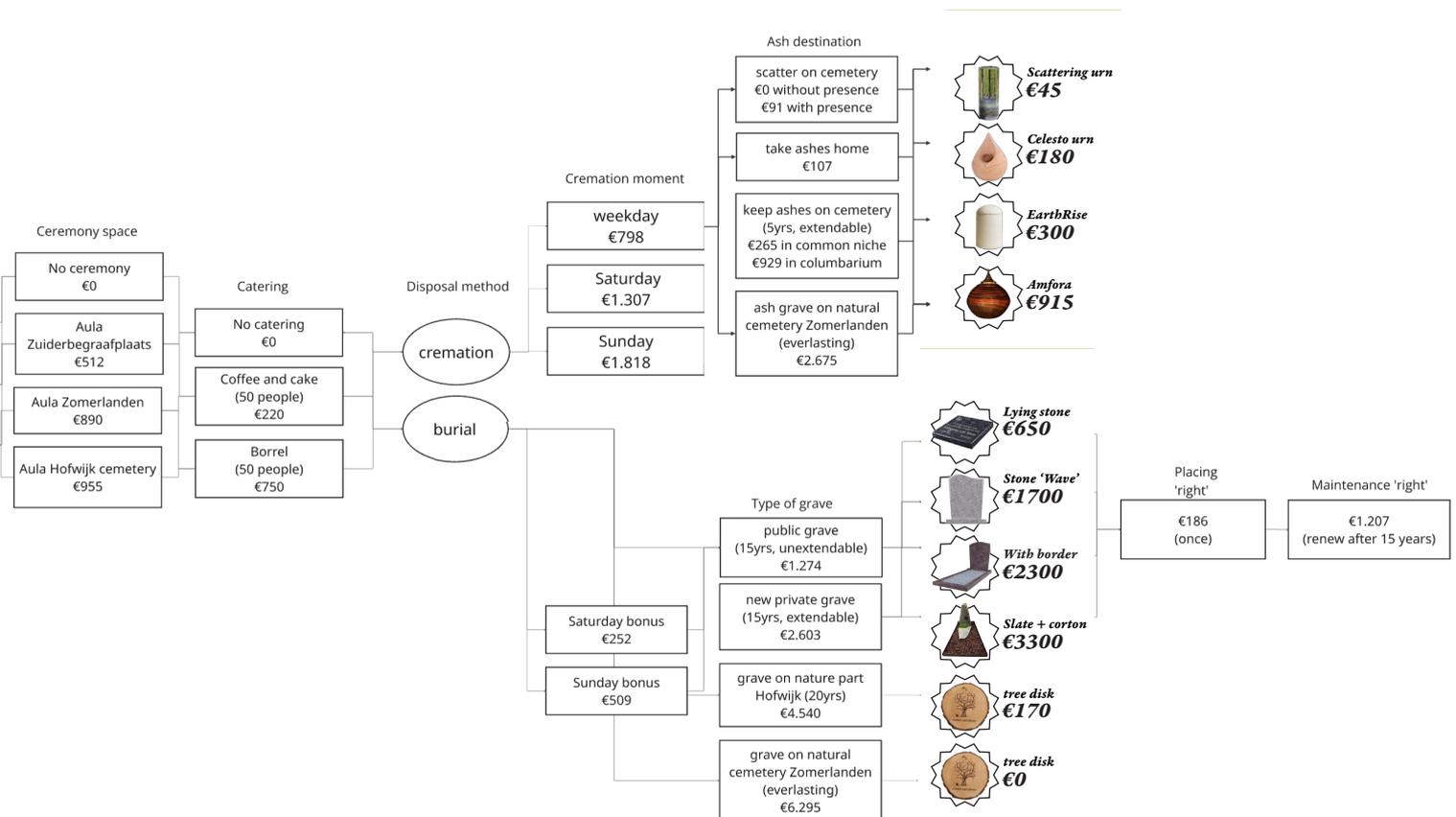
For this analysis, I examined the fee structure of cemeteries in Rotterdam (Gemeente Rotterdam, 2025). What stood out most was how difficult it is to gain a clear overview of the total costs involved in arranging a funeral, as the information is extensive and the number of choices is overwhelming. As a result, many people rely on funeral directors to manage these decisions.

Funeral costs have increased significantly in recent years. In 2017, Nibud estimated the average cost of a funeral at €7,500. By 2025, this figure has risen to approximately €10,000 (NOS, 2025).



More than two-thirds of people in the Netherlands have funeral insurance (although according to NOS (2025), many do not cover the price increases). Over the past century funeral funds have transformed into specialised, consumer-focused funeral companies (Venbrux, Peelen & Altena 2009). This growing professionalisation of the Dutch funeral sector has led to carefully organised and highly structured funeral practices. The creation of a clear and regulated period for funeral preparations has also been reinforced by the Dutch Burial and Cremation Act (Matthijssen 2017, pg 59) . In particular, article 16 states that a burial or cremation must take place no later than the sixth working day after a person's death.

Lastly, choosing for cremation turns out to be a lot cheaper than burial. This factor might stimulate the popularity of this form of disposition.



Adaptation from Corona Lucio's *The Flow: the visual lifecycle of death*. (2023, p. 8). Visual made by author

## 06 cemetery construction

The construction of cemeteries in the Netherlands has always been closely tied to the country's particular landscape conditions. Due to the high groundwater table and the soft, low-lying soils characteristic, cemeteries are typically heightened above the surrounding terrain. This elevation serves both practical and hygienic purposes: it ensures that graves remain dry and stable, prevents contamination of groundwater, and improves the manageability of the burial ground over time.



*Canal and heightened cemetery, Jaffa cemetery in Delft.*



*Height difference on the general cemetery in Maasland.*

Moreover, the process of decomposition requires an oxygen-rich environment; burial in groundwater would therefore significantly slow down this process.

Traditionally, the soil used for this elevation was obtained from the canals dug around the perimeter of the cemetery. These canals not only provided the necessary fill material but also served important drainage and symbolic functions—they helped to regulate water levels within the burial ground while simultaneously marking a physical and spiritual boundary between the world of the living and the dead.

Within the raised cemetery terrain, the Dutch burial system distinguishes primarily between sand graves (*zandgraven*) and burial vaults (*keldergraven*). A sand grave is the most common and traditional form, consisting of a grave dug directly into the sand or soil, where the coffin is placed and later covered. Over time, the organic decomposition of both coffin and body allows the grave to naturally integrate back into the soil. Sometimes this makes the ground settle, causing a small hole or sagged tombstone.

This is avoided with a burial vault, where you place the coffin within a constructed chamber, typically made of concrete or brick. The vault prevents direct contact with the surrounding soil, offering a more permanent and structurally stable resting place. While vaults are often associated with higher costs and long-term preservation, sand graves align more closely with ecological and traditional burial practices.



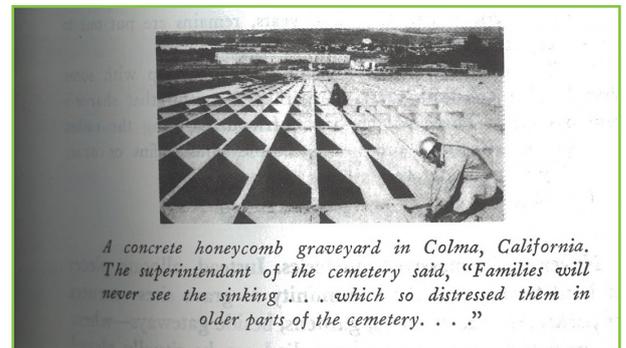
Burial vault ready to use at the Zuiderbegraafplaats. There is place for three coffins.



Burial vaults construction on The Nieuwe Ooster, Amsterdam. Project by Karres en Brands. Photo by Jeroen Musch (2006)



Stored burial vaults at Nieuwe Ooster cemetery.



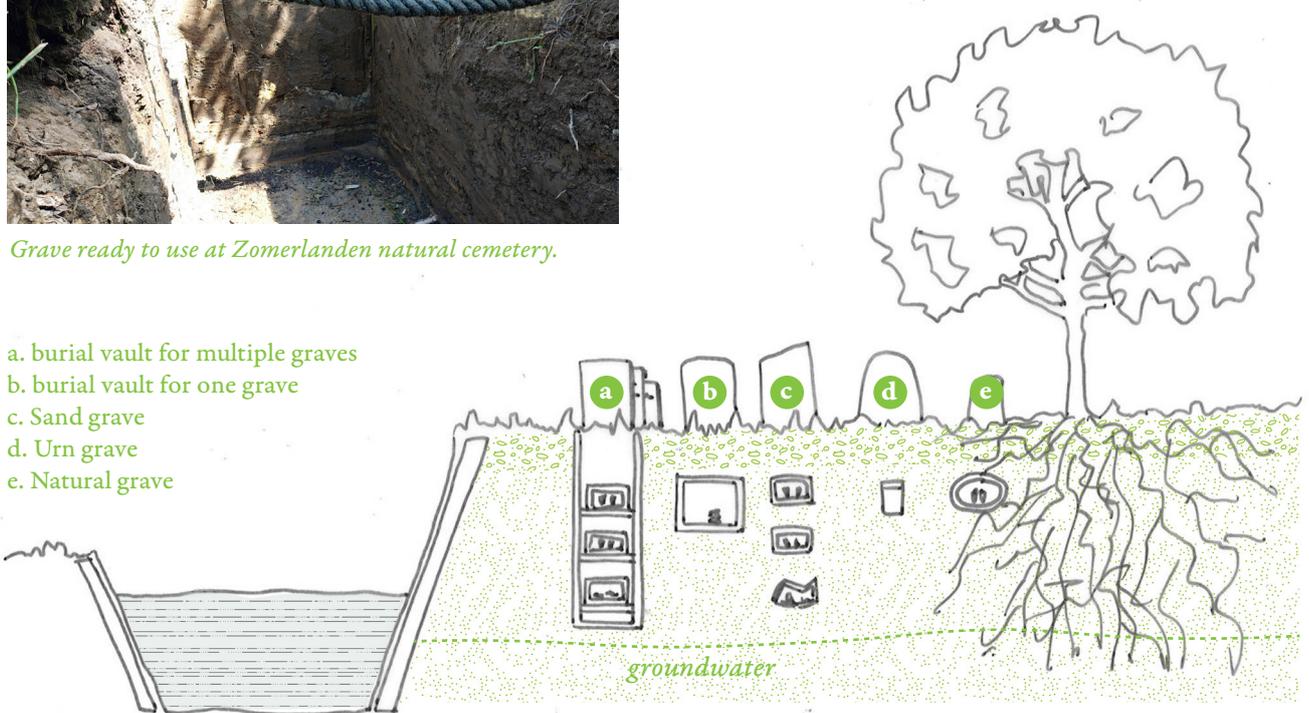
A concrete honeycomb graveyard in Colma, California. The superintendent of the cemetery said, "Families will never see the sinking . . . which so distressed them in older parts of the cemetery. . . ."

Critique on burial vaults (Alexander 1977, pg 355)



Grave ready to use at Zomerlanden natural cemetery.

- a. burial vault for multiple graves
- b. burial vault for one grave
- c. Sand grave
- d. Urn grave
- e. Natural grave



## 07 the natural cemetery

A relatively new cemetery typology has gained popularity over the past decade: the natural cemetery. Throughout this report, I have touched upon this type of cemetery in several places, but given its strong influence on the design process, I bring all information together in this chapter.

The first natural cemetery in the Netherlands, Westerwolde, opened already in 1944 on the Veluwe. But only since 2012, the number has increased from just two to 37—or 56, if we also include conventional cemeteries with a designated natural section. In total, the country has around 3,500 cemeteries. Coincidentally, that is the same amount of natural burials in The Netherlands: over 3,500 in 2023 (Trouw 2025).

To better understand the nature of the natural cemetery, I visited Zomerlanden (see page X), the closest one to Rotterdam. There, I walked the grounds with relationship manager Marina Fidder (appendix A4), who usually accompanies people searching for a burial plot, and asked her my questions. In addition, I consulted news articles, online reviews, and research on the climate effects of burial. I also spoke with two peers who regularly visit graves in natural cemeteries, and accompanied one of them to his father's grave to gain a first-hand impression of what a visit to a natural cemetery entails (p. 64-65).

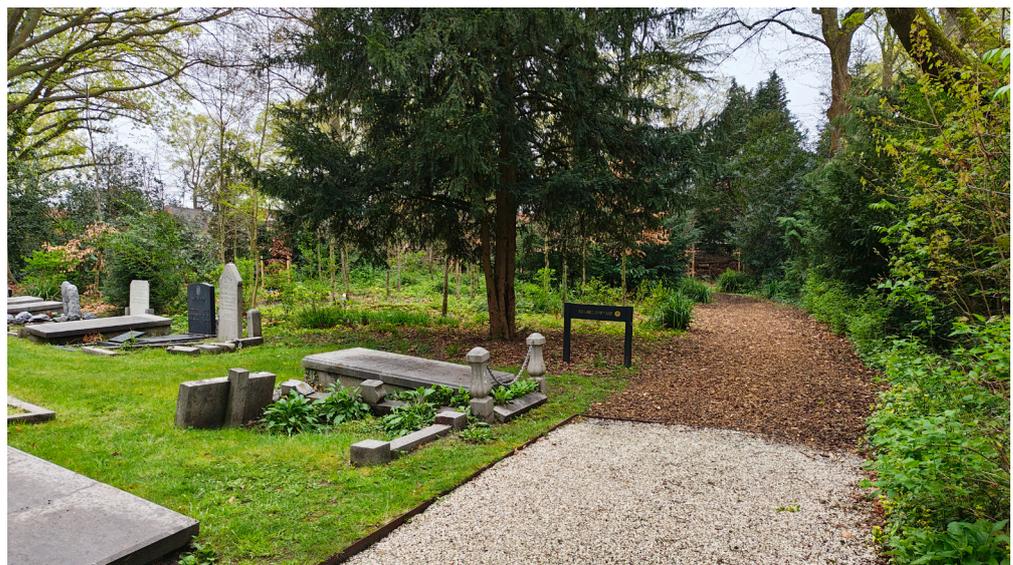
### Sustainability

Natural burial is currently considered the most sustainable form of interment. However, not all visitors are primarily motivated by sustainability. Many value the concept of the eternal grave most. This means that relatives never have to worry about renewing burial rights or paying additional fees years later—a burden many wish to spare their loved ones. Because not everyone prioritises the ecological aspect, some find it difficult to follow the rules, Fidder notes: staying on the paths and refraining from decorating graves can be challenging.

There are significant differences between natural cemeteries in terms of eco-friendliness. The website [allenatuurbegraafplaatsen.nl](http://allenatuurbegraafplaatsen.nl) monitors and rates all Dutch natural cemeteries on a scale of one to five “leaves.” One one-leaf site was described critically as (translated from Dutch): “A natural burial ground in name only. A small flower field within a conventional cemetery.”

At Zomerlanden, sustainability is the top priority, Fidder explained. The main goal is to restore nature to an area that previously functioned as production forest, bordered on three sides by agricultural land. Revenues from grave sales are reinvested in ecological management. Fidder proudly pointed out plant species that had appeared spontaneously after the removal of unhealthy trees to bring more daylight to the forest floor. Interventions are kept to a minimum.





*The Bosdrift cemetery in Hilversum made the entrance to the natural part obvious in the change of materials. Here, the graves are eternal.*

## **Rules**

Because the idea is that nature should take care of itself, planting flowers or seeds is prohibited. Bouquets placed after the farewell ceremony may remain for a few days before being cleared away. In most cases it is forbidden to scatter ashes, because the components can disturb the ecosystem. Alternatively, ashes can be buried. All buried materials buried must be biodegradable, including clothing and the coffin. Even dentures must be removed. Metals, such as titanium artificial hips, generally have little to no impact on the soil (Molenaar et al., 2009, p. 39). The same study concluded that human bodies, including any cytostatics (used in cancer treatment) and other medications, should not be considered chemical waste (Molenaar et al., 2009, p. 36). This finding opens the way to reframe how we perceive the human body at the end of its life: that we return to the ecosystem.

## **Accessibility**

Most natural cemeteries are located in the eastern Netherlands. As of 2025, Zeeland and Flevoland have none, while South Holland has only two. However, several new initiatives are underway. One example is Bonnenpolder in Rotterdam, a planned 30-hectare site with space for 10,000 graves. The land, currently used for agriculture, will be transformed into a nature reserve, of which the cemetery will form only a part.

Because natural cemeteries are not yet abundant in numbers nor evenly distributed across the country, visitors often face greater travel distances to visit graves. Accessibility is especially limited for those relying on public transport: from the nearest bus stop to Zomerlanden, it is still a 15-minute walk. This can be unfortunate for people who want to visit on a regular basis, not uncommon and all the more important in a mourning process.

## **For everyone**

Islam requires eternal burial, which is rarely possible in conventional cemeteries. Natural cemeteries therefore provide an alternative. Some have a designated Islamic section where graves are oriented towards Mecca. This option became especially popular during the Covid-19 pandemic, when repatriation to Islamic countries of origin was often impossible.

## **Criticism**

The growing popularity of natural cemeteries is not without controversy. Critics see them as a disturbance to the experience of nature, accuse them of greenwashing, or express concerns about soil contamination. Above, I outlined how cemetery managers respond to these issues. It could be a good idea to inspect the cemeteries and keep them accountable for following their own rules.

Another point of critique is that not all natural cemeteries are truly “natural.” For instance, Zomerlanden’s plan and routing were designed by humans. The new Bonnenpolder cemetery will involve transforming pastureland into a nature reserve, meaning the resulting landscape will be entirely human-made, even if more ecologically diverse. As Westendorp & Gould (2021, pg 13) argue: “The ‘nature of death’ has become artificial and man-made—exactly the characteristics that Anthropocene critics argue against.” The degree of artificiality likely varies from cemetery to cemetery.



*Relatively new grave in Zomerlanden natural cemetery.*



*At Den en Rust natural cemetery, you can also opt for a small memorial plate.*

## 08 Islamic burial

In the Netherlands, approximately 6% of the population identifies as Muslim. In Rotterdam, although no recent figures are available, Statistics Netherlands (CBS) reported in 2014 that more than 13% of its residents follow Islam. Muslims observe strict burial customs, which for a long time were difficult to practise in the Netherlands due to national burial laws. As a result, many Muslims chose to be repatriated after death to their country of family origin, even when they were born in the Netherlands. During the COVID-19 pandemic, border closures made repatriation impossible, leading to a significant increase in the demand for Islamic graves within the Netherlands.

### **Growing demand**

In 2020, the National Organisation for Cemeteries (Landelijke Organisatie Begraafplaatsen, LOB) estimated that between 60 and 70 cemeteries in the Netherlands had an Islamic section—three times as many as a decade earlier (Krabben, 2020). As part of fieldwork, I visited several of these Islamic sections, including De Nieuwe Ooster cemetery in Amsterdam and, in Rotterdam, the General Cemetery Crooswijk and the Zuiderbegraafplaats. During fieldwork abroad, I also visited the newly established Järva Cemetery in Sweden, located in a predominantly immigrant neighbourhood with a large Muslim population. Additionally, many natural cemeteries now include Islamic sections, although after Covid-19 popularity stagnated, according to Fidler (appendix A4). Some Muslims prefer not to be buried among non-Muslims or even among Muslims from different cultural or denominational backgrounds. The Zuiderbegraafplaats visibly has different sections for Sunnis, Shiites, Javan Muslims, there might be more. This also goes for Christians, Catholic and Reformed Christians are normally buried separately.

Currently, there are around four cemeteries in the Netherlands exclusively designated for Islamic burials. The largest of these is the Maqbara Rawdah Al Moslimin in Arnhem, which has space for over 16,000 graves (Hornstra, 2023).

### **Islamic Cemetery in Rotterdam**

From the end of 2026, Muslims living in and around Rotterdam will be able to be buried in a dedicated Islamic cemetery within the city. Located on an island south of the Zuiderbegraafplaats, the 30-hectare site will accommodate approximately 2,500 graves, which is expected to meet local burial needs for the next sixty years (Vriend, 2024).

### **Burial Rules in Islam**

Islamic burial practices are guided by specific religious prescriptions, including:

- Cremation is strictly prohibited;
- The body should be buried as soon as possible, preferably within 24 hours;
- The deceased is buried on their right side, facing Mecca (southeast in Dutch context);
- Graves should be modest, without decorative elements;
- The grave should not be exhumed (eternal rest).



*The Islamic part on De Nieuwe Ooster in Amsterdam has a building especially for Islamic rituals.*



*Islamic part on General Cemetery Crooswijk, Rotterdam*

### **Eternal Rest**

The principle of eternal rest is particularly uncommon in the Netherlands and has historically been a major reason for repatriation to countries of origin such as Morocco or Turkey. According to Islamic law, exhumation is only permitted under specific circumstances, such as reasons of public interest (Al-Dawoody, 2017, p. 778). For example, the construction of a public road may constitute a legitimate ground for exhumation. Khadija Kadrouch-Outmany, who obtained her PhD on Islamic burials in the Netherlands and Belgium, explained in an interview with Leiden University Journal that exhumation also occurs in Islamic countries, albeit less explicitly and after longer periods: “Perhaps only after eighty years, when everyone has long forgotten who is buried there.” (translated from Dutch, Meijer, 2013)

### **Other Religions**

In Judaism, graves are also considered eternal. A separate burial ground is preferred, and today there are 238 Jewish cemeteries in the Netherlands, more than half of which are protected as state or municipal monuments (Rijksdienst voor het Cultureel Erfgoed). Some general cemeteries also contain Jewish sections.

In contrast, Hinduism’s primary funerary practice is cremation. It is an important tradition to scatter the ashes in water that flows into the sea. Official locations for this ritual exist in The Hague and Rotterdam (uitvaart.nl, 2022).



*Järva Cemetery in Stockholm*



*One of the Islamic sections at Zuiderbegraafplaats, Rotterdam*

## 09 death rituals on the cemetery

In this thesis, perspectives on death rituals in the Dutch context are informed by a combination of fieldwork findings and the work of Brenda Mathijssen. In her PhD thesis *Making Sense of Death*, Mathijssen (2017, p. 37) distinguishes three phases within the process of death ritual: first, the (preparation and) performance of the funeral ceremony; second, the disposal practices; and third, the period of bereavement, which may last up to a year after the funeral. The second phase—the funeral—is commonly perceived as “the last rite.” Mathijssen (2017, p. 26) notes that this perception has been reinforced by funeral enterprises, which have centralized and formalized the ceremony. However, death rituals are not limited to public performances: private rituals also play an important role and may continue for months or even years after the formal ceremony.

These three phases do not necessarily take place at a single location. For instance, funeral ceremonies may be held in cafés or restaurants that have personal significance for those involved. Nevertheless, it is often considered practical to keep the different phases in close proximity in order to limit travel. When burial is chosen as the method of disposal, the location becomes fixed: the cemetery. In contemporary Dutch cemeteries, all three phases can be recognized in both their design and use.

### **Phase 1: Performance of the funeral ceremony**

Most medium to large cemeteries include a chapel or ceremonial building where funeral services can be held. These buildings are typically located near the entrance of the cemetery or at a central point within it. This phase involves the largest number of participants, and the space must therefore accommodate groups of 100 people or more. Proximity to parking facilities and access for the hearse are essential. Funeral ceremonies often include music and, increasingly, the projection of images of the deceased. After the ceremony, mourners usually gather for a reception. In recent years, outdoor funeral ceremonies have also become more popular.

### **Phase 2: Disposal practices**

In the case of burial, a funeral procession typically moves—on foot or by vehicle—from the ceremony space to the grave, where the burial container, such as a coffin, is lowered into the ground.

When cremation is chosen, the bereaved may accompany the deceased to the cremation chamber. Dutch law stipulates that ashes may only be released after a minimum period of 30 days, allowing time for reflection. After this period, the scattering or burial of ashes can form the basis of an additional ritual.

### **Phase 3: Period of bereavement**

This phase varies most strongly between individuals. Focusing on the scope of this project, fieldwork revealed three main types of rituals performed within the cemetery, which are explained on the right.

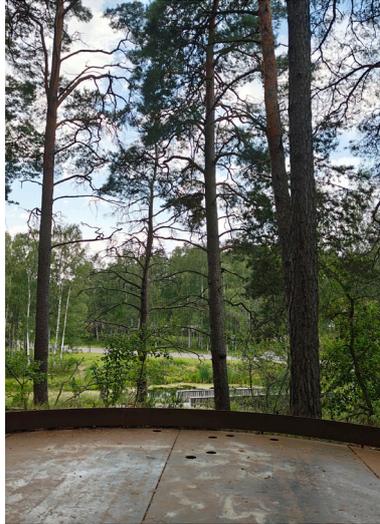
## Forms of rituals in phase 3: period of bereavement



*People are taking care of a grave.  
Skogskyrkogården, Stockholm*

### **Grave care**

Activities such as planting, watering, and cleaning the grave marker. Many cemeteries provide tools like watering cans, enabling mourners to engage in these practices. Such actions can help transform grief into purposeful activity and may be performed individually or collectively.



*Meditation space  
Järva cemetery, Stockholm*

### **Reflection**

Including meditation, prayer, or conversation with the deceased, often requiring a degree of privacy.



*Women socialising  
Meža kapi, Riga*

### **Coming together**

Gathering in larger groups to share a meal, offer mutual support, or commemorate the deceased.

### **Developing new rituals**

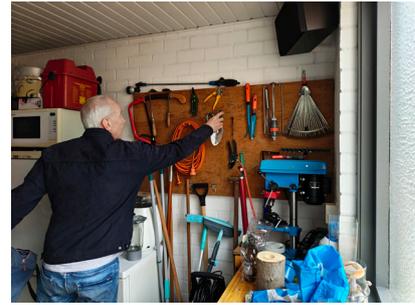
Mathijssen (2017, p. 28) argues that rituals are not invented from scratch but are reshaped using existing practices. For ritual development spatially, Brands (Appendix A7) emphasizes the importance of having a dedicated place in the grieving process. From a design perspective, ensuring that there is sufficient space to *stay* creates opportunities for new rituals to emerge over time.

# 10 the ritual of visiting a classic cemetery

Fourteen years ago, my grandmother passed away. She was buried on the Roman Catholic cemetery in Maasland, the village where she lived the biggest part of her life. Her husband, my grandfather, had died many years before her - so many that already his grave had been dug up again. The family decided to reuse his stone for my grandmother's stone, with a new glass plate attached to it which read: 'together again'. It was the first time I was faced with the matter of death. My dad, who had lost his mom, took me to visit the grave a lot in the first years. But now it had been a while.

After a long time, on April 20 2025 we visit her grave again. Because it has been too long, and to experience the ritual of visiting a grave. I recorded the trip by identifying the individual actions, creating a sequence of actions.

It was important to note that this cemetery felt different to me than the others I visited during my fieldwork, due to a personal connection. I experienced my father's work as loving and conscientious. Beside identifying the practical steps that someone takes when going to a cemetery, I experienced that it is a very personal, emotional activity. I realised going to a grave, I was not just visiting a public space, I was also visiting a person.



1. Taking necessary tools from home



5. Parking the bike upon arrival at the cemetery



9. Removing unattractive weeds



13. The final result



17. Browsing the cemetery looking for familiar names in the recent graves



2. Buying flowers in the supermarket



3. Storing the flowers in the bicycle bag



4. The road to the cemetery, by bike



6. Entering the cemetery through the gates



7. Walking to the grave, taking off hot clothing items



8. Filling the watering can at the tap



10. Planting the flowers that were brought along



11. Cleaning the grave from sand and dust



12. Watering the plants



14. Throwing away the plastic plant pots



15. Cleaning the hands from dirt



16. Standing still at the bone pit, where family members also lie



18. Leaving the cemetery



19. Cycling home



20. Sharing the activity with the family group chat

# 10 the ritual of visiting a natural cemetery

In november 2023, Max (28) his dad passed away. He first wanted to be cremated and scattered, but Max preferred to have a place to visit him, so he could organise his grief. His dad agreed. After his death, the family chose the natural cemetery Den en Rust in Bilthoven to bury the urn. They chose this cemetery because of family and friend connections in the surroundings, and more people they knew were buried and cremated nearby.

On July 16 2025, I join Max during a visit to his dad's grave. It takes an hour, driving from Rotterdam to Bilthoven by car. During the drive we talk about his family, about grieving.

When we arrive at the grave, he asks me if I would like to see a photo of his dad, because "it's actually weird that you're at his grave and you have no idea what he looked like," he notes. He knows that not everyone is okay with seeing a photo of a dead person, that's why he asks for my permission.

In return, I ask if he wanted a moment for himself, but that was not necessary. He cleans the monument, says some words to his dad, "next time maybe I will bring some whiskey to share with him," takes a picture of the grave and is ready to go again.

On the way back, Max stresses the importance of talking about the topic: with your loved ones about final wishes, and with people in similar situations, which helps him in his grief.



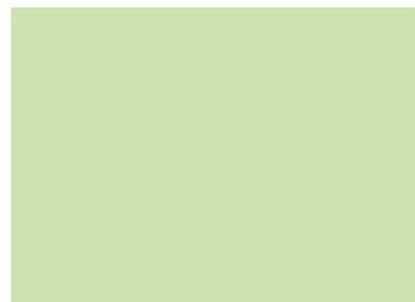
1. Driving to the cemetery



5. The last part is off the path



9. Circling back



13. Showing photos to family\*



2. Parking the car



3. Remembering other funerals on this location



4. Walking to the grave



6. Cleaning the monument from twigs\*



7. Taking the photo from the monument



8. Sitting, talking to dad\*



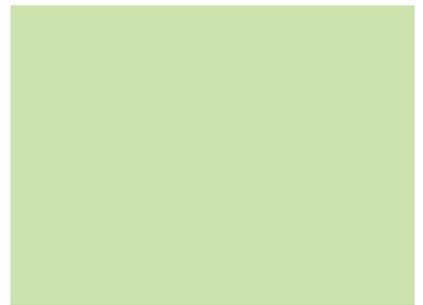
10. Paying attention to new graves on the way



11. Back at the car



12. Driving back home



\*Not every action was photographed.

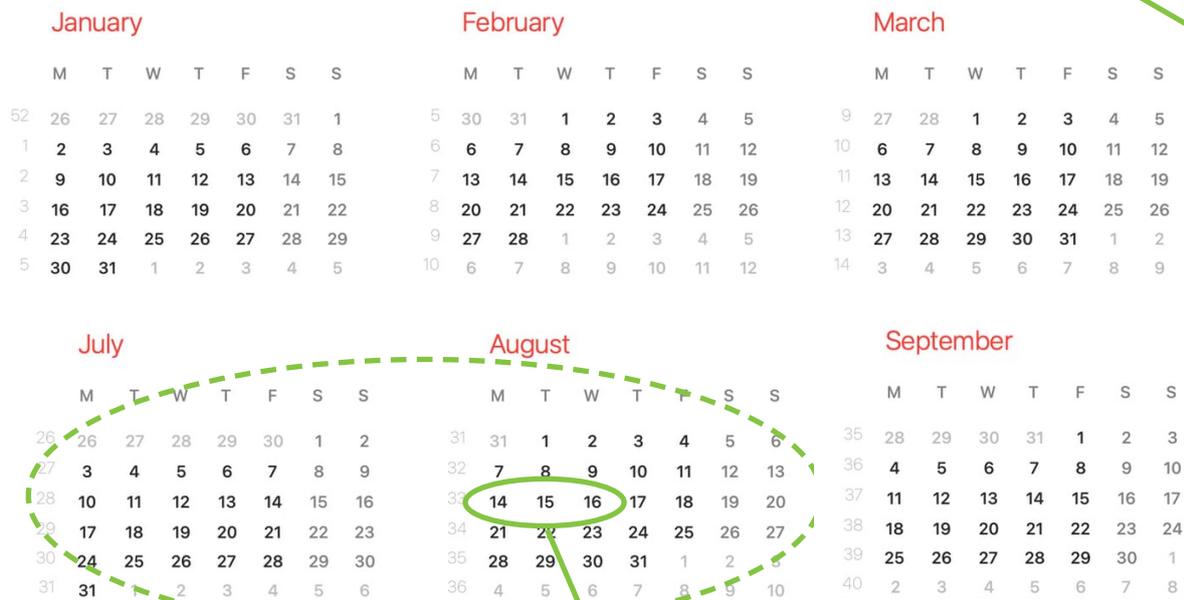
# 11 cemetery holidays

Throughout the world, cultures visit their cemeteries on special holidays. On these days, people remember the dead, clean tombstones. Traditions often involve having food together.

## Qingming Festival (Tomb-Sweeping Day)

China, South-East Asia  
Date: the first day of the fifth solar term

Qingming Festival is one of the seven national holidays in China. It combines honouring the dead and celebrating the arrival of Spring. During Qingming, families visit their ancestors' graves to clean the site and make ritual offers.<sup>1</sup>



### Kapu svētki

Latvia  
Date: somewhere in Summer, differs per cemetery

During the Cemetery Festival, Latvian families pay respect to the deceased as well as celebrate life and togetherness. After a service on the cemetery, a feast is cooked which some families enjoy on the cemetery.<sup>3</sup>

### Obon

Japan  
Date: August 13th-16th

During Obon, it is believed that the spirits of ancestors visit their relatives. This annual Buddhist event is one of three holiday seasons in Japan, which is celebrated with special dances, lantern rituals and grave visits.<sup>4</sup>

#### Sources

- <sup>1</sup> China highlights (n.d.). Qingming Festival 2026. <https://www.chinahighlights.com/festivals/qingming-festival.htm>
- <sup>2</sup> Lonely Planet (2024). Lonely Planet's Guide to Death, Grief and Rebirth
- <sup>3</sup> Beņķe-Lungeviča, L. (2022, September 19). Far From Morbid: Latvia's Cemetery Festival. Retrieved from <https://3seaseurope.com/kapusvetki-latvias-cemetery-festival/>
- <sup>4</sup> Japan-guide.com (n.d.). Obon. <https://www.japan-guide.com/e/e2286.html>
- <sup>5</sup> ChinaDaily.com (n.d.). The Double Ninth Festival. [https://www.chinadaily.com.cn/english/doc/2002-10/09/content\\_359355.htm](https://www.chinadaily.com.cn/english/doc/2002-10/09/content_359355.htm)
- <sup>6</sup> Day of the Dead (n.d.). About. <https://dayofthedead.holiday/about/>

### Radonitsa / Provody

Russia / Ukraine

Date: second Monday/  
Tuesday of Orthodox Easter

Radonitsa is described as a 'graveside feast': on this day, Slavic communities traditionally have dinner, sometimes even on top of a grave, giving thanks for another winter survived (Lonely Planet, 2024). It's unclear if these traditions are still commonly upheld today.<sup>2</sup>

### National Remembrance of the Dead

The Netherlands

Date: May 4th (the day before Liberation Day)

On this day, everywhere in the country wreaths are laid at war memorial sites, among which in cemeteries. At 8.00 PM, there is a national 2 minute silence.

### Memorial Day

USA

Date: last Monday of May

Previously known as Decoration Day, on this public holiday Americans decorate graves from veterans with flowers and/or the American flag.

#### April

M	T	W	T	F	S	S
13	27	28	29	30	31	1 2
14	3	4	5	6	7	8 9
15	10	11	12	13	14	15 16
16	17	18	19	20	21	22 23
17	24	25	26	27	28	29 30
18	1	2	3	4	5	6 7

#### May

M	T	W	T	F	S	S
18	1	2	3	4	5	6 7
19	8	9	10	11	12	13 14
20	15	16	17	18	19	20 21
21	22	23	24	25	26	27 28
22	29	30	31	1	2	3 4
23	5	6	7	8	9	10 11

#### June

M	T	W	T	F	S	S
22	29	30	31	1	2	3 4
23	5	6	7	8	9	10 11
24	12	13	14	15	16	17 18
25	19	20	21	22	23	24 25
26	26	27	28	29	30	1 2
27	3	4	5	6	7	8 9

#### October

M	T	W	T	F	S	S
39	25	26	27	28	29	30 1
40	2	3	4	5	6	7 8
41	9	10	11	12	13	14 15
42	16	17	18	19	20	21 22
43	23	24	25	26	27	28 29
44	30	31	1	2	3	4 5

#### November

M	T	W	T	F	S	S
44	30	31	1	2	3	4 5
45	6	7	8	9	10	11 12
46	13	14	15	16	17	18 19
47	20	21	22	23	24	25 26
48	27	28	29	30	1	2 3
49	4	5	6	7	8	9 10

#### December

M	T	W	T	F	S	S
48	27	28	29	30	1	2 3
49	4	5	6	7	8	9 10
50	11	12	13	14	15	16 17
51	18	19	20	21	22	23 24
52	25	26	27	28	29	30 31
1	1	2	3	4	5	6 7

### Chongyang Festival

China, Hong Kong, Macau

Date: ninth day of the ninth lunar month

Also called the Double Ninth Festival, this day is spent with elderly family members. Traditions involve climbing a mountain and eating and drinking special foods. Some cultures spend time cleaning the tombstones and making offerings.<sup>5</sup>

### All Saints' Day & All Souls' Day

Christian communities

Date: November 1-2

In many European countries, All Saints' Day is a public holiday. Saints and martyrs are remembered. A day later, on All Souls' Day, remembrance revolves around passed away family and friends. People visit cemeteries to decorate graves with flowers and lights.

### Día de los Muertos

Mexico

Date: November 1-2

Mexico's most famous holiday is when they are celebrating life and death. Families make offerings on graves with the favourite food and drinks of the remembered person. Skulls are drawn, mainly smiling so as to 'laugh at death itself'.<sup>6</sup>





*04*  
*Design*  
*Strategy*

# 04 Design Strategy

## 01 pattern development

This chapter combines the information of chapter 3 and the findings from the fieldwork journal into the tools we need to design for the research aim, in the form of a pattern language. The chapter concludes with a design strategy table on the goals Life in the Cemetery and Death in the City.

The development of the patterns started with a murder board, finding connectings between the data obtained in the research. The pattern language has been compared and supplemented with the the tools Kok (2021) published in his research 'Unlocking the potentials of green urban cemeteries'.

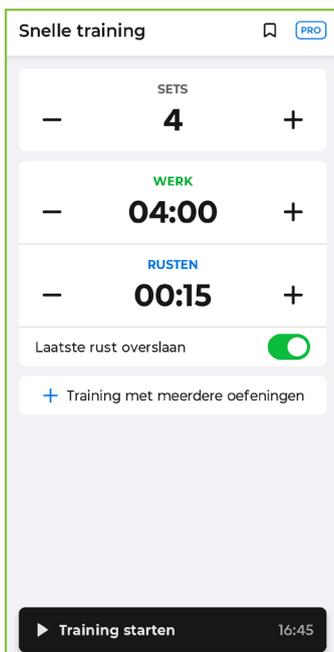




## 02 workshop

During the development of the patterns, a workshop was organised with the aim of generating new, extreme cemetery design ideas. Each participant was assigned a pattern and asked to combine it with their specific expertise—namely water retention, heritage, designing for blindness, and urban manufacturing.

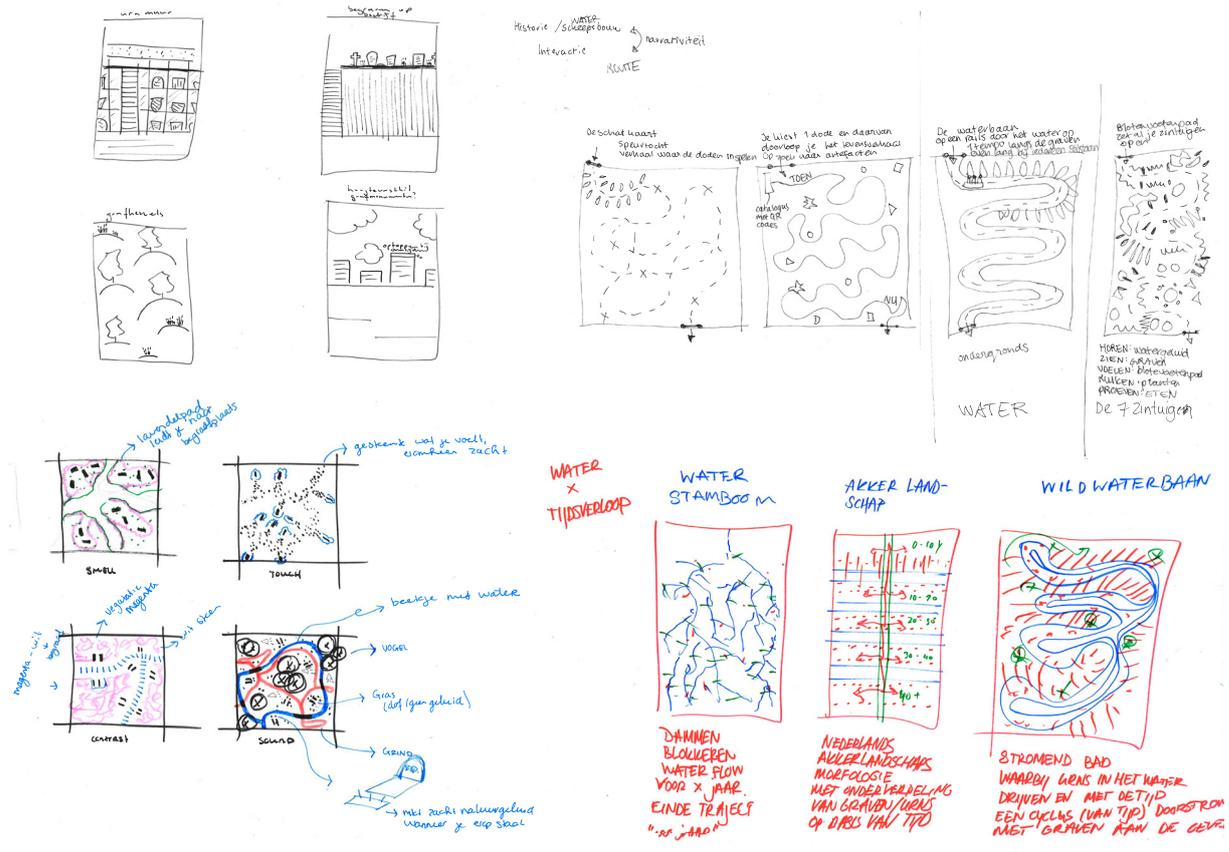
Working in four rounds of four minutes, participants developed four new cemetery typologies. Beyond providing inspiration for the final designs of this project, the outcomes of the workshop were also incorporated into the pattern language. Pattern 29 (Floating Urns) and Pattern 34 (Rooftop Cemetery) originated directly from ideas proposed by workshop participants.



*Interval timer used during the workshop*



*Participants during the workshop*



New typology drawings made by participants during the workshop



Visual representation of an idea which two participants similarly generated: floating urns in a water course.

# 03 patterns

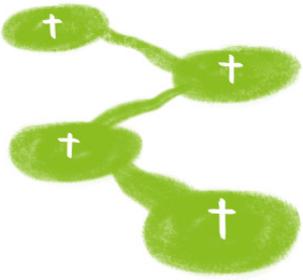
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01

Connected cemeteries





A network of cemeteries can form a walkable landscape of remembrance.

scale

S M **L**

goals

b	m	c
g	u	p

emotions



**ACTION**  
 With many small-scale cemeteries dispersed throughout the city, it becomes possible to walk from one to another as a journey of grief or remembrance. These connections can be shaped and highlighted in different ways: through landscape elements, spaces designed to support mourning, or prompts that invite reflection and conversation about life and loss.

**BACK-UP**  
 Research by design  
 Pepijnpad grief path in Amsterdam (Stoker, 2025)

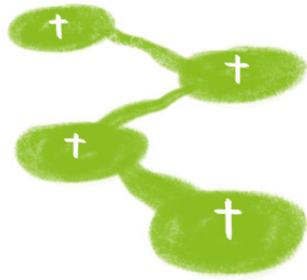
**RESPONSIBILITY**  
 municipality / management / residents / bereaved

**SUPPORTS**  
 03 No dead-ends  
 28 Scattered cemeteries

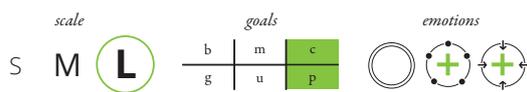
Extra information about each pattern can be found in the pattern booklet. ←

01

### Connected cemeteries



A network of cemeteries can form a walkable landscape of remembrance.

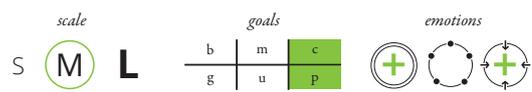


02

### Transition zone

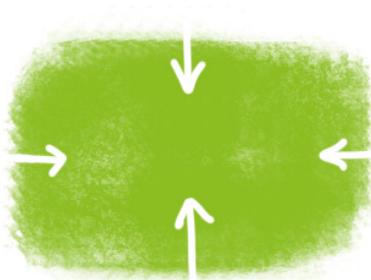


Designing thresholds for transition, not for seclusion.



03

### No dead-ends



The cemetery as part of the daily commute, stroll or run by cut-through routes.



04

### Gentle grave stones



Subtle grave markers to maintain a harmonious, park-like character in the cemetery.



05

*Peek-a-boo*

Opening the cemetery border to offer a peek into the place reduces the mystery.



06

*Stairway to heaven*

Introducing subtle changes in elevation within a flat landscape to add spatial variety and create look-out points.



07

*Symbolic planting*

Thoughtful plant selection enriches a cemetery's meaning and image.



08

*From lawn to meadow*

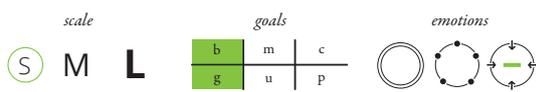
Transforming underused cemetery lawns into diverse planted landscapes for biodiversity.



09

*Sustainable disposition*

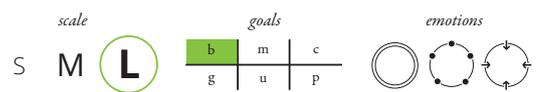
Promoting and regulating sustainable burial practices, to reduce environmental harm.



10

*Wildlife meets afterlife*

Cemeteries can serve as vital green refuges that support wildlife.



11

*Stone cold*

The cemetery as place to cool down during hot Summer days.



12

*Water buffer*

Storing water on-site in urban small-scale cemeteries.

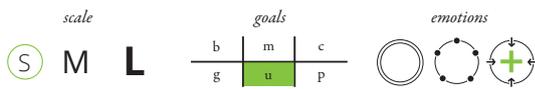


13

*Acts of remembrance*



Rethinking how remembrance is expressed, to offer meaningful alternatives to traditional grave decorations.

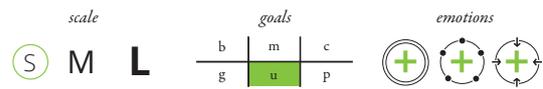


14

*Place to stay*



Being able to sit down and take a moment, wherever you need it.

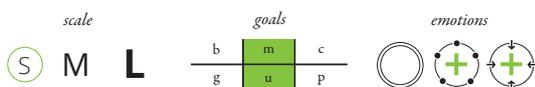


15

*A meal on the cemetery*



Places for having a meal as a vital medium through which grief, memory, and connection are expressed.



16

*Sheltered*



Care for cemetery visitors by providing shelter for extreme weather scenarios.

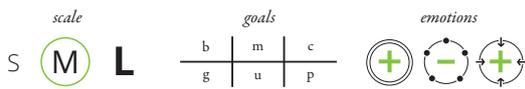


17

*Dead silent*



Balancing public areas with private refuge allows cemeteries to support many forms of grief.

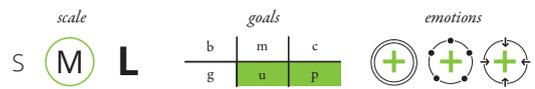


18

*Outdoor ceremony*



Open air ceremonies as alternative to traditional indoor spaces, embedded in the surroundings.



19

*Someone to talk to*



Spaces for conversation and shared reflection, cemeteries can take on a meaningful social role within the city.



20

*Voluntary stewardship*



Actively involving volunteers in both the care and programming of a cemetery strengthens its community role.

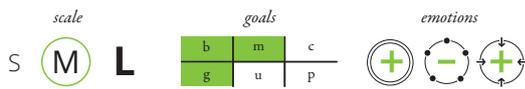


21

*Food production*



Edible planting transforms cemeteries into places that nourish both memory and community.

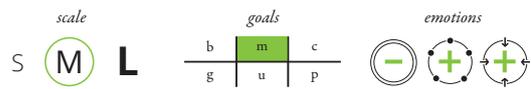


22

*Cemetery café*



A café as informal place to stay and have a drink on the cemetery.

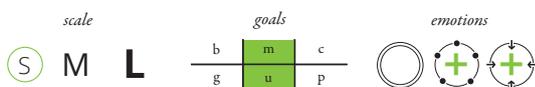


23

*Every body has a story*



Every life has a story worth telling. The cemetery can be a library of lives.

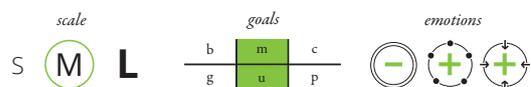


24

*Child-friendly*



Introducing cemeteries to children through gentle, playful elements.

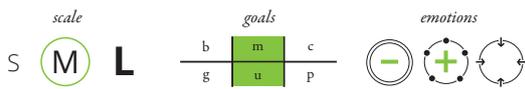


25

*Learning ground*



By hosting educational programs, the cemetery becomes a space to share knowledge.

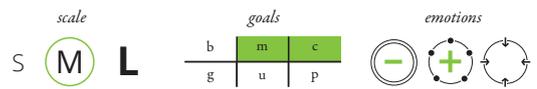


26

*Lease in peace*

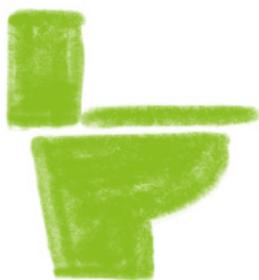


Leasing unused cemetery areas to community groups to strengthen local connections.

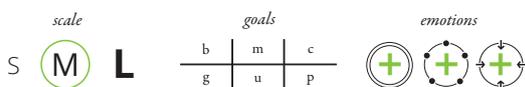


27

*Public toilet*



Integrating public toilets acknowledges the cemetery as a place of care and everyday use.



28

*Scattered graves*



Breaking down the scale of the cemetery to spread through the city.

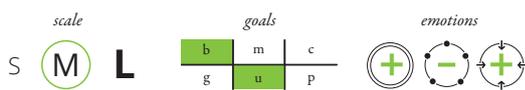


29

### Floating urns

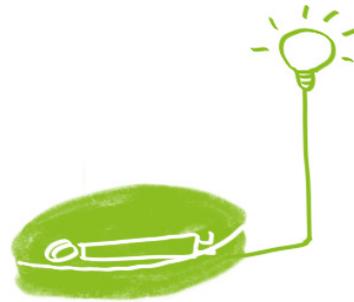


A floating urn pond offers a dynamic alternative to traditional ash storage.

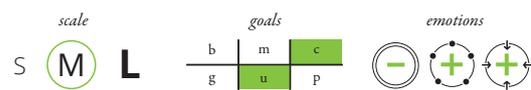


30

### Memorial lights



Human composting transforms death into a visible, regenerative process that produces energy to fuel lights.



31

### Lifecycle



Human composting reframes death as a contribution to the greening the city.



32

### Parklet grave



Turning a parklet into a temporary grave allows mourners to keep the deceased close.



33

*'Til death doesn't do us part*



Joint disposal as a new grave typology to be together forever.

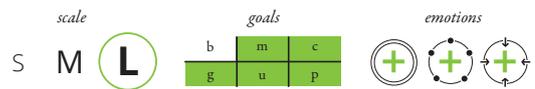


34

*Rooftop cemetery*

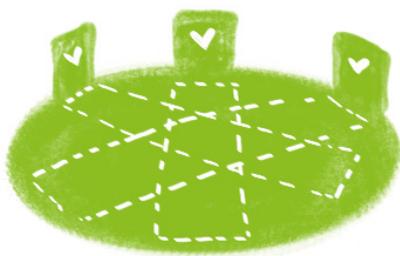


Bring underused rooftop to life by adding a cemetery function.



35

*Circular alignment*



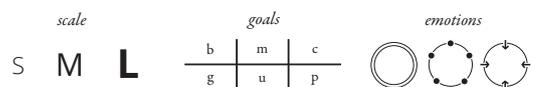
Replacing rigid rows with a more flexible arrangement that allows personalised orientation.



XX

*Etcetera!*

The pattern language can be expanded infinitely with more cards.



## 04 design strategies



### *life in the cemetery*

#### **Biodiversity**

Economic and conservative aesthetic reasons move cemeteries to make maintenance decisions which don't benefit the biodiversity of the area. Large parts of grass fields are typical for cemeteries but don't fit with the modern day view on the function of green spaces. By focusing more on establishing biodiversity, the cemetery can add more to the flora and fauna of the region.

#### **Multi-functionality**

Examples of cemeteries where burial is combined with other functions, generally have more daily visitors. From museum Tot Zover at Nieuwe Ooster in Amsterdam, to guided tours at Highgate cemetery in London and a Biergarten at St Jacobi Friedhof in Berlin, these places give people reasons to visit more regularly or extensively and attract new visitors.

#### **Proximity**

With the centralisation of cemeteries at the borders of the city, they moved away from daily intercourse. The natural cemetery amplifies this trend because they are located even more rurally, even though more are developed in the vicinity of Dutch cities. Lowering the threshold, higher proximity makes visits easier to do more regularly and spontaneously.



### *death in the city*

#### **Urban greening**

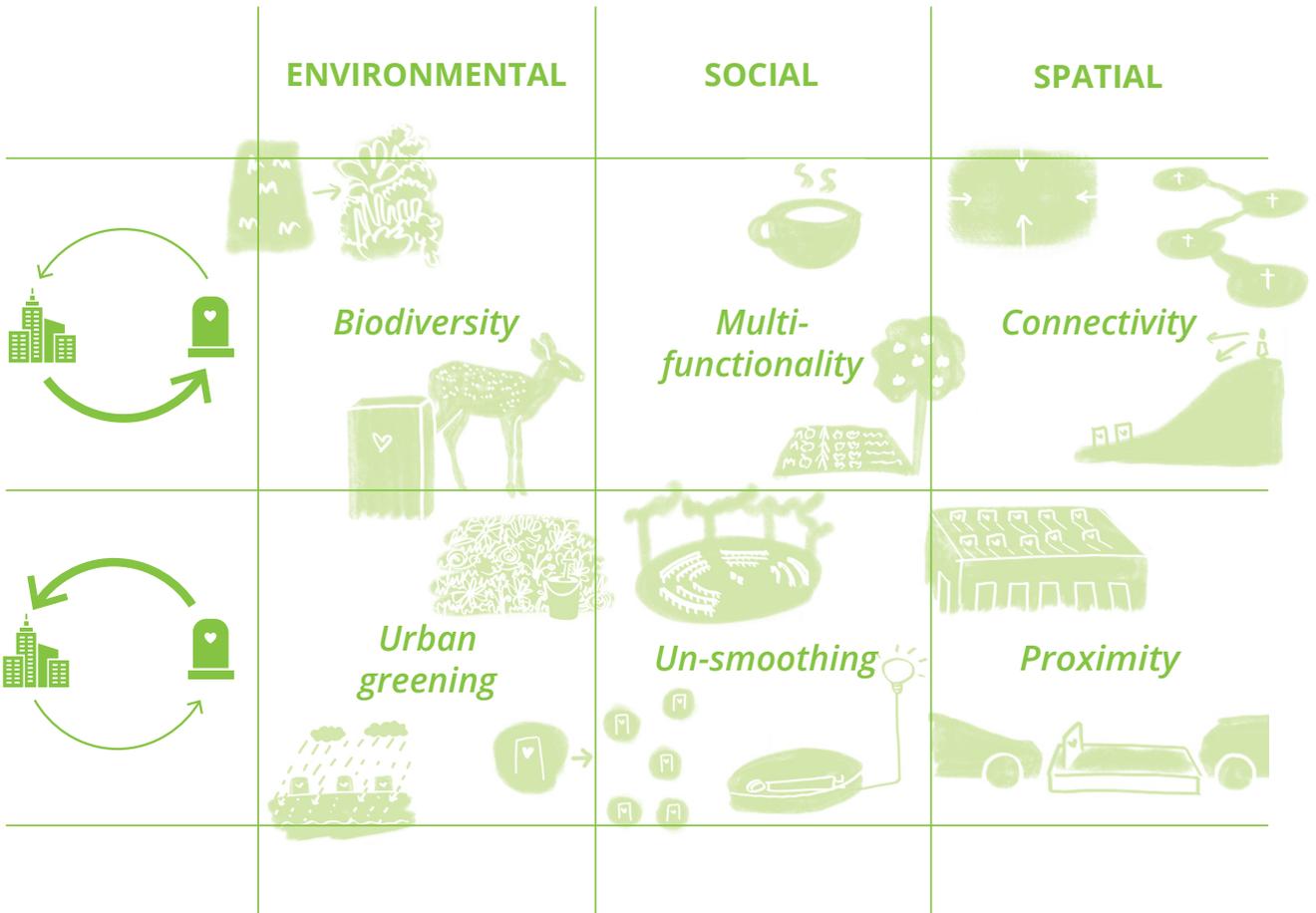
The other way around, urban cemeteries are strong tools to perpetuate green infrastructure in the city centre. Because a cemetery normally does not change function often, the green on the location gets the change to reach maturity and add to cooling the city.

#### **Un-smoothing**

Dutch planning praxis hides the ugly parts of the city, and therefore we hide places where we are unhappy. In his book *The Smooth City* René Boer (2023, p. 149) argues that we need these 'imperfections' and irregularities 'to live life properly'. He talks about places for grief, but also confusion, unpredictability and inconsistency. In the context of this project, un-smoothing is interpreted as the visibility of unhappy emotions and death.

#### **Connectivity**

Cemeteries in Dutch urban context are typically bordered by fences and canals and one or maybe two entrances. The surrounding functions don't interact with the cemetery. Strengthening the physical connection with the neighbourhood and softening the borders will embed the cemetery in the neighbourhood.



*the case:*  
*Rotterdam-South*

A large white circular arc is positioned on the right side of the page, spanning from the top to the bottom. The background is a solid green color.

*05*  
*Life in*  
*the Cemetery*

# 05 *Life in the Cemetery*

## 01 introduction to Zuiderbegraafplaats

**YEAR:** 1940  
**TYPE:** modern cemetery  
**DESIGNER:** F. Theeuwis  
**DISTRICT:** Zuiderpark  
**AREA:** 223.000 m<sup>2</sup>

**WHY HERE?** The Zuiderbegraafplaats is the second biggest cemetery in Rotterdam and distinguishes itself by its multi-cultural character.  
The cemetery exemplifies the disconnect between city and cemetery: mono-functional and with strong boundaries towards the living world.



1:40.000



*Fragmented green facilities around  
Zuiderbegraafplaats*

🕒 **1:20.000**  
(scaled from 1:10.000)

### Legend

- water
- cemetery
- allotment garden
- park
- recreational area
- sports field
- crematorium

The Zuiderbegraafplaats is extensively analysed in chapter 6 of the **fieldwork journal** of this project.

## 02 analysis morphology

This chapter is based on the information found in 'Begraven in Rotterdam en omstreken' (Hulsman & Mulder 1999, pg 93-98) and maps found on Topotijdreis (n.d.).



### Before 1940

Before the construction of the cemetery, the area of Zuiderbegraafplaats was part of the polder in Smeetsland en van der Woudensland.



### 1940

In the 1920s, the population in the south of the river Meuse grew. The demand for a new cemetery arose, of which the design was finished in 1938. The main structure was a cross form, which is drawn on the map above.

The cemetery opened earlier than planned because of the bombings on Rotterdam: the first burial was on May 14th. One of the first to be buried was Jan Lijk (last name translates to Corpse).



### 1953

In 1953 the cemetery expanded again. In this time, cremation was gaining ground fast, and 60% of the original plan didn't need to be realised. The temporary entrance became the definite one.



### 1971

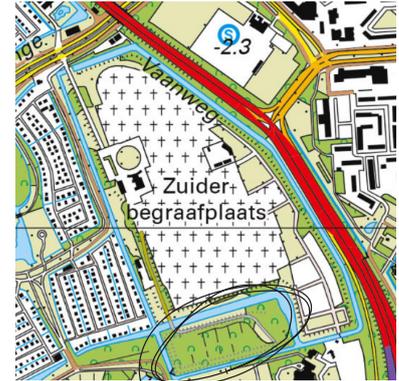
In the sixties, the cemetery expanded again, following the new motorway. It seems around this time the cemetery was at its 'fullest'.

With the arrival of migrant workers from mainly Turkey and Morocco, in 1971, the first Islamic section was constructed.



### 2007

The map shows more empty sections (in green), no data was found about this but we assume it can be explained by a decline in demand for graves.



appointed as  
new Islamic cemetery

### 2025

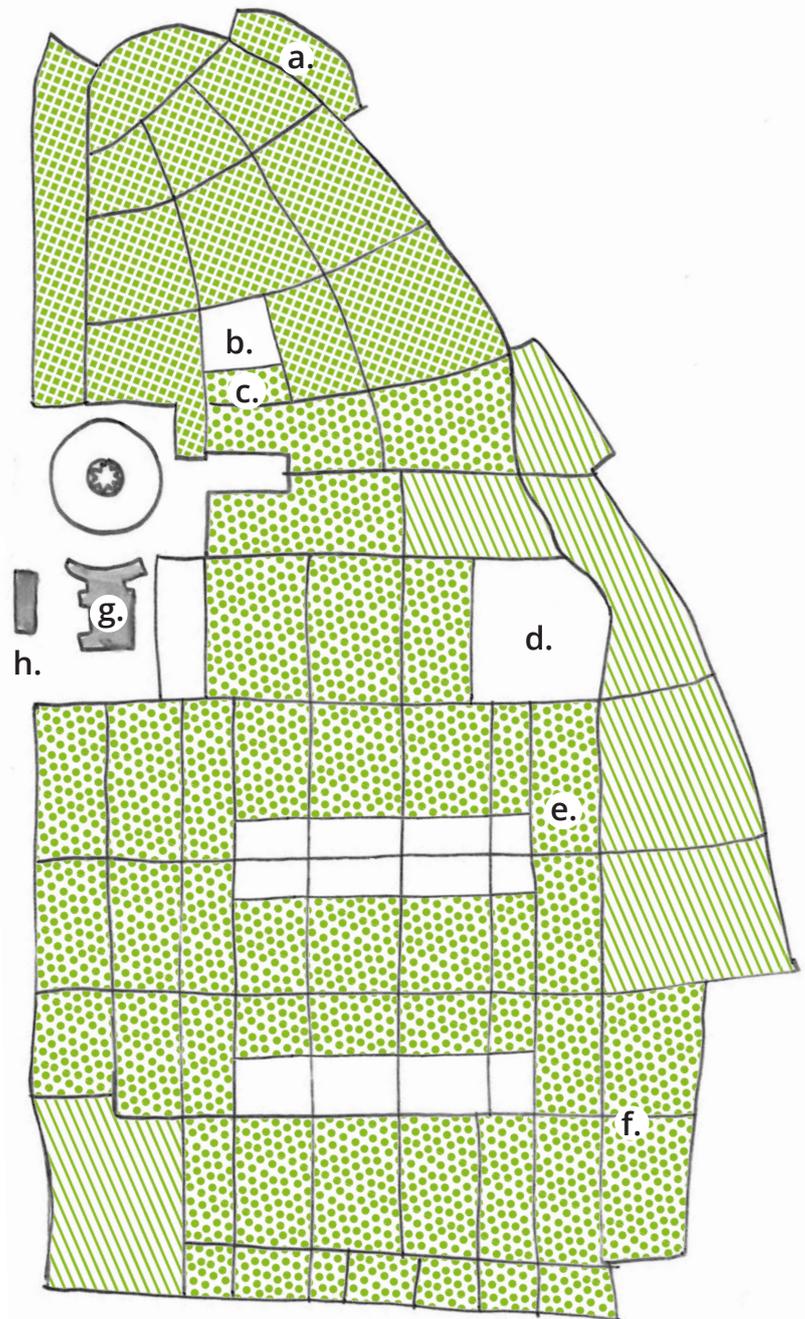
The Covid-19 pandemic caused a rise in demand of Islamic graves, which finds a place in Zuiderbegraafplaats.

In 2025, an official place for a separate Islamic cemetery in Rotterdam is appointed. It's the Vogeleiland,

# grave typologies

The Zuiderbegraafplaats distinguishes itself from the other cemeteries in Rotterdam by the openness to all cultures that call the city home. A large part of the cemetery is assigned for Islamic graves, there is a 'China town' and also Feyenoord-fanatics can find a place of final rest, the latter can even be scattered on real Kuip-grass (Feyenoord is the local football club, the Kuip their stadium).

## Types of grave duration on the cemetery



- a. nameless graves
- b. memorial garden
- c. children's graves
- d. maintenance
- e. Feyenoord section
- f. Chinese section
- g. funeral home
- h. office

### Legend

-  common graves (15 years)
-  Islamic graves (eternal)
-  private graves (extendable)

 1:4.000



# paving analysis


**So-An Ssi**  
 Local Guide · 401 reviews · 350 foto's

★★★★★ 2 jaar geleden

Feedback betreffende de toegankelijkheid.  
 De begraafplaats is niet/nauwelijks toegankelijk voor personen die slecht ter been zijn. Door de smalle paden en kiezels is het zeer lastig om met een scooter of rollator naar de graven te rijden of lopen.

Google Maps Review stating that cemetery is barely accessible for people that have difficulty with walking



formal driveway: asphalt



parking: brick pavers



primary roads: brick pavers (used by cars and bikes)



secondary road: asphalt



secondary roads: brick pavers



secondary roads: gravel



gravesite under construction: sand



natural area: gravel

source map: Gemeente Rotterdam (2025)

🕒 1:4.000

# tree analysis



data source: 3D Rotterdam Bomen (n.d.).

🕒 1:4.000

# 03 design proposal

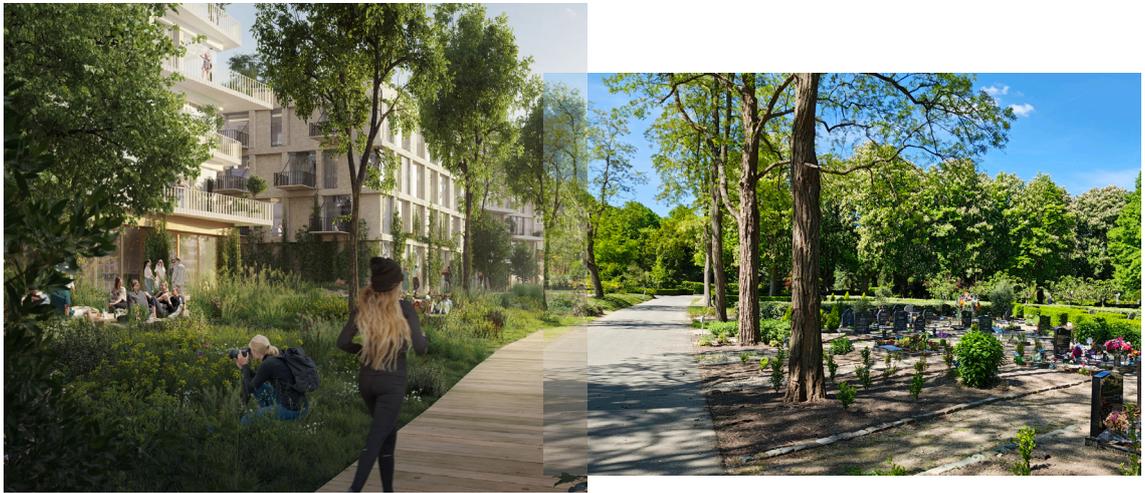
## Zuiderbegraafplaats 2080



Section DD  
1:4.000



- 26 The part of the cemetery that has been vacant for a long time, will be **leased out** to associations in the neighbourhood so they can use the plot to their liking.
- 03 In other vacant parts of the cemetery, the **lawns are transformed into meadows** which add more to the biodiversity of the area.
- 10 In the new natural part of the cemetery, there is attention for **wildlife** to find their habitat on location.

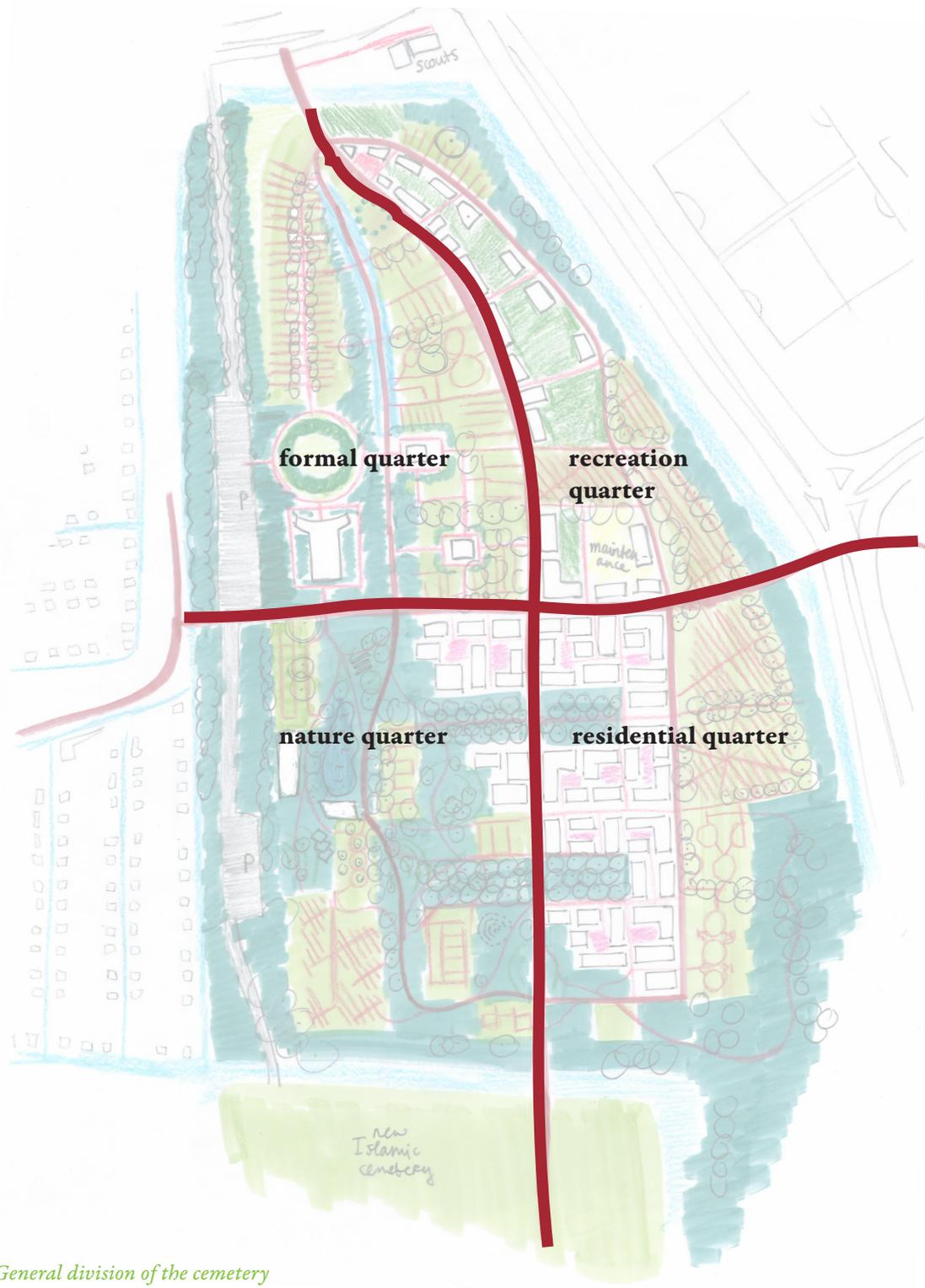


*Visualisation of new residential area embedded in the existing Zuiderbegraafplaats  
Project visual on the right: Wärz, Zwolle (Orange Architects 2023)*

## Legend

-  building
-  active square
-  main network
-  sub network
-  cemetery preservation
-  biodiversity-rich area
-  outdoor area for lease
-  water
-  driveway

 **1:4.000**  
(scaled from 1:2.000)



*General division of the cemetery*

# design principles

## 2. Meaningful connections

Beside the one existing entrance, for new entrances are introduced based on the morphology analysis by extending the lines of the cross-structure from the original design in 1938.

The two strengthened axes are connected with a stroll route around the cemetery.

## 2. Integration surroundings

The functions surrounding the cemetery are pulled into the cemetery. In the northeast, sports fields bring recreation, the southeast residential area grows into the cemetery and on the southwest, allotment gardens mirror within the city as food forests.

## 3. Preservation

Based on the grave typology analysis, parts of the cemetery are preserved. In some cases because graves are eternal (Islamic parts), because of heritage reasons (Feyenoord and Chinese section) and to maintain the atmosphere of the Zuiderbegraafplaats to a certain extend.

The preserved burial sites are integrated within the added context.



## 04 the first step

The proposed design on the previous pages is comprehensive, but there is a big gap between the design and the cemetery today. A lot needs to happen for the design to become reality, and the social time for adaptation should not be underestimated.

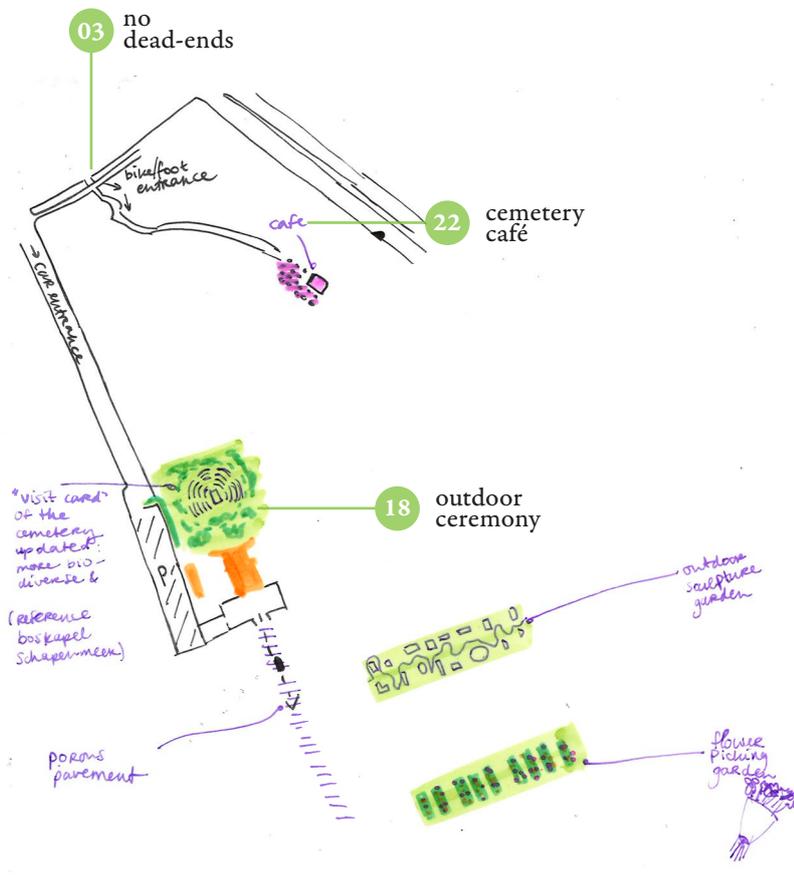
So where to start?

During an interview with Ingrid Addicks and Ton van Dam (appendix A6), respectively the administrator and asset manager of Zuiderbegraafplaats, they shared their wishes for the design of their cemetery. They wanted to add an outdoor ceremony space, and a solution for the shortage of parking spaces at peak hours.

To bridge the gap between 2026 and 2080, this chapter proposes a first step towards bringing more life in the cemetery. The most important design intervention is turning the cemetery from a car-dominant to pedestrian-dominant area.

On green plots where burial is not possible, the clipped lawns are interchanged for functions which can attract new visitors to the cemetery.

- 18 Parking is brought to the side, away from the eye, allowing the roundabout at the main entrance to be transformed into an **outdoor ceremony** space.
- 03 Then, an new informal, pedestrian entrance is introduced where people can enter the cemetery from Slinge: the second entrance, meaning **no more dead-ends**.
- 22 The road connects to a small **cemetery café** which is located on a currently vacant section.



Design proposal for Zuiderbegraafplaats 2030

*the case:*  
*Rotterdam-South*

A large white circular arc is positioned on the right side of the page, spanning from the top to the bottom. The background is a solid green color.

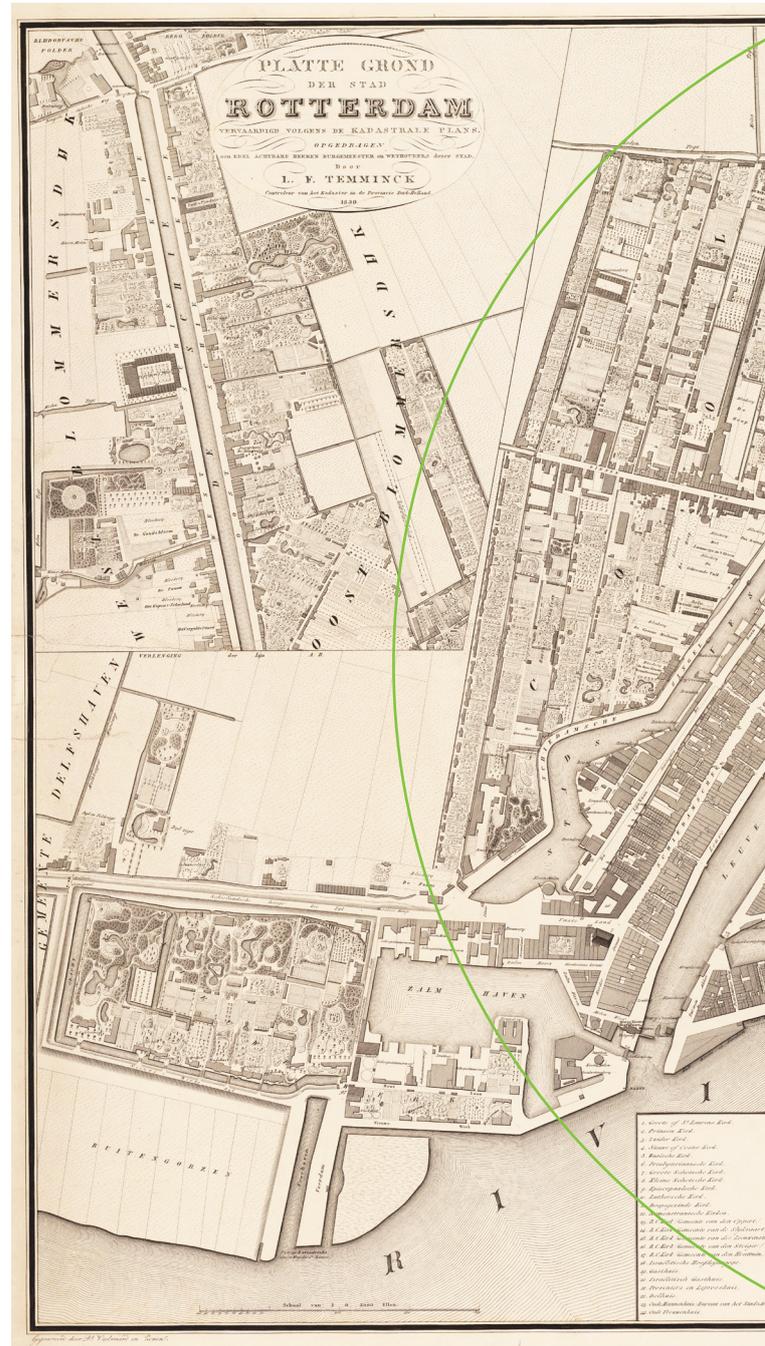
*06*

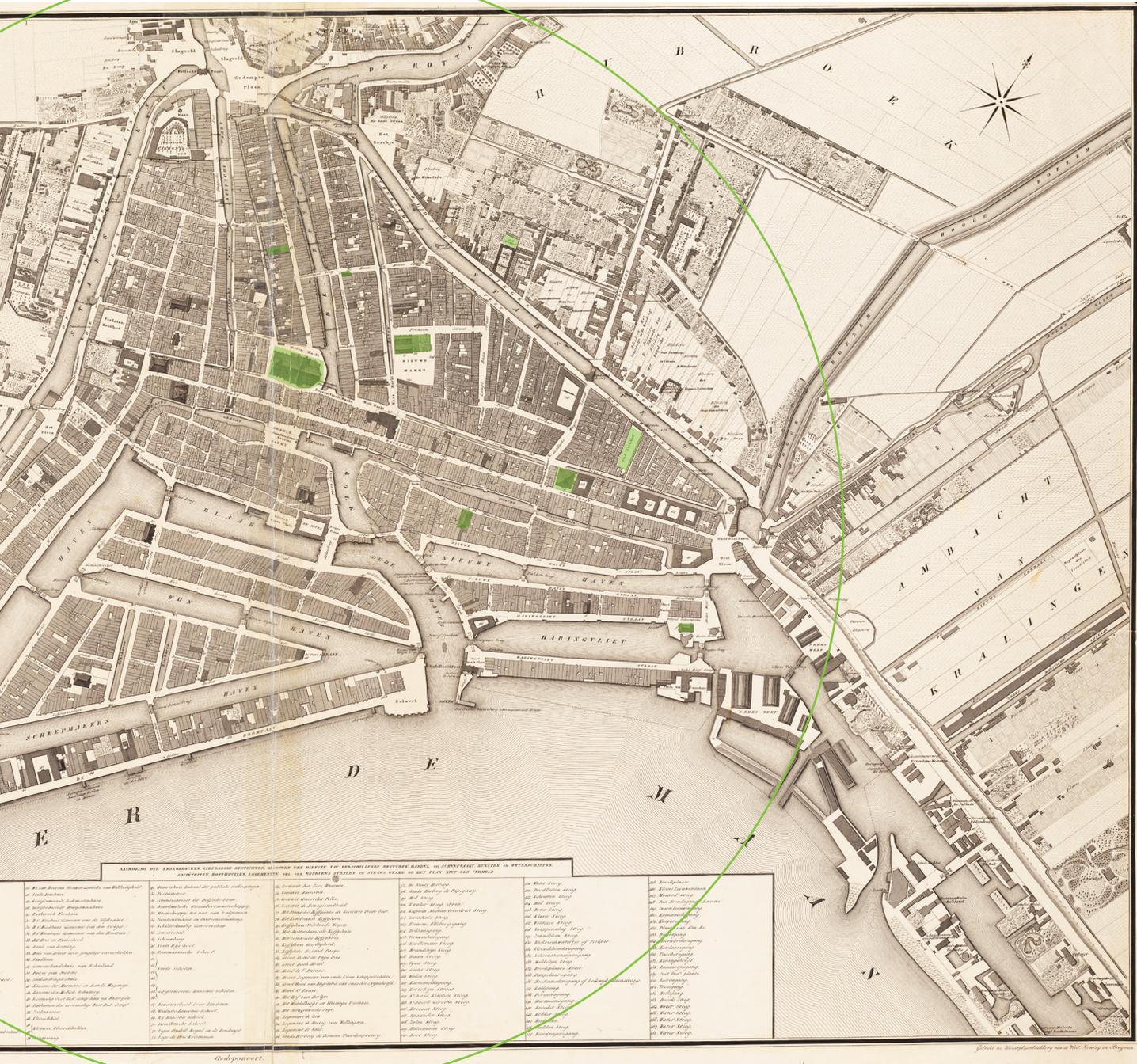
*Death  
in the City*

# 05 Death in the City

## 01 historical burial sites of Rotterdam

In green, places with (previously) burial function are highlighted. At the time this map was drawn, burying within city walls had been forbidden for 12 years (from 1829). Therefore a new cemetery was constructed outside of the city centre: the general cemetery in Crooswijk opened in 1832, but lies outside of the reach of the map. Now the cemetery lies centrally again.





Map of Rotterdam, by Veelwaard en Zn., D./L.F. Temminck (1839). Retrieved from the city archive of Rotterdam

## 02 cemeteries in Rotterdam



*Map of cemeteries in and around Rotterdam in 2025.*



*Cemetery Crooswijk*

*Zuiderbegraafplaats*

⊙ 1:50.000

## 03 deathscape Rotterdam



*Bombing of Poems: On May 14th 2025, 106,000 poems scattered from the air on the place where 85 year before, nazi-Germany bombed Rotterdam. Photo: Poetry International.*

Beside its cemeteries and crematoria, Rotterdam has an abundance of places which are related to death. Some actively want to remind us of events happened in the past, such as memorial sculptures.

Another example is the 'Brandgrens' project by West 8 showing the border of the city that were destroyed by the bombing on May 14th 1940. These and other events are also reminisced in the form of events, the left picture shows the Bombing of Poems where the Binnenrotte turned into a deathscape for a few hours.



*Memorial place on the location of fatal stabbing, Rotterdam, June 22th 2024. Photo: John van der Tol/ANP. Source: NRC*

Another temporary deathscape typology is the memorial place after an accident.

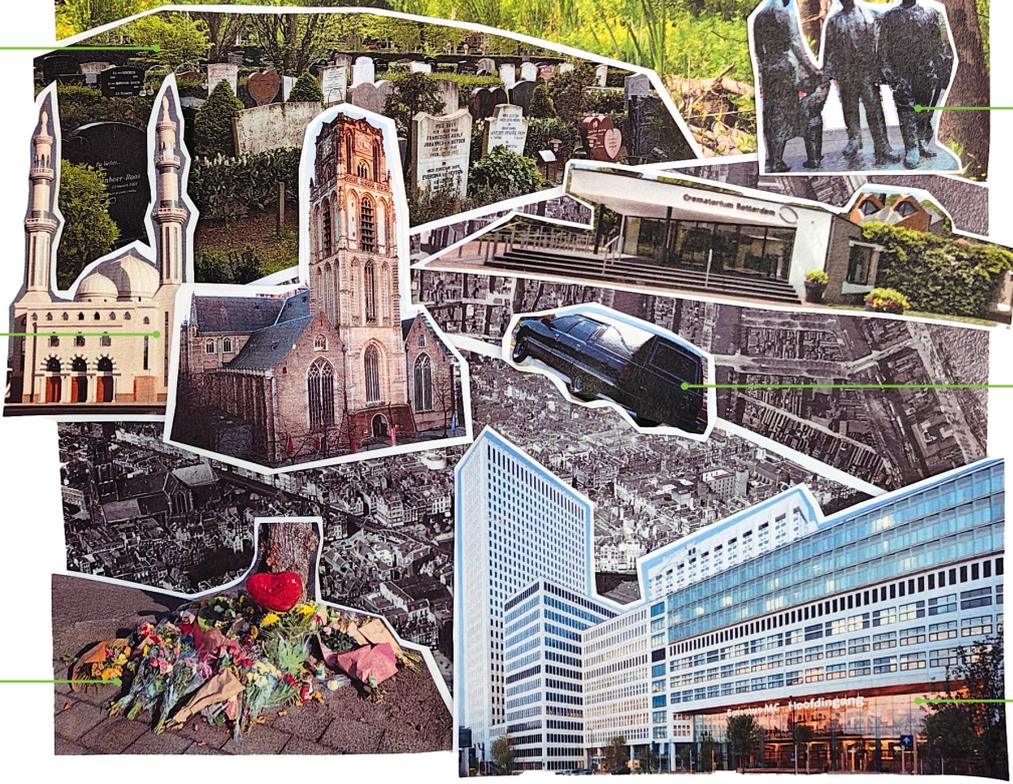
ash scattering techniques

contemplative green

cemeteries

religious buildings

temporary memorial place



memorial bench

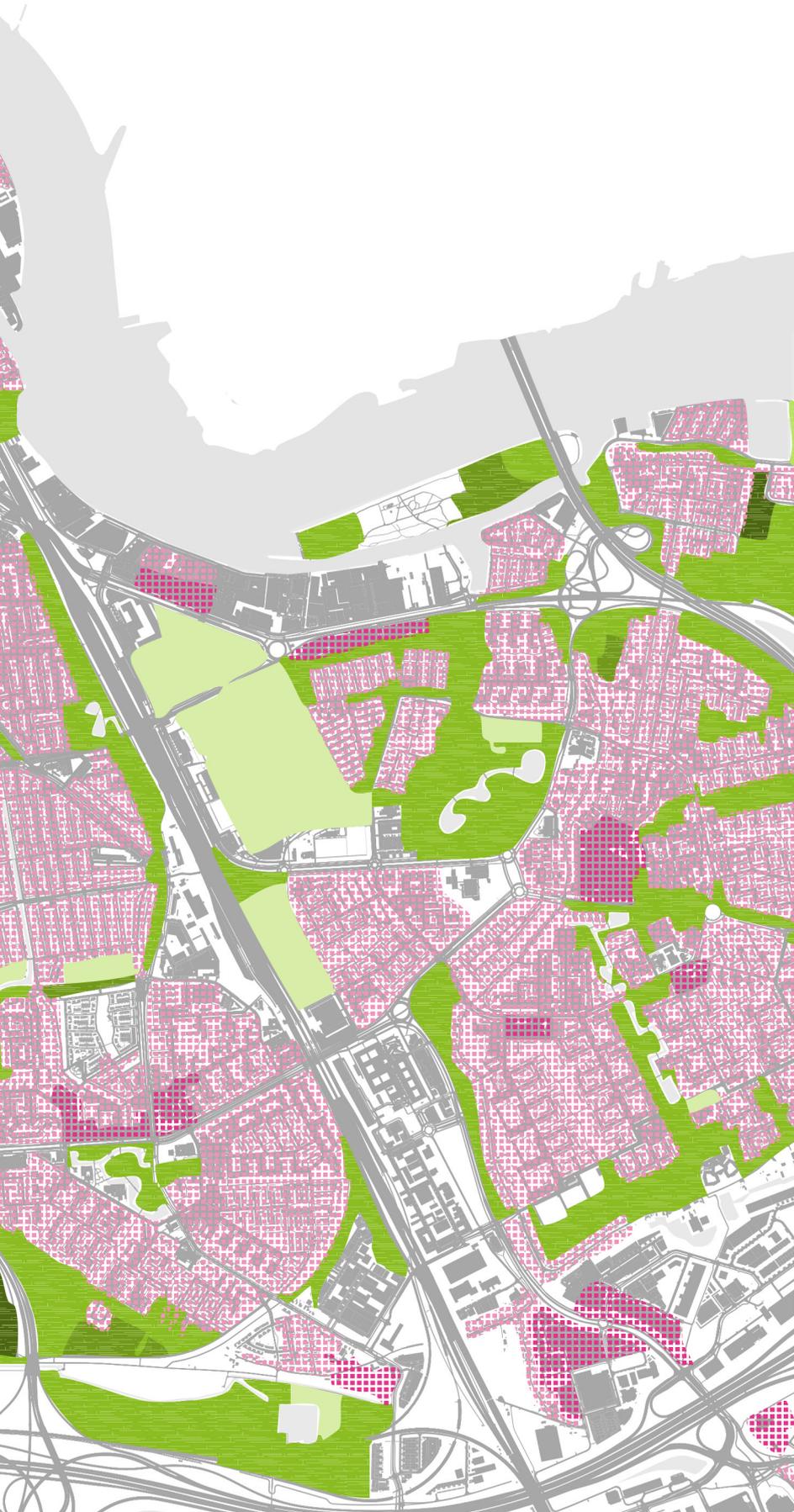
memorial sculpture

hearse using road network

hospitals

## 04 looking for cemetery locations





As explained before, to connect death to public life the project focuses for one part on adding small-scale cemeteries to the city. Therefore we start with mapping out potential places where this can happen. With the three focus goals in mind, we analyse Rotterdam-South.

In line with the three focus goals, these are the kind of places where the addition of a cemetery might be applicable:

**Urban greening** - places which are suffering from urban heat island effect, warming up in hot seasons. We look at paving and the urban heat island analysis on the next page.

**Un-smoothing** - public, buzzing locations, mapped in dark pink. Also urban leisure parks.

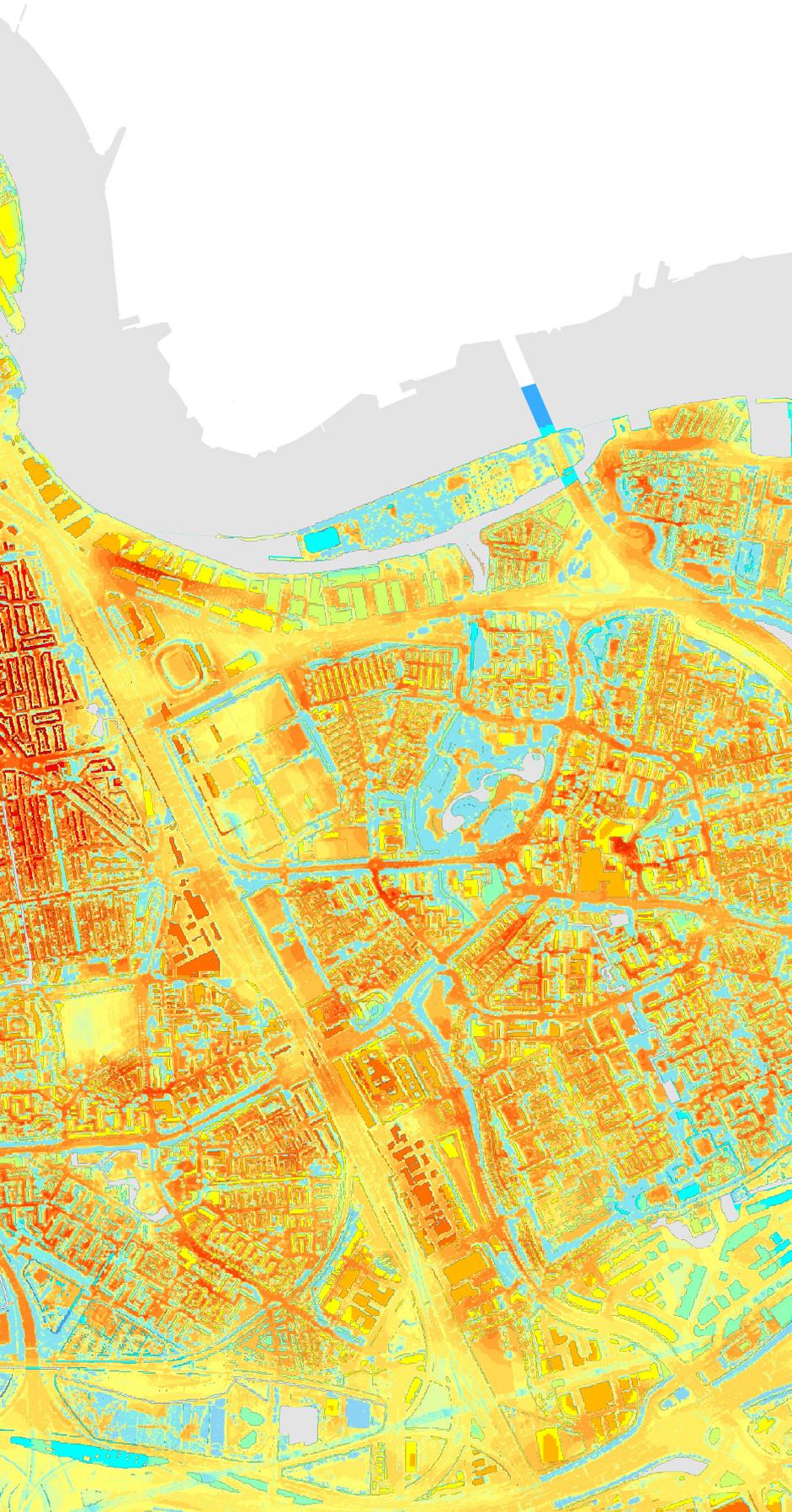
**Proximity** - locations in residential areas, preferably in semi-private settings where neighbours meet each other.

### Legend

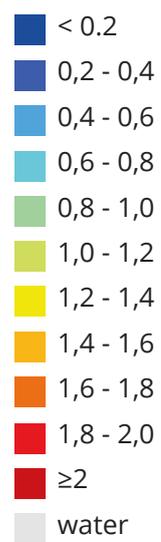
- paving
- ▨ residential area
- ▨ public area
- cemetery
- allotment gardens
- park
- ▨ planned park
- recreational area
- sports field
- water

🕒 **1:25.000**  
 data: CBS, RIVM &  
 Provincie Zuid-Holland





### UHI-effect (°C)



🕒 **1:25.000**  
data: RIVM &  
Provincie Zuid-Holland

## 05 opportunity map

The locations with the biggest potential for small-scale cemeteries are mainly parks, public squares and semi-private courtyards.

All locations can contribute to the three focus goals to some extent, but one place fits more to one than the other.



## Legend

-  Zuiderbegraafplaats
-  potential new cemetery spaces

## 06 testing the potential locations

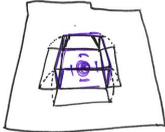
Location-specific idea-finding as well as conceptual sketching added to the the process of finding potential locations for cemeteries, researching the boundaries of locations.

place for ~~memory~~ →  
(Alexander)

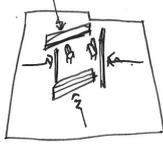


Cabinet for object

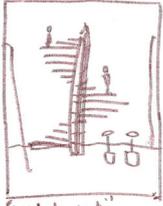
build-up -  
break-down



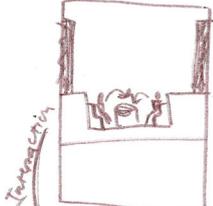
box which can be  
lifted or down, depending  
on amount of privacy  
needed.



Height



"Watch out!"



"Skyline"



"Screaming room"  
(but nobody hears)



"pile of sadness"

Interaction



"Screaming place"  
(and everybody hears)

Interaction

sinking ship



cemetery in the heart

outdoor ceremonial  
place



memorial  
MAZE



cemetery at the side



death of the core

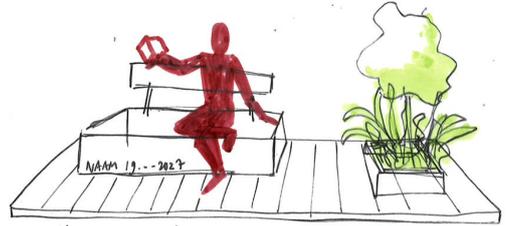


events/picnic

7000 m<sup>2</sup>, 500 graves / ha = 350 graves

BP: Soha → 533 graves / ha

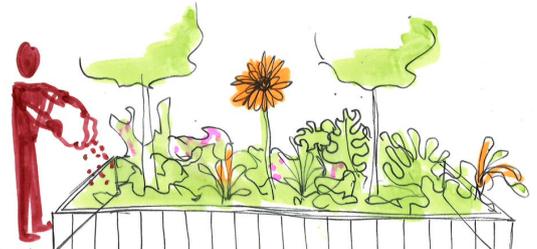
green  
long route (visiting graves, lot of exposure)  
short route (little exposure)



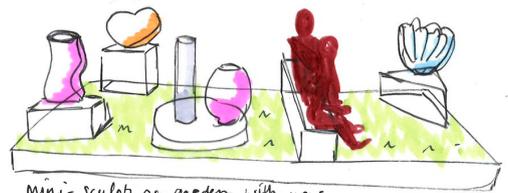
Above-ground grave



human-composting machine  
(to keep close during the process)



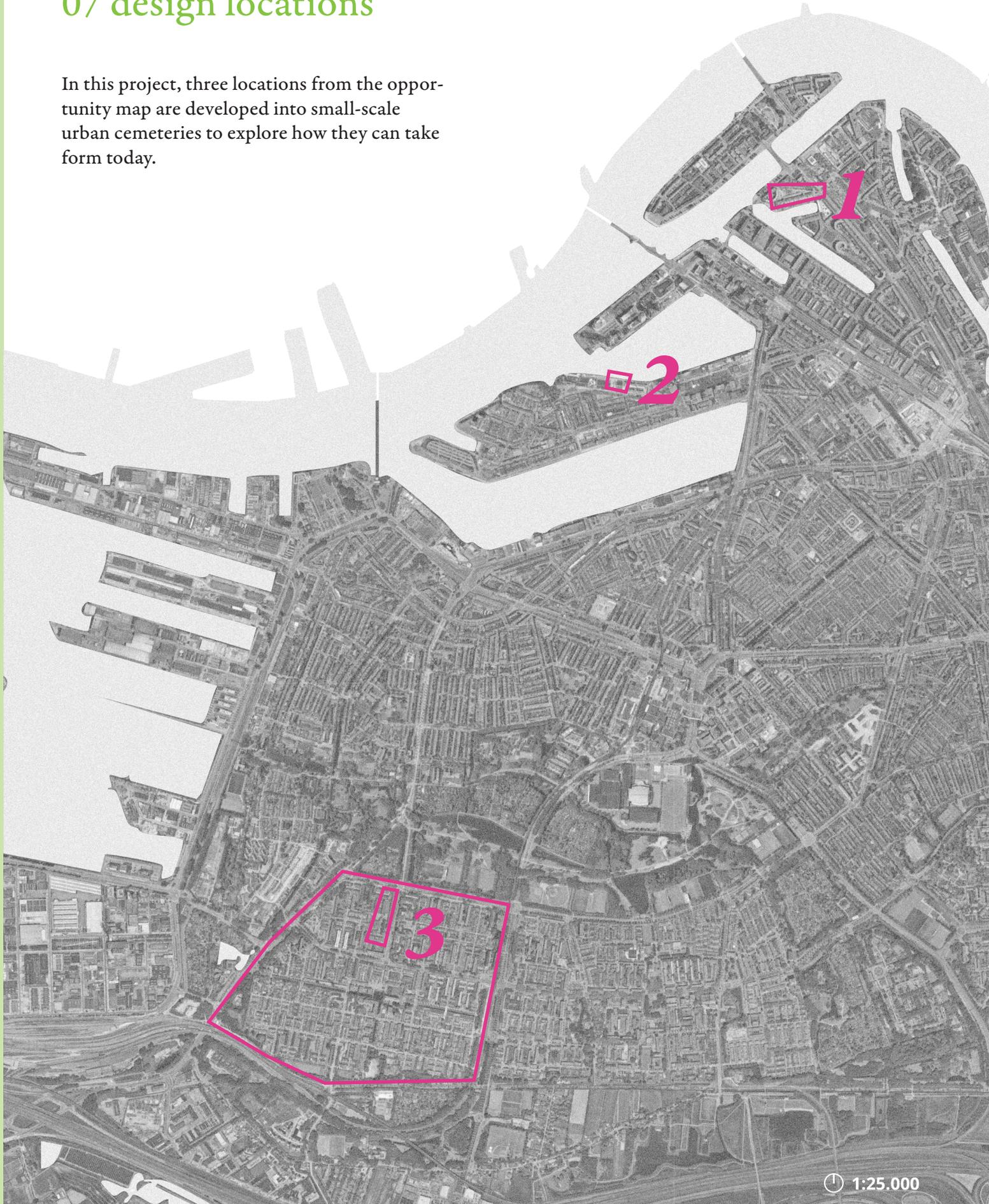
Re-use of decompose-soil (human ~~decomposing~~ composting)  
OR calcium-ashes (Resomation)  
"memorial planting"



Mini-sculpture garden with users

## 07 design locations

In this project, three locations from the opportunity map are developed into small-scale urban cemeteries to explore how they can take form today.



1:25,000



**1**

**Handelsplein**

Focus: urban greening



**2**

**Walhalla square**

Focus: un-smoothing



**3**

**Pendrecht courtyard**

Focus: proximity

0X

0X

In the design drawings, these pointers show where patterns from the pattern language are applied.

# 08 location 1: Handelsplein focus: urban greening

**YEAR:** 1997 (current design)  
**TYPE:** old port neighbourhood  
**DESIGNER:** unknown  
**DISTRICT:** Feijenoord

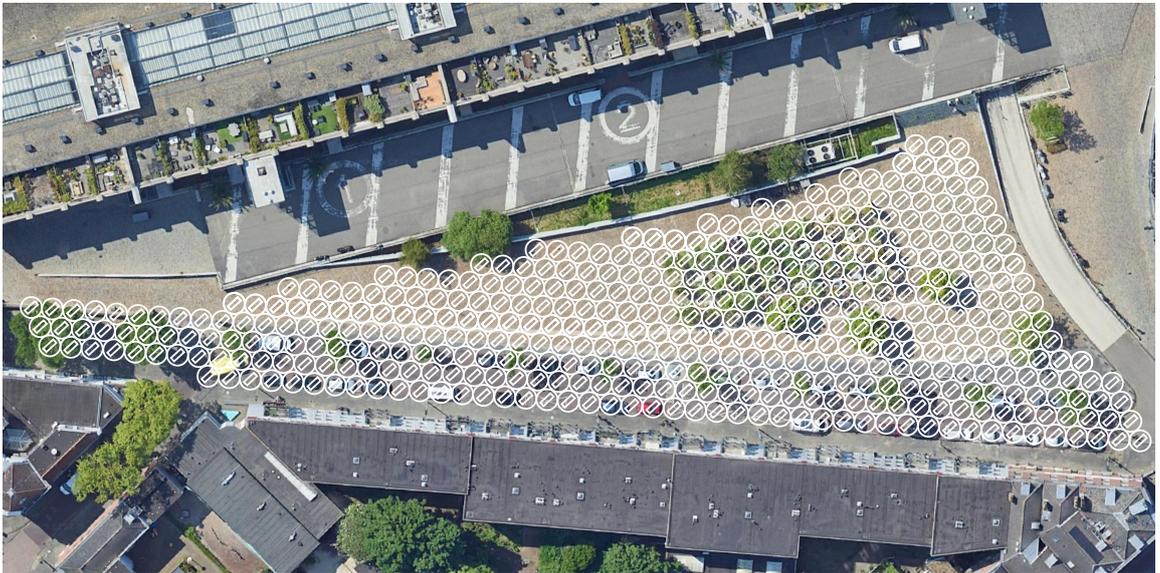
**WHY HERE?** Located next to the Entrepot building, Handelsplein is completely paved; the square colours red on the urban heat island analysis. The square lies empty by a lack of use by residents.



1:40.000



*Handelsplein in autumn*



**500** graves projected on Handelsplein,  
if it would be fully filled.

**housing**

entrance  
Jumbo  
supermarket

restaurant

restaurant

restaurant

restaurant

bar

restau

**Entrepot building**

Built in 1879. originally intended for  
the tax-free storage of transit goods.  
Now high-end apartments.

supply entrances supermarket and restaurants

part of old wall  
around Entrepot building

built in 1888

**social hou**

**Hefpark**  
Initiative by local residents



restaurant

restaurant

restaurant

senior housing

by  
cepezed

Dutch language  
school

Protestant  
church

hotel

Villa Zebra  
children's art museum

ing

Koninginnebrug

1:1000

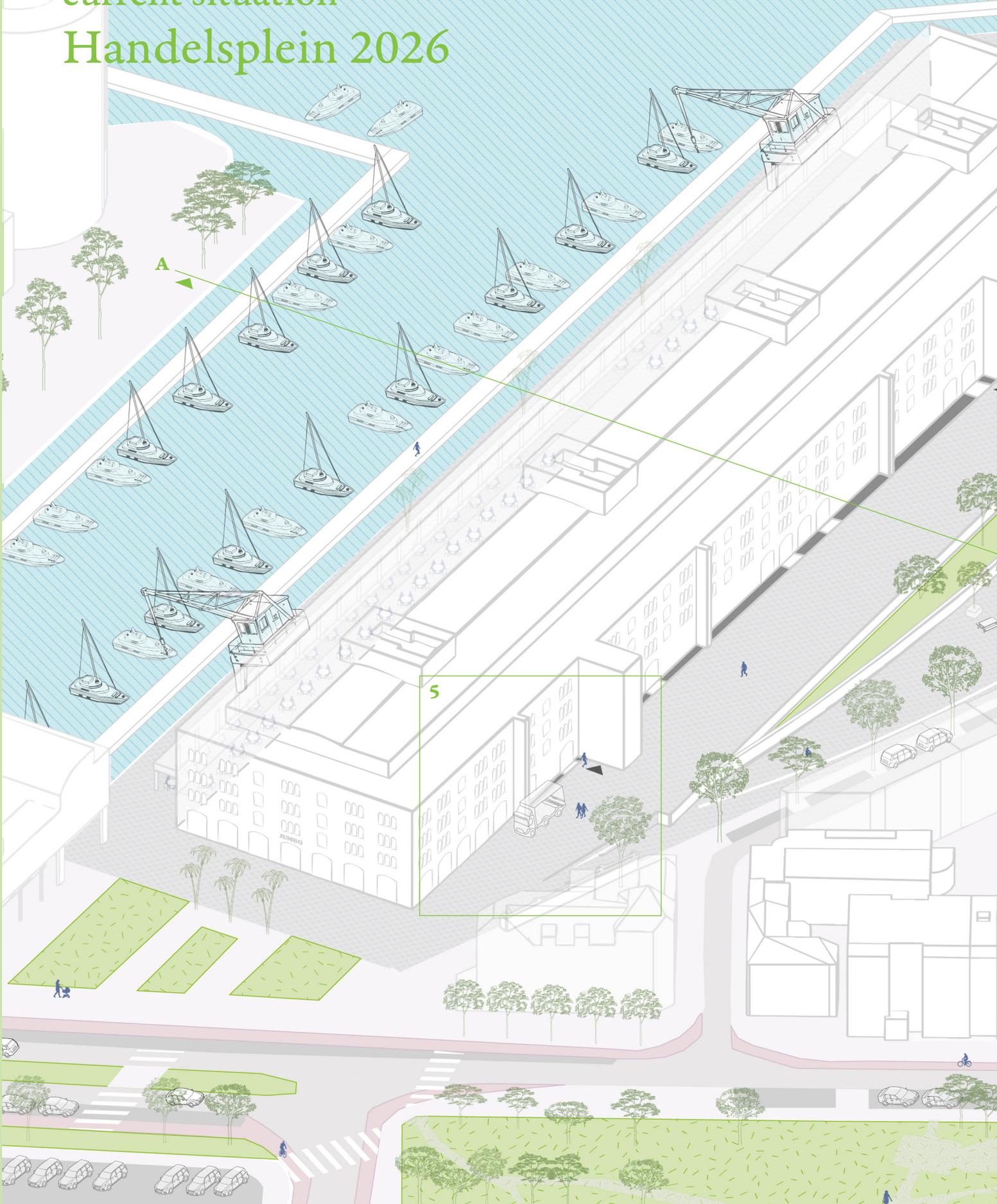




view on Noordereiland

Ⓢ 1:1000

current situation  
Handelsplein 2026



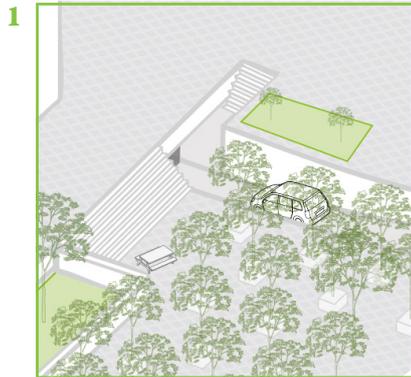


1-6 and section AA available on the next pages.



# spatial context

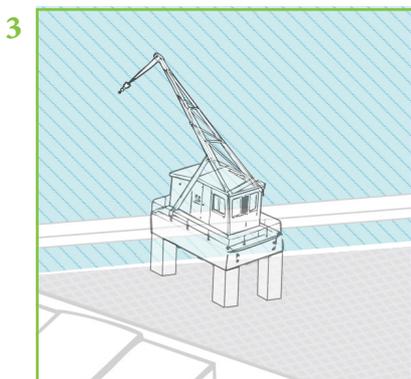
Existing elements of Handelsplein that should be taken into account in a new spatial design.



**Parking garage entrance** in the middle of the square disrupts the pedestrian zone.



**Green and social demand** clearly visible in placement of (temporary) trees and picnic benches.



**Harbour architecture** reminds us today of the activities that used to take place on location.



**Small garden** in front of the senior housing has only been there since 2022, Google Streetview shows. It looks like the community is maintaining it.



**Supply entrances stores and restaurants** are located at the 'back' of the Entrepot building, facing Handelsplein.

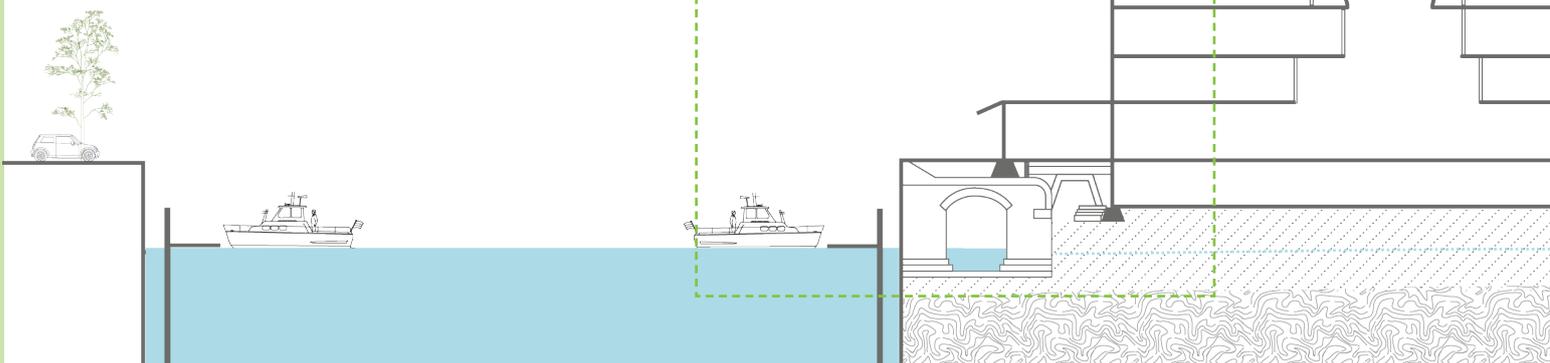


**No activities along the water bank** along the Meuse except for children's museum Vila Zebra. Parking spaces take up the area.



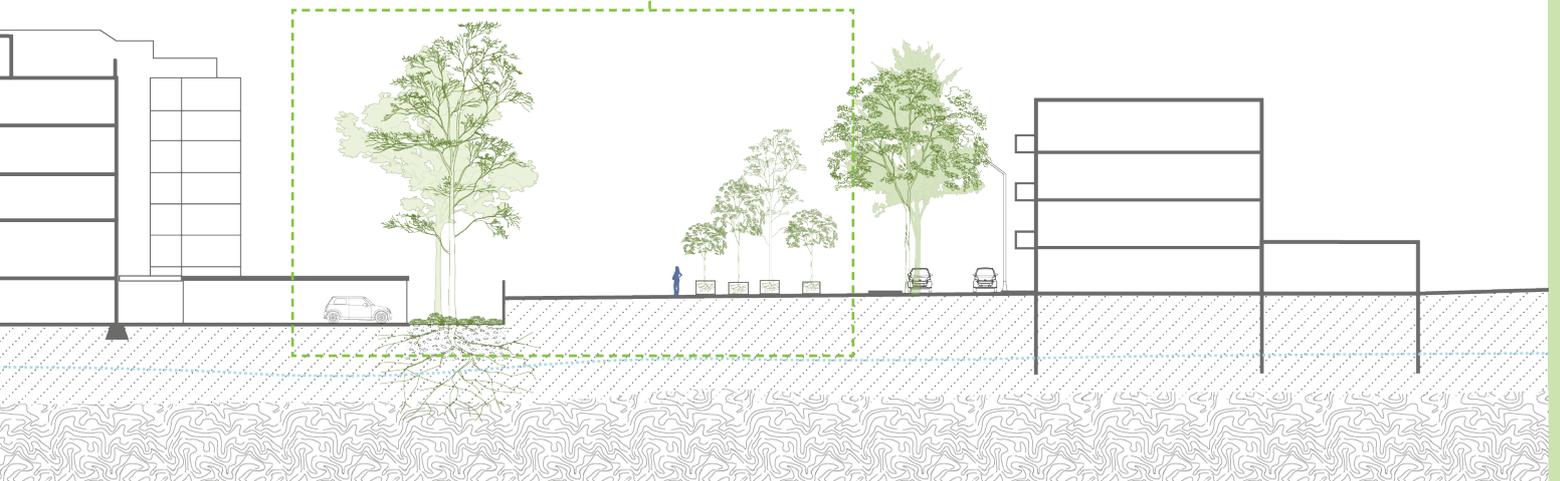
Along the Vijf Werelden street, restaurants and shops have in- and outdoor terraces. In the harbour, private yachts are moored.

**Section AA**  
**1:500**

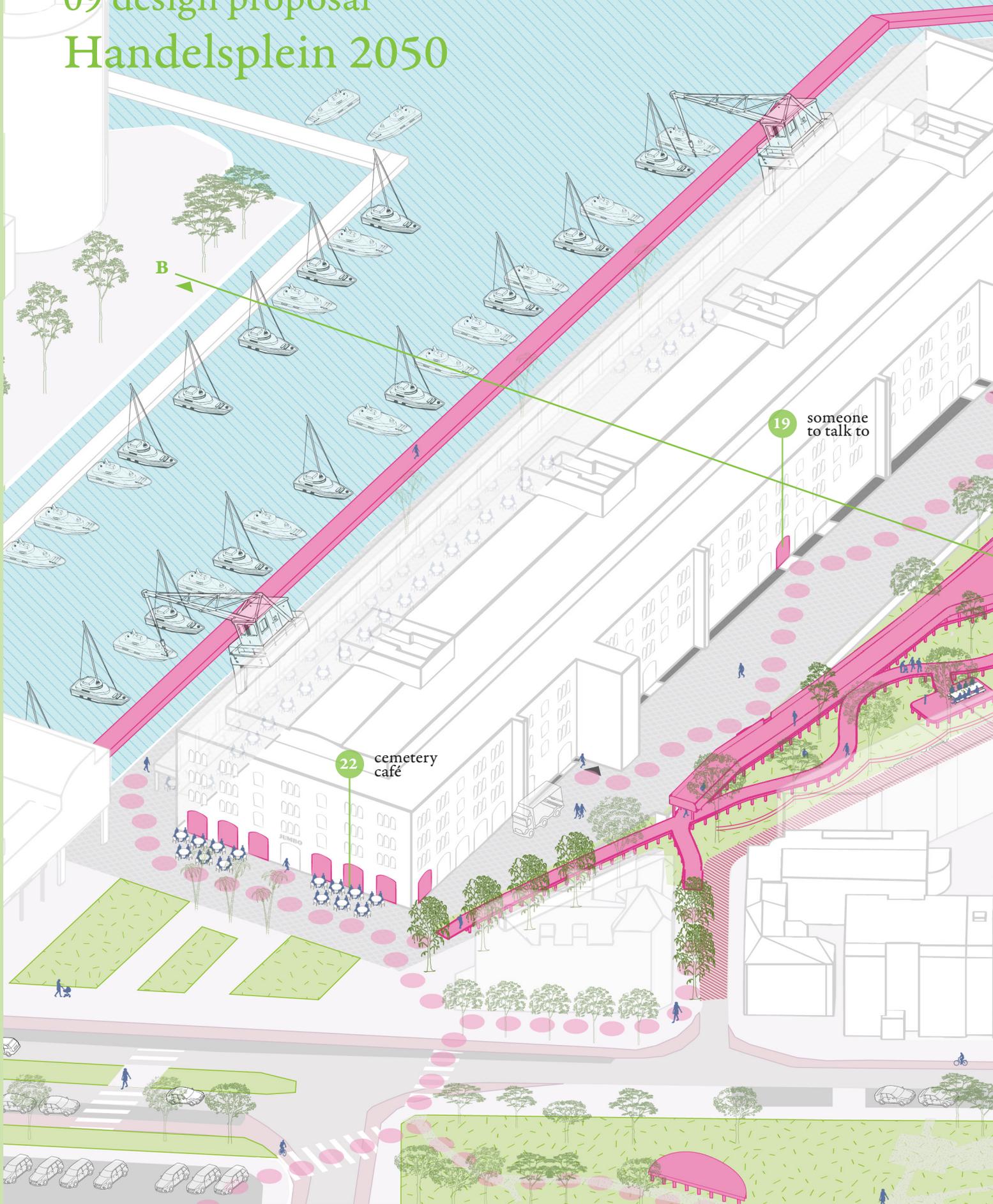


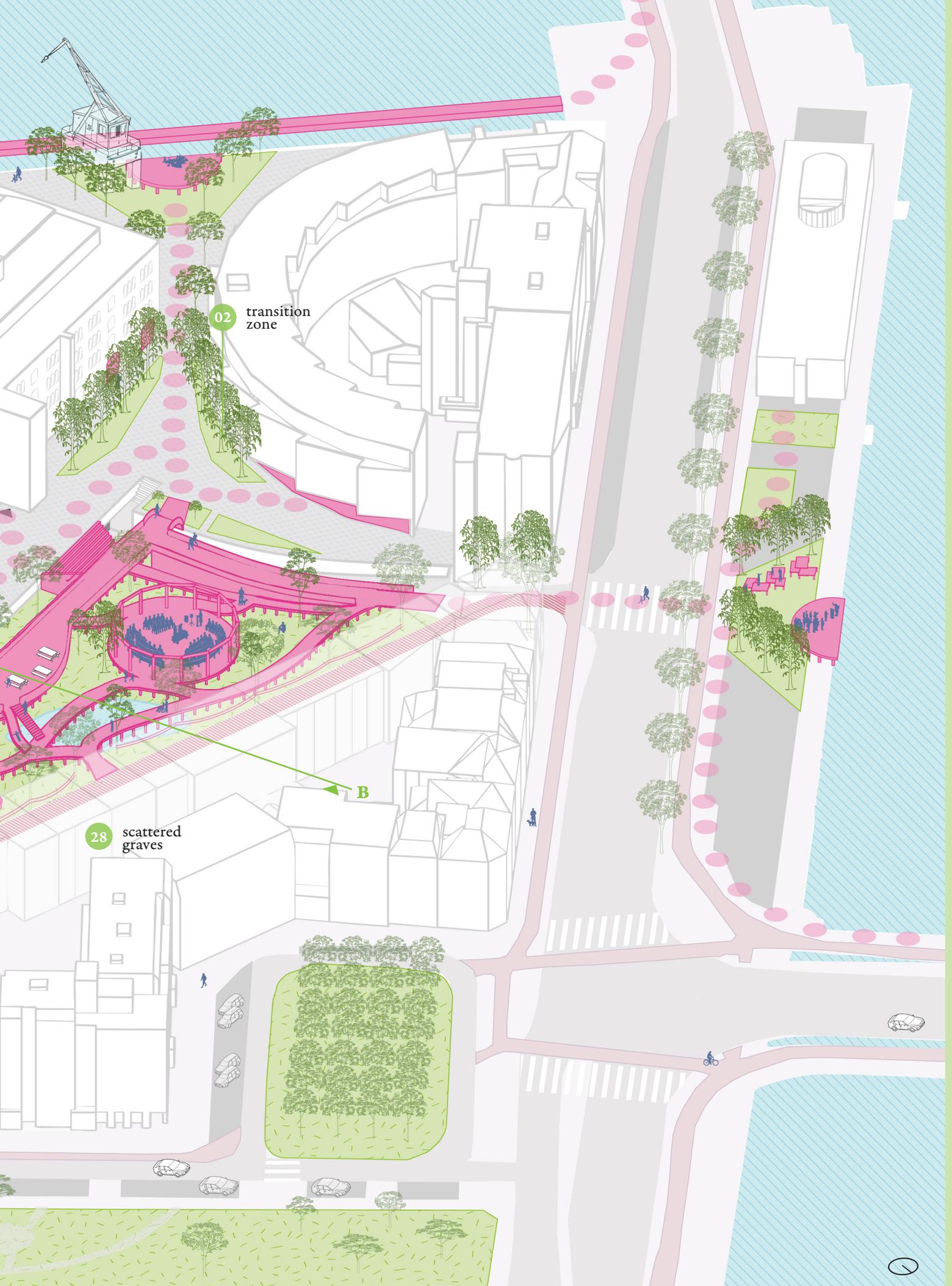


The parking garage next to the Entrepot building creates height differences in the square, with a green container with trees.



# 09 design proposal Handelsplein 2050



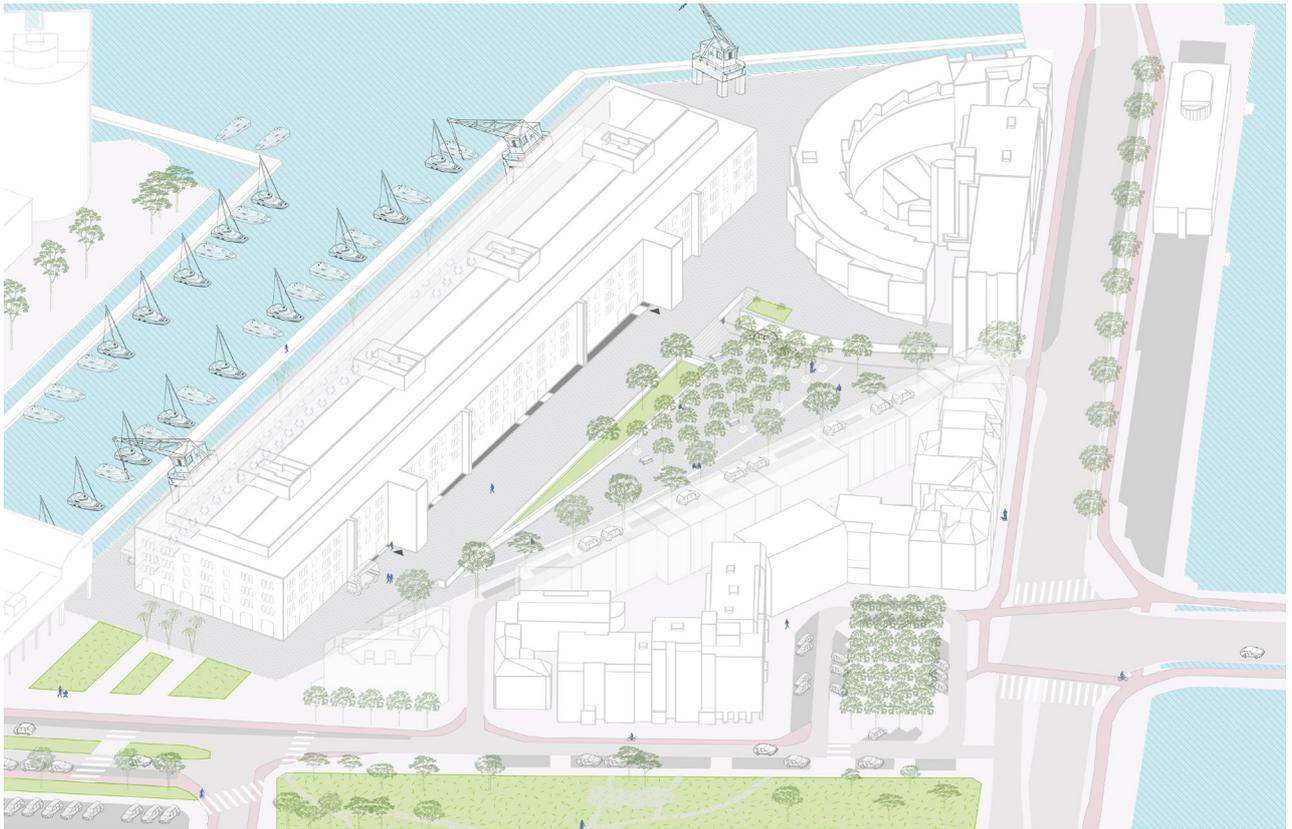


02 transition zone

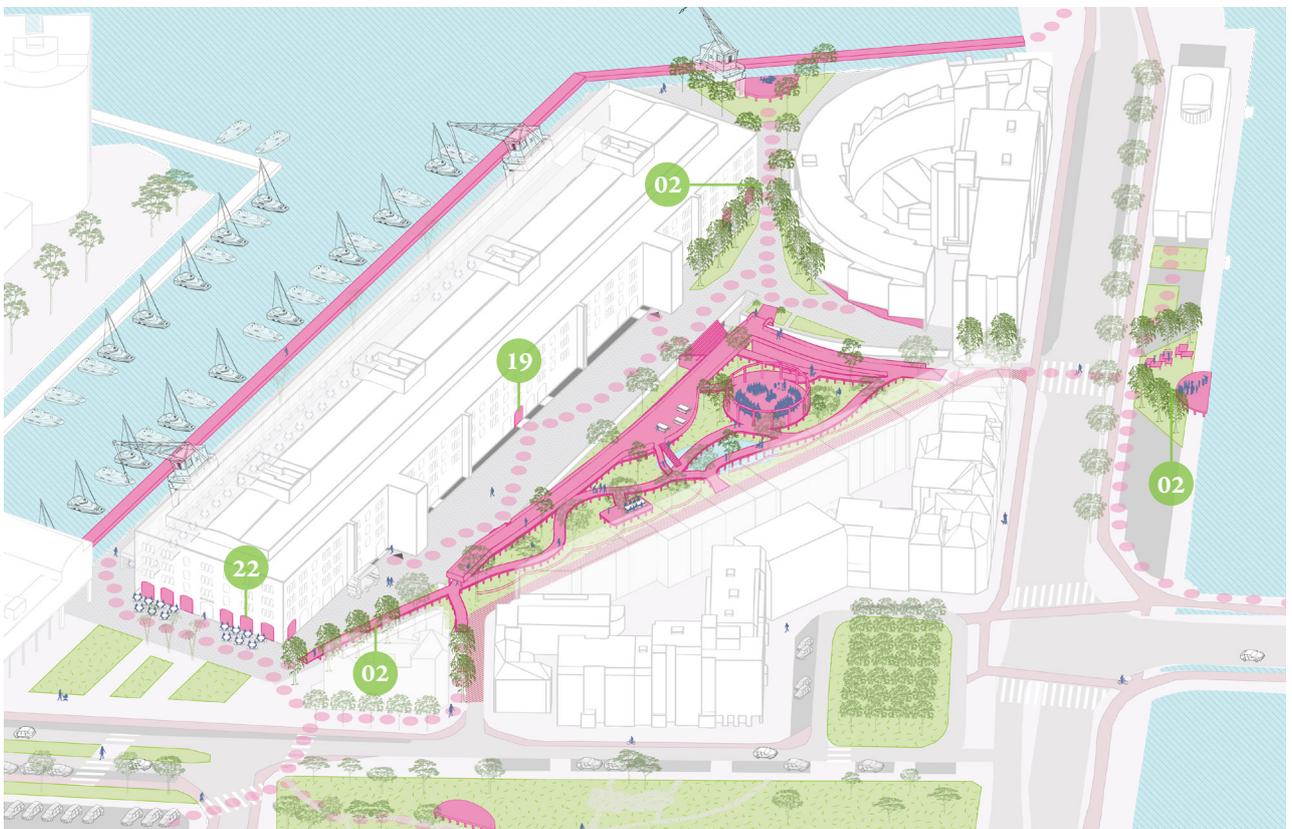
28 scattered graves

B



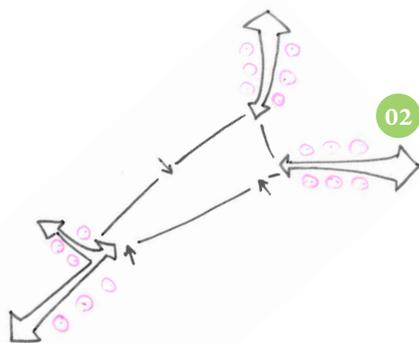


*before*

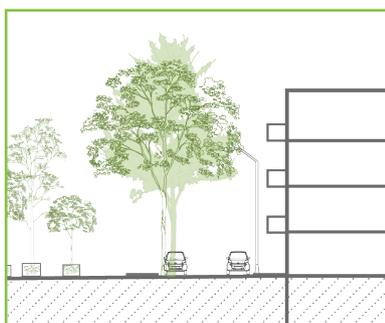


*after*

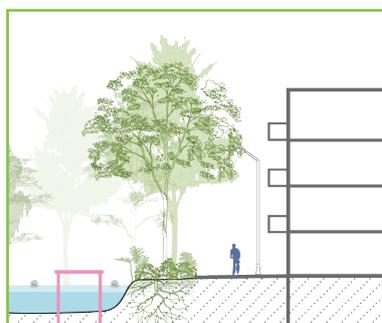
- 22 Currently, only the southern side of the Entrepot building has an activated plinth. Adding entrances and functions such a **cemetery café** to get a drink during a visit.
- 19 Another function to activate the northern side of the Entrepot building is with a cemetery living room, where cemetery visitors can find **someone to talk to**.



- 02 The **transition zones** to and from Handelsplein cemetery behave as funnels: open space narrows, whereafter it opens up again.

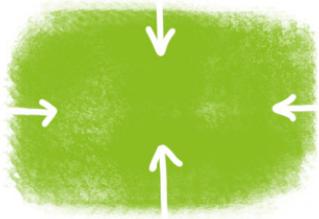


*before*



*after*

transforming the street and car parking into a **bicycle street** with green addition.



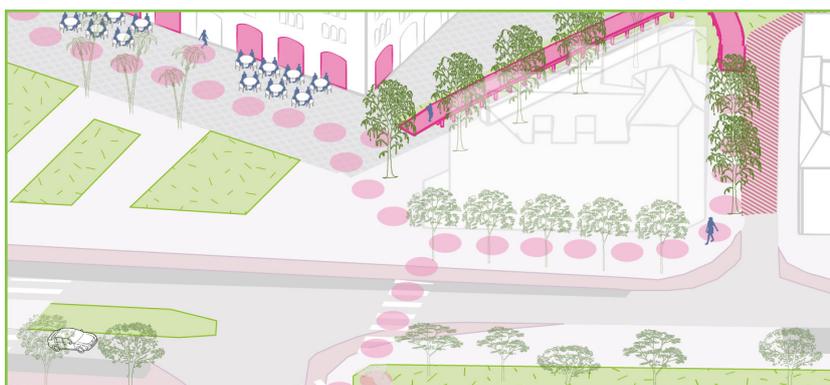
03 There are six ways to enter and exit the cemetery, which means the cemetery has **no dead-ends**.



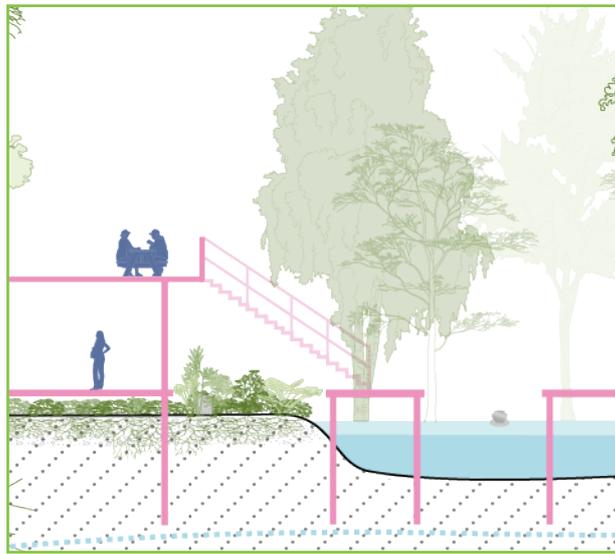
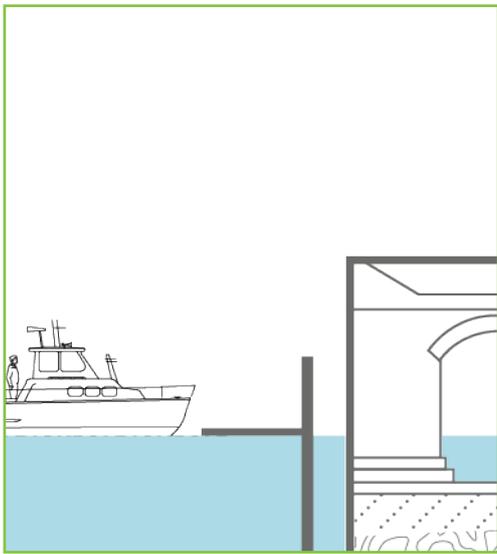


► **07** Connection to the south, with a flexible ritual space at the water front. Transition is made with **symbolic planting** elements, such as weeping tree variants.

**24** Connection to northeastern side, activating the waterfront and front of children's museum Villa Zebra. Playful elements are added (**pattern 24: Child-friendly**).

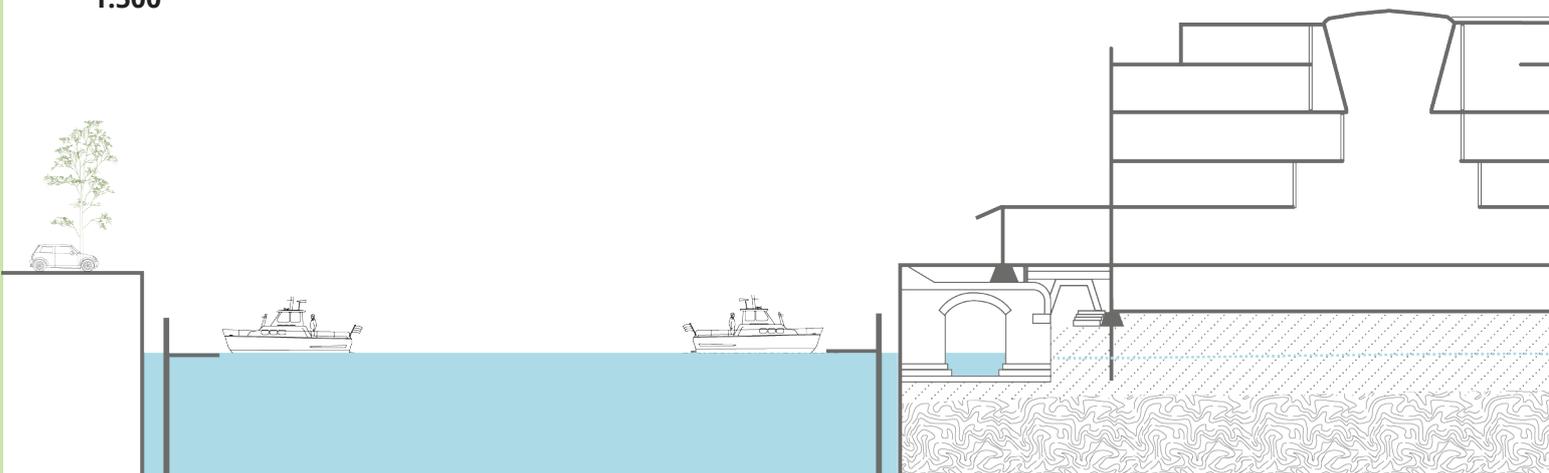


► Connection to Hefpark, entrance to the supermarket and the other option to reach the southern waterfront.

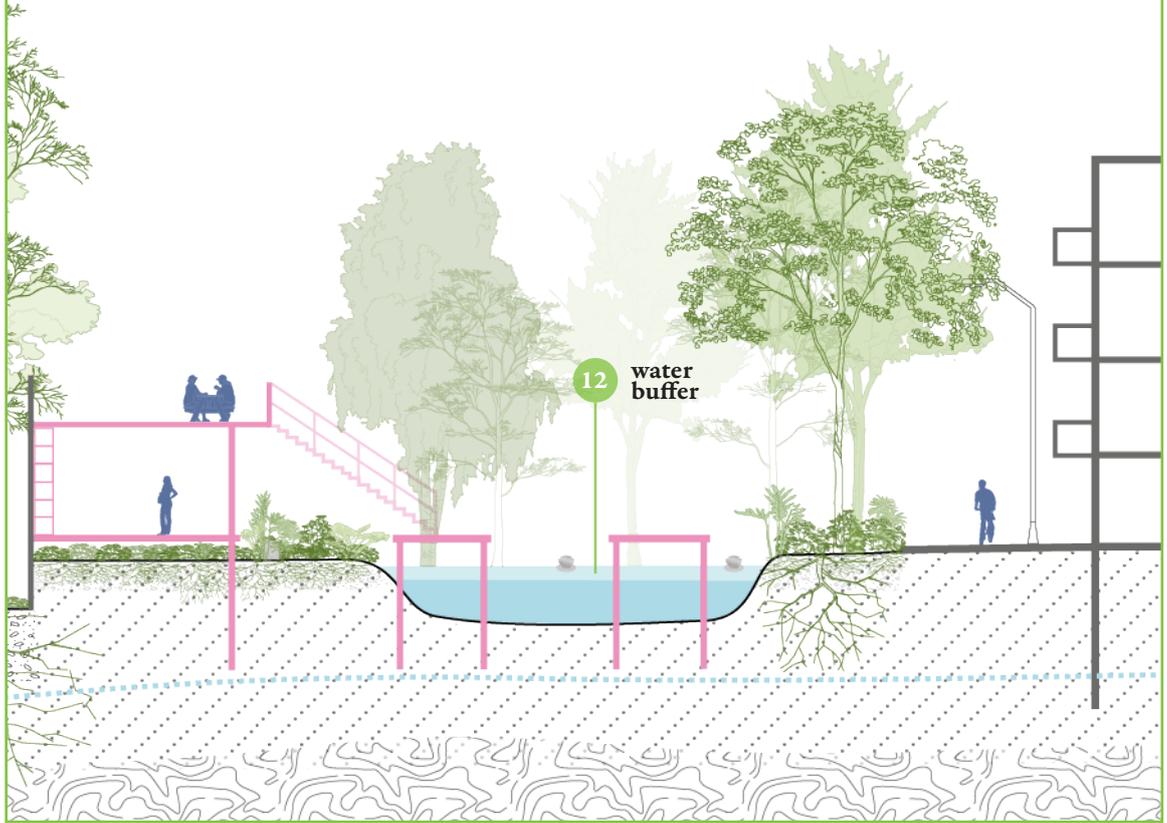


Repetition of quay structure from the harbour (left) in the design (right)

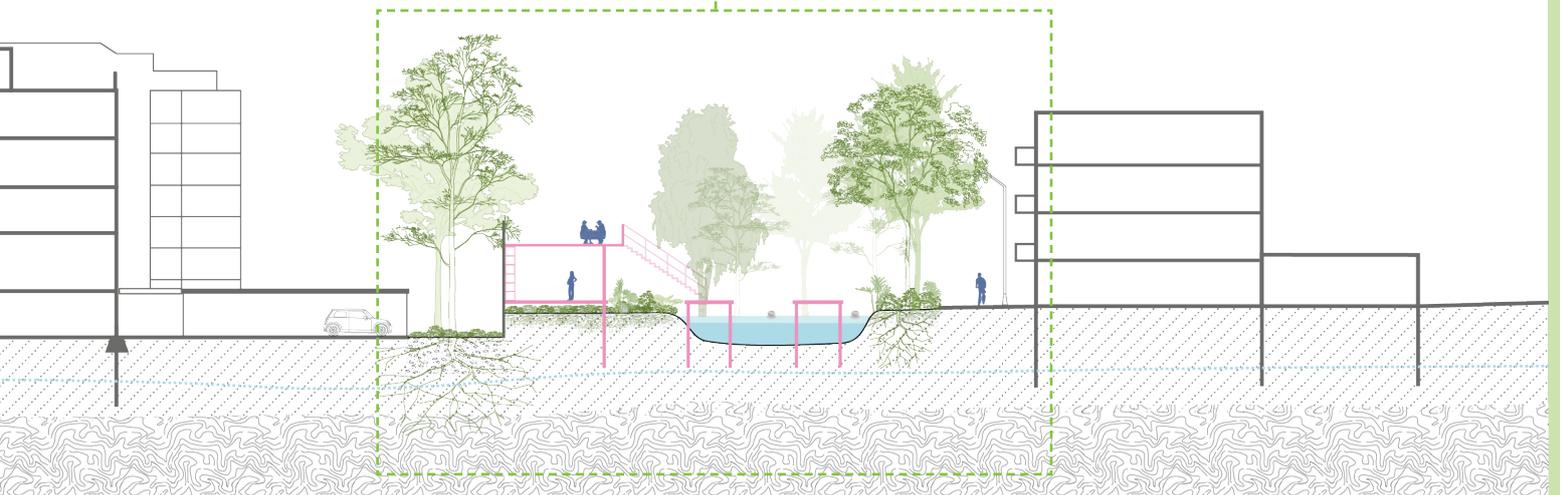
**Section BB**  
**1:500**



Section C  
1:250



- 12 The urn pond (pattern 29: Floating urns) in the design is used as open **water buffer**, where the water can rise or drop depending on the weather circumstances.



# funeral in the cemetery

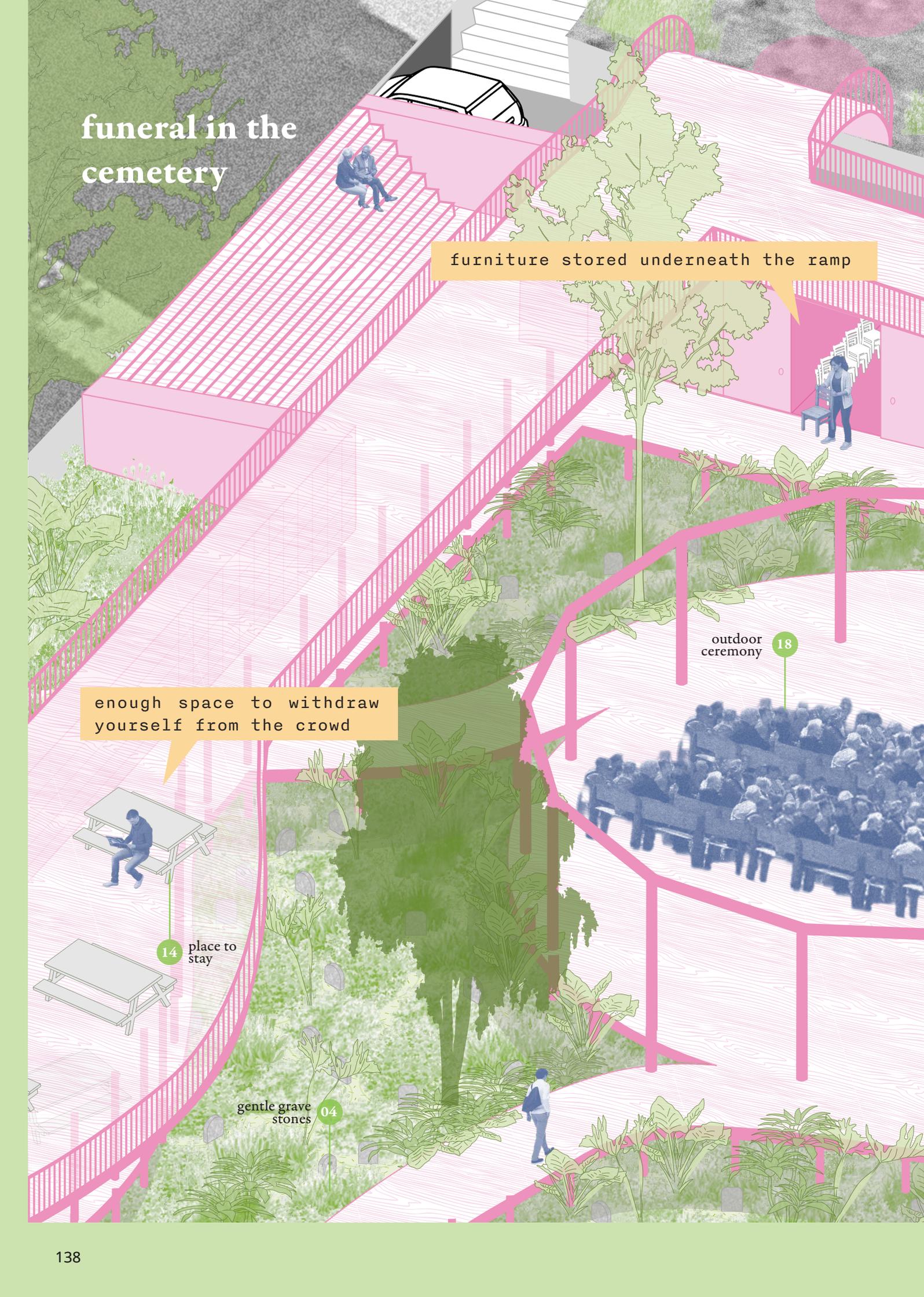
furniture stored underneath the ramp

18 outdoor ceremony

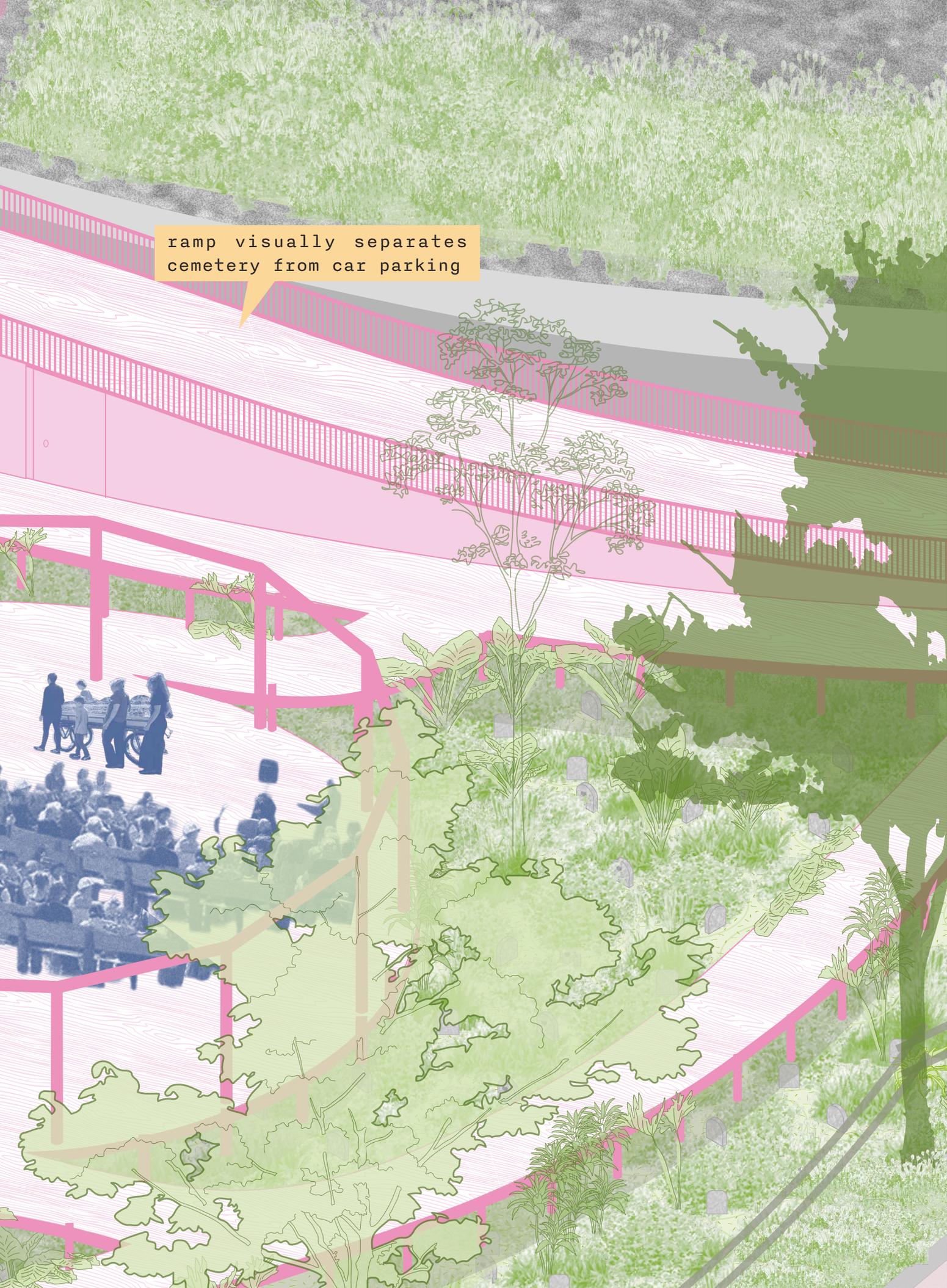
enough space to withdraw yourself from the crowd

14 place to stay

gentle grave stones 04



ramp visually separates cemetery from car parking



## involved patterns



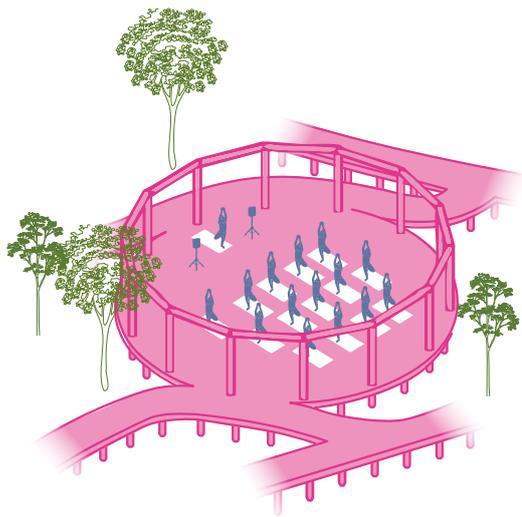
- 18 The **outdoor ceremony** space lies in the heart of the cemetery and is connected in the directions of the entrances.
- 14 Through the cemetery, (picnic) benches create **places to stay** for a while.
- 04 Because of the circular alignment (pattern 35) of the graves, the stones are oriented towards all directions. Regulations on grave marker expression ensures a **gentle grave stone** landscape.



*Reference: forest chapel Schapenmeer  
natural cemetery (Schapenmeer, n.d.)*

## flexible ceremony space

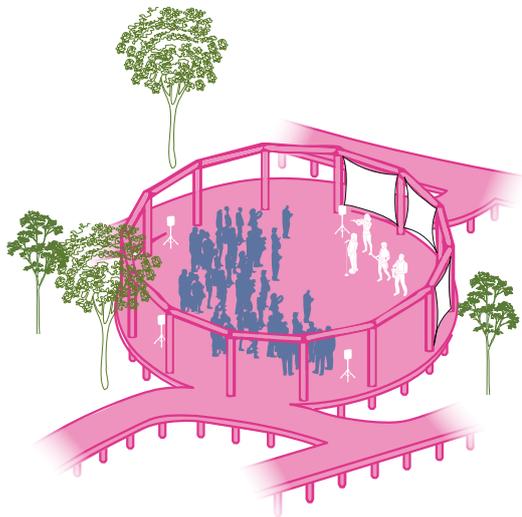
Chapter 03.09 of this report explained the three phases of death rituals in the Netherlands. Phase 1 (performance of the funeral ceremony) can take place in the ceremony space on the cemetery or for example in a cafe nearby the location.



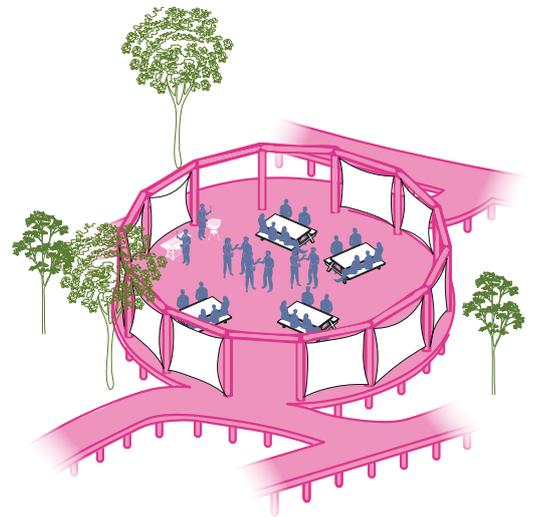
**Yoga class**



**Market**



**Concert**



**Community event**

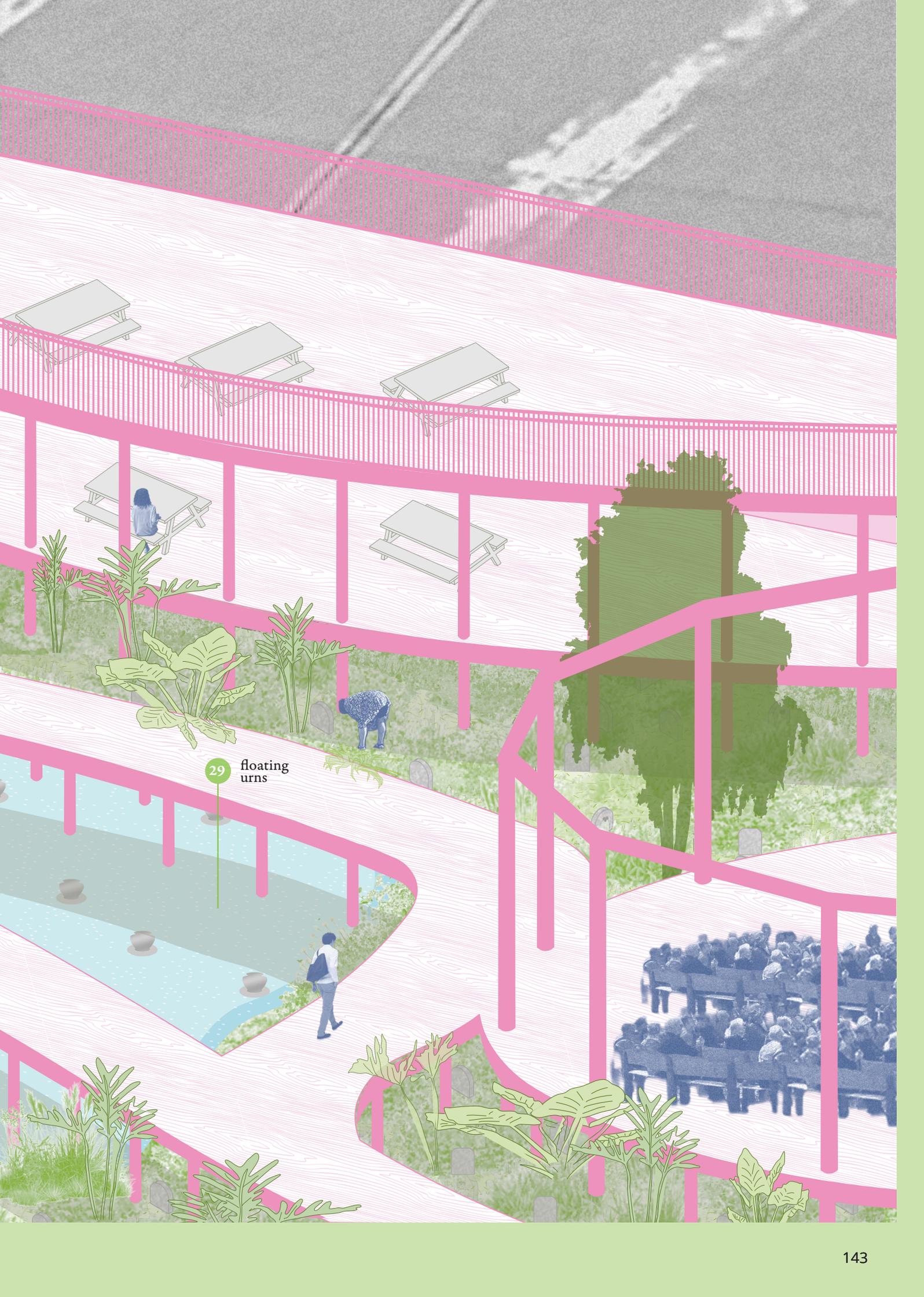
When there are no funerals planned, the ceremony space is flexible to host other sorts of events for the neighbourhood. The wooden framework surrounding the space can be used to hang wind breakers, roofs or tent structures.



covered columbarium wall

child-friendly 24

stairway to heaven 06



29 floating urns

## involved patterns



- 06 In the middle of the cemetery, a **stairway (to heaven)** connects ground floor level to the roof of the pavilion.
- 24 The two levels are also connected by a **child-friendly** slide, breaking with the tradition that cemeteries should be serious, sober and muted.
- 04 In the pond there are **floating urns**, offering an alternative way of commemorating the deceased by allowing urns to drift gently on the surface of a body of water.

## board walk

In the design of the Handelsplein cemetery, the circulation network consists of boardwalks because of several reasons. First, with the focus on urban greening at this location, elevating the paths above ground level maximises the removal of hard surfaces and allows the soil beneath to remain permeable.

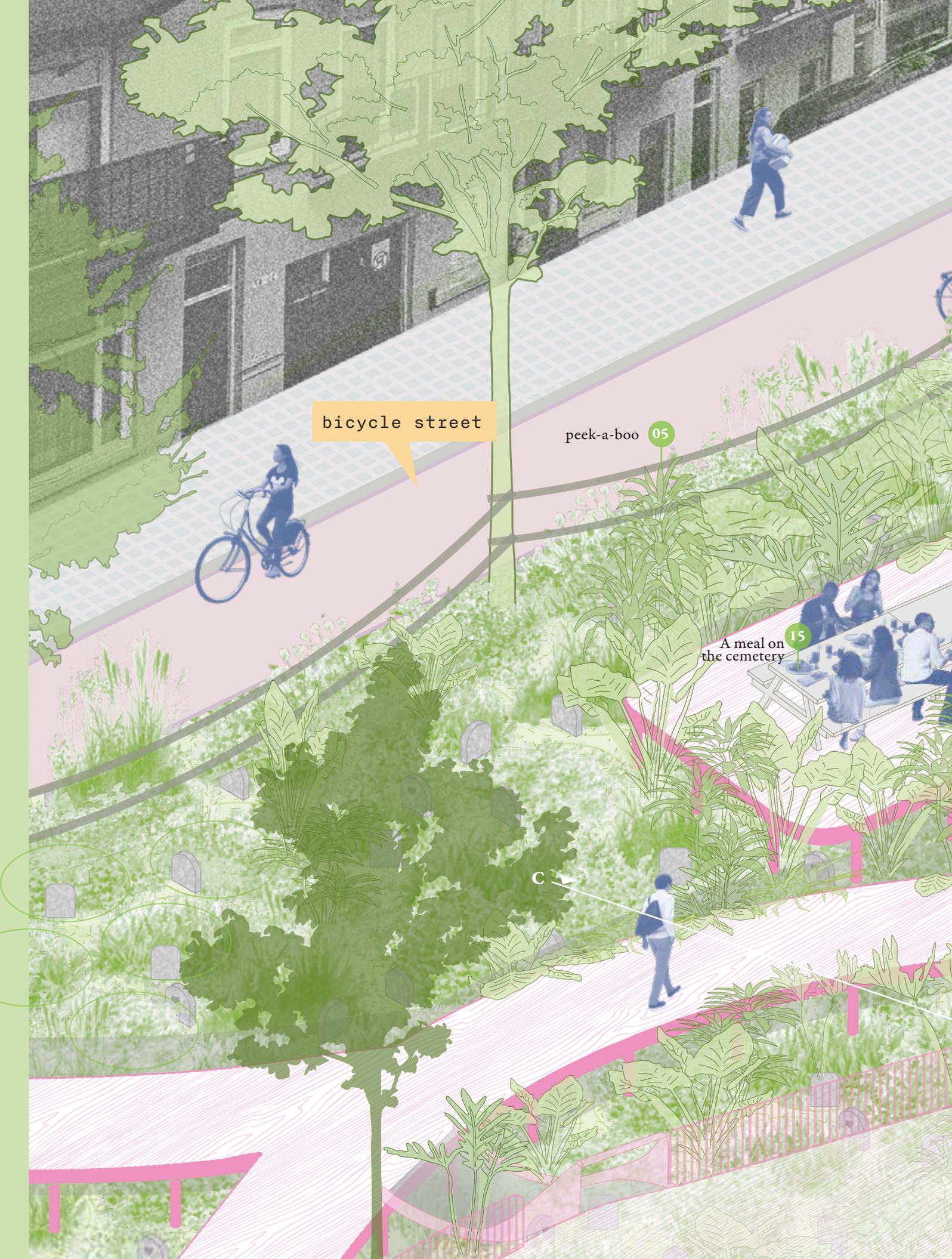
Second, the use of boardwalks offers greater flexibility in the orientation of graves, which is particularly valuable on a relatively small site. In addition, the vertical separation between the pathways and the burial plots discourages visitors from leaving the path unintentionally, reducing trampling of vegetation and preventing disturbance of graves. Bereaved visitors can step off the boardwalk only when approaching a specific grave.



*Board walk made from corten steel in Den en Rust natural cemetery*



*Boardwalk material reference: Houston Arboretum & Nature Center. Image by C. Spade (2022).*



bicycle street

peek-a-boo 05

A meal on the cemetery 15



Circular alignment 35

## involved patterns



- 05 At the side of the cemetery along the bike street, the border is fully transparent, offering views (**peek-a-boo**) into the necropolis.
- 15 This picnic bench is located separately from the pathway and has space for up to 12 people to **have a meal together on the cemetery**, celebrating the life of a loved one.
- 35 The graves are in circular alignment, so every body can be oriented differently. It makes the landscape more free than rigid row cemeteries.

# planting

Handelsplein cemetery is a hybrid between a traditional cemetery and natural cemetery. As seen in chapter 03.07, natural cemeteries generally prohibit planting on graves in order not to disturb the local ecosystem.

Chapter 03.09 concludes that, during the bereavement process, it is important to enable mourners to transform grief into action. In combination with the urban context of Handelsplein, this informed the decision to allow visitors the freedom to plant and maintain vegetation on graves according to their wishes.

They can however be advised in appropriate planting to decorate the grave. Some species thrive in soils that become relatively acidic due to burial, while others retain their visual qualities even after withering (Pattern 07: symbolic planting).

## Winter skeletons



(pictures by Foster, C. 2020)

*Hydrangea and Symphitrichum turbinellum*



*Ammi majus*



*Phlomis and Molinia Transparent*

## Thriving on acidic soil



Pictures: The Spruce / Vlasova, E. (2025)

*Ageratum houstonianum*)



*Erica x darleyensis*



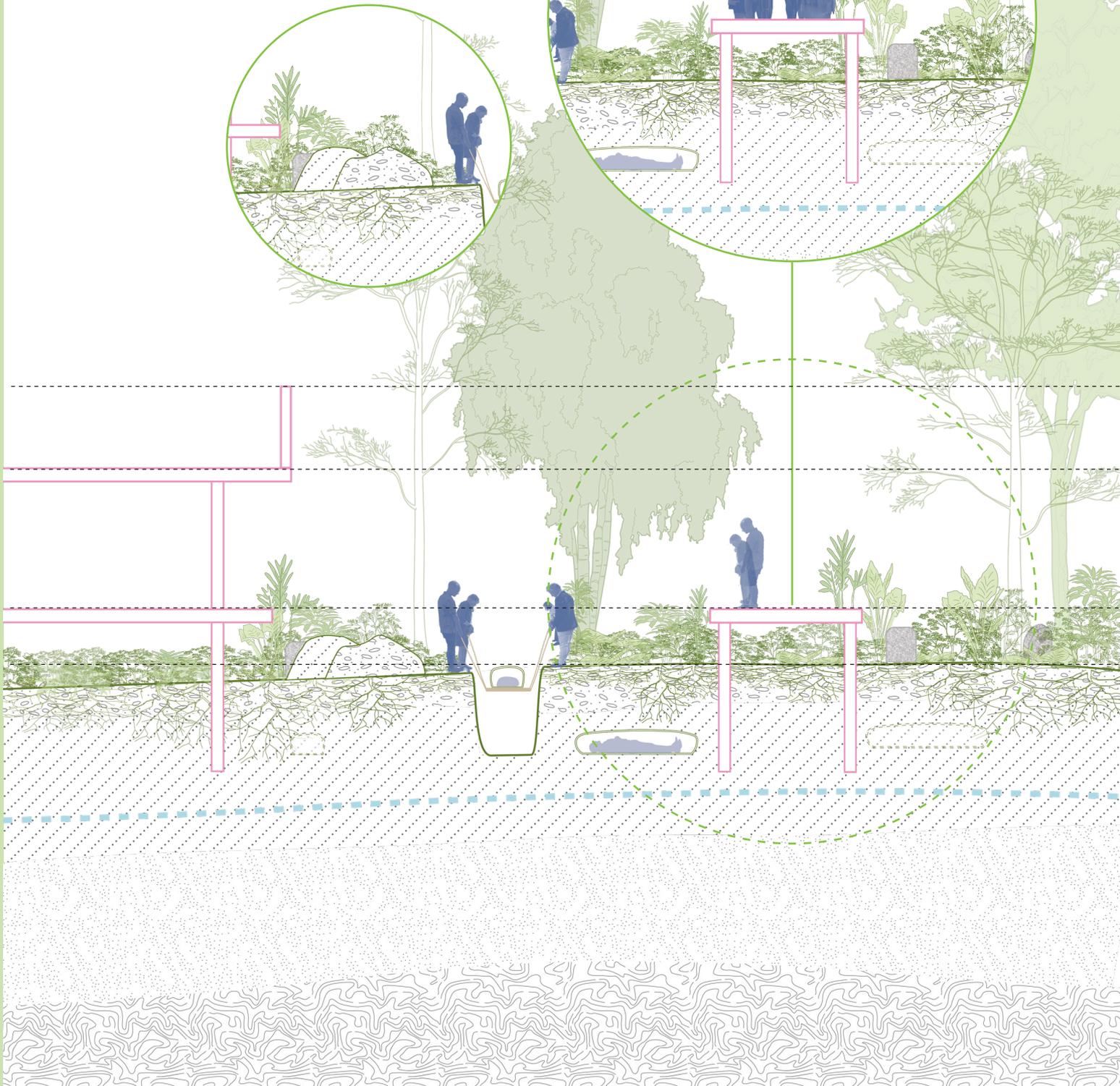
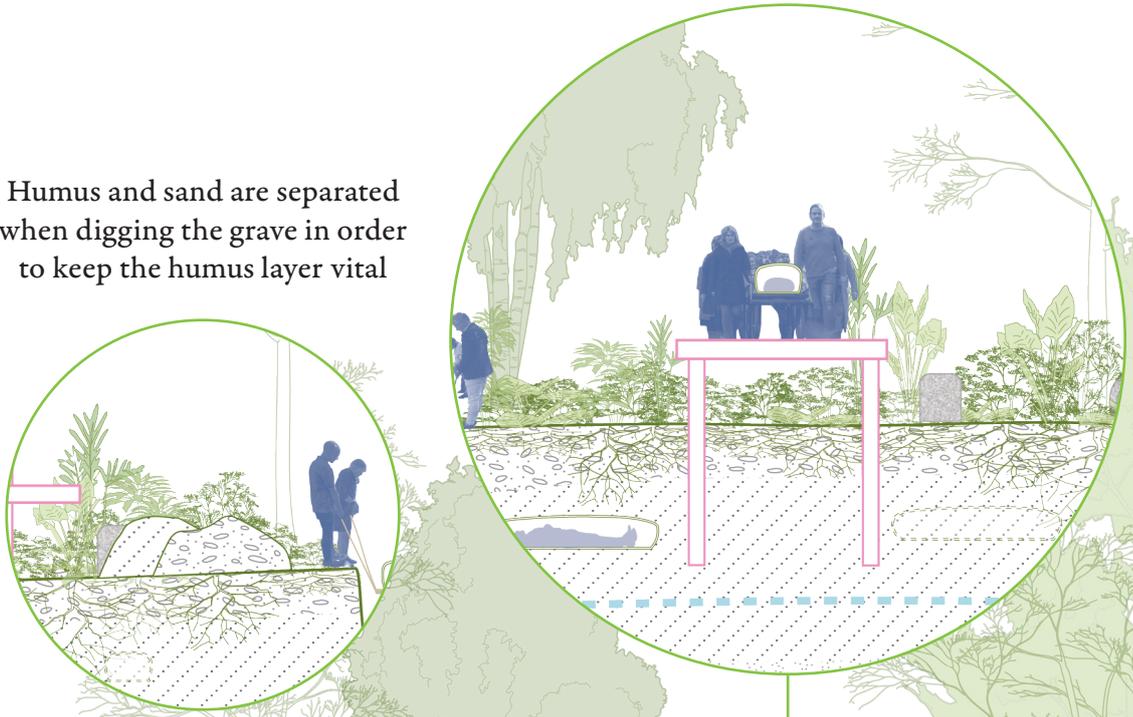
*Rhododendrons*

# burial situation

Roads are 2.5 m, broad enough for a funeral procession

Section CC  
1:100

Humus and sand are separated when digging the grave in order to keep the humus layer vital





# bereavement situation

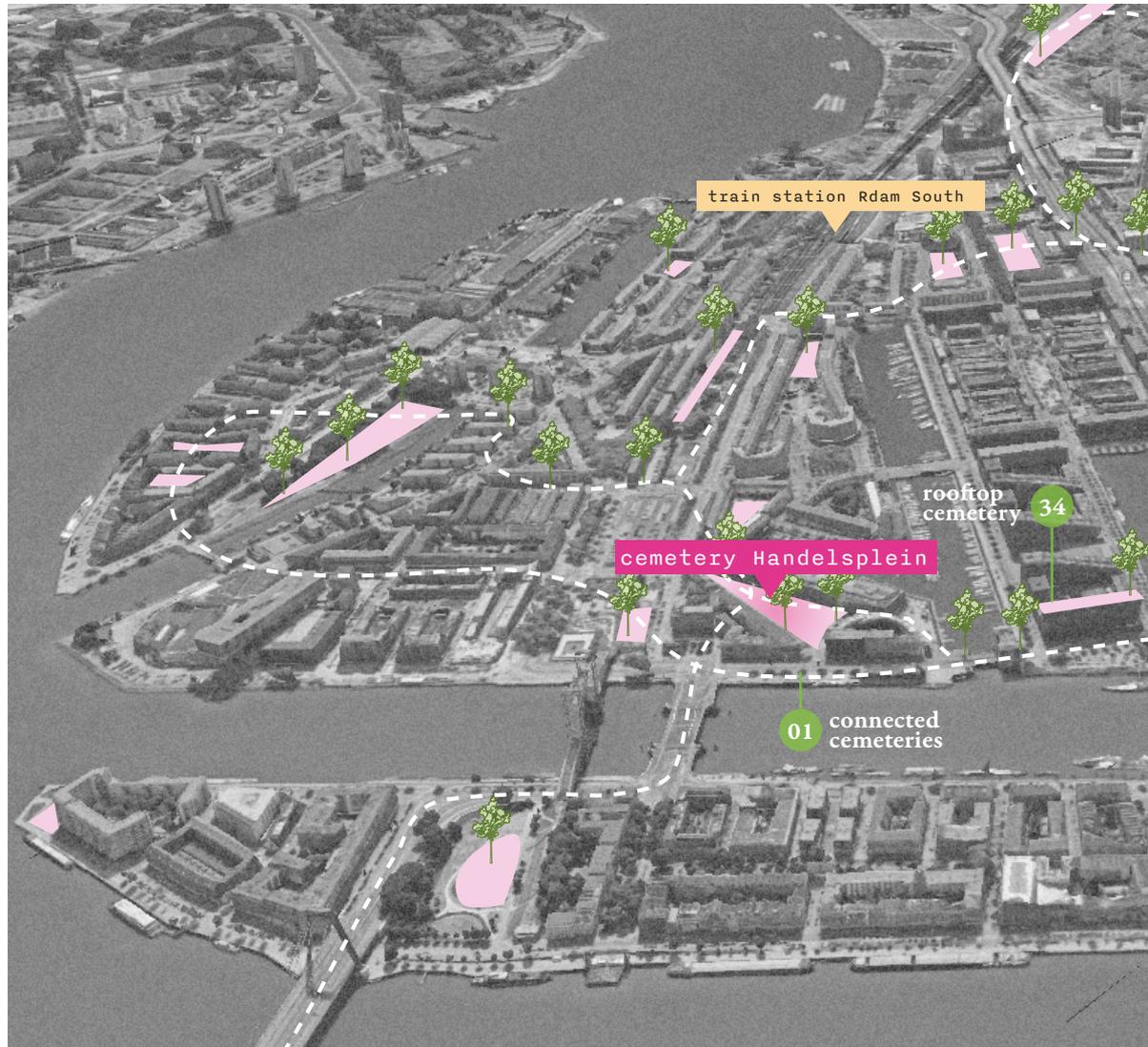
Section CC  
1:100



When the grave is closed again, green stars growing back on the grave. It gives bereaved the opportunity to care for the plot, which is one of the forms of rituals of phase 3 (period of bereavement) as seen in chapter 03.09 of this report.

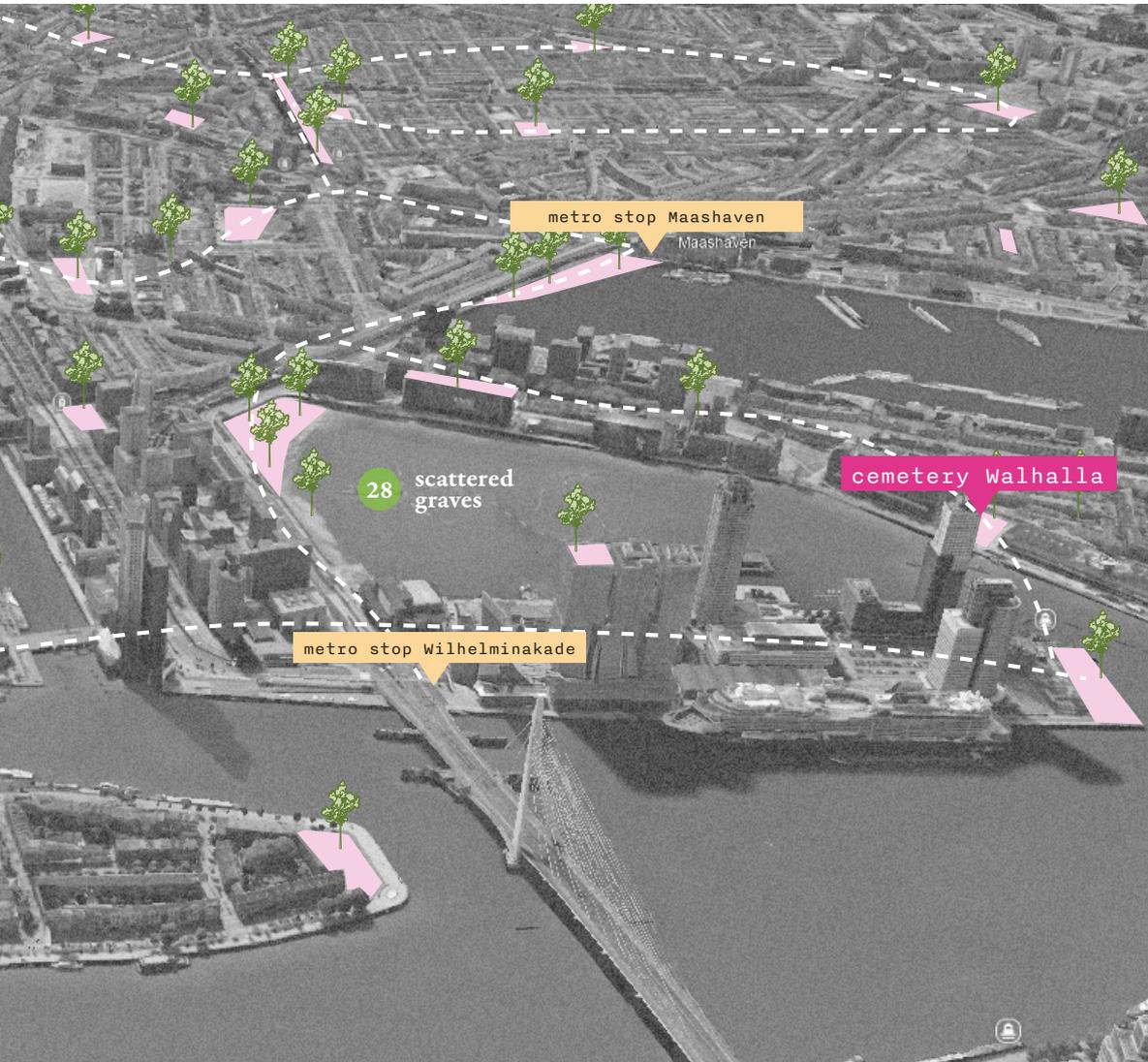
- 16 The second floor of the pavilion offers a view as well as **sheltered** space underneath, to hide in bad weather or sunny days.
- 09 **Sustainable disposition** to assure the soil of the cemetery is not more polluting than necessary.
- 13 Loose regulations regarding grave care are recommended, giving freedom in bereaved's **acts of remembrance**.

## cemetery Handelsplein in the context



Zooming out from Handelsplein, the surrounding neighbourhoods of Noordereiland, Feijenoord, and Kop van Zuid come into view.

- 28 The highlighted locations on the opportunity map in chapter 06.05 —such as public squares, parts of parks, and courtyards—are transformed into small deathscapes: **scattered graves** all around the city. In this way, death and memorial functions are brought closer to everyday living environments.



■ new cemeteries

📍 **Rotterdam South**  
source: Google Maps

- 01 **Connected cemeteries** builds on the close proximity of cemeteries, enabling walking routes between them. This network allows for reflection walks, runs, educational tours, and the enjoyment of the added greenery that cemeteries contribute to the city.
- 34 As an area undergoing major transformations, **rooftop cemeteries** are especially interesting in Rotterdam South. Skyscrapers and apartment blocks which are recently constructed, can activate the roof with green and a social function.

# 10 Walhalla square

## focus: un-smoothing

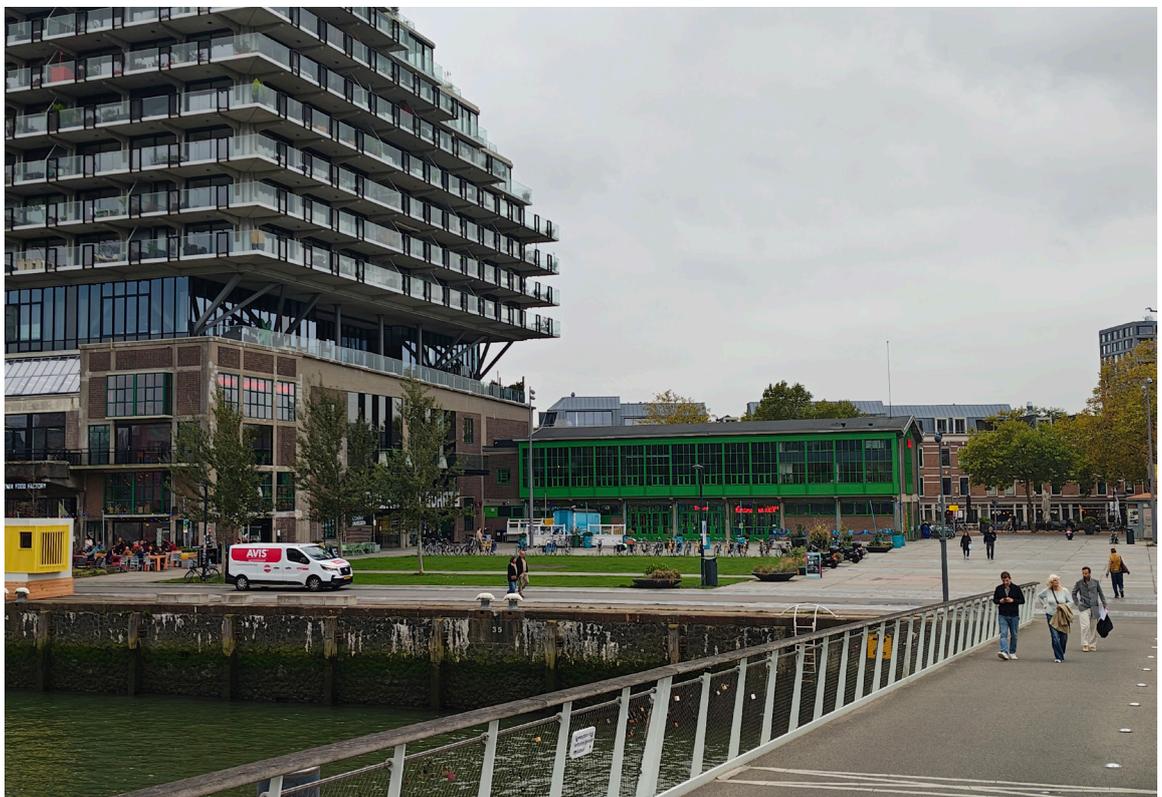
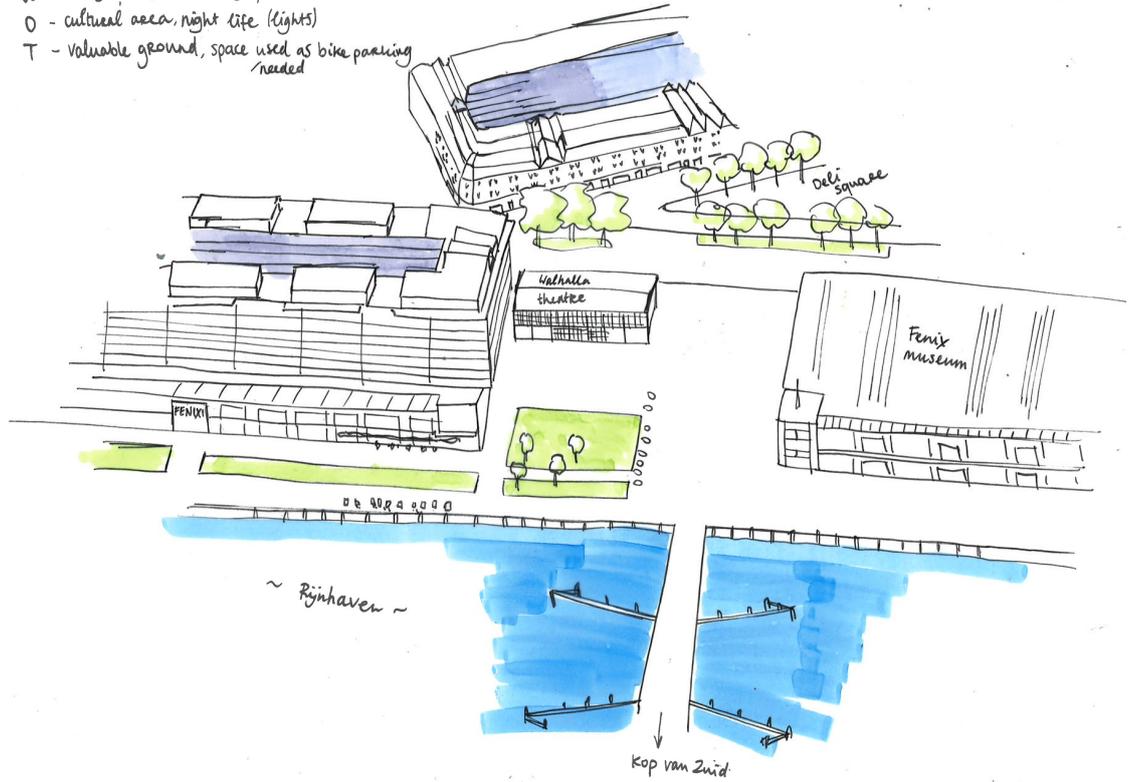
**YEAR:** 2020 (current design)  
**TYPE:** old port neighbourhood  
**DESIGNER:** unknown  
**DISTRICT:** Feijenoord

**WHY HERE?** Located at the Meuse waterfront, at the foot of the Rijnhaven bridge and surrounded by cultural, social and residential functions, this empty-lying piece of grass has the visibility and public life to become a vibrant urban cemetery.



1:40.000

- S - very accessible, facing the water, many functions coming together
- W - really small, no privacy/quietness
- D - cultural area, night life (lights)
- T - valuable ground, space used as bike parking needed



*The Walhalla square (official name: Dolf Henkesplein) in October.*

# 11 design and involved patterns

- 23 Katendrecht and Fenix museum tell us the story of immigrants. Dying can also be seen as travelling into a new phase: we can **tell the story** of those travellers here.
- 30 Powered by the anaerobic process of human composting, **memorial lights** light up the public space along the river Meuse as an ever-changing public artwork.
- 09 A place which publicly displays the process of human composting contributes to the goal of **sustainable disposition**.



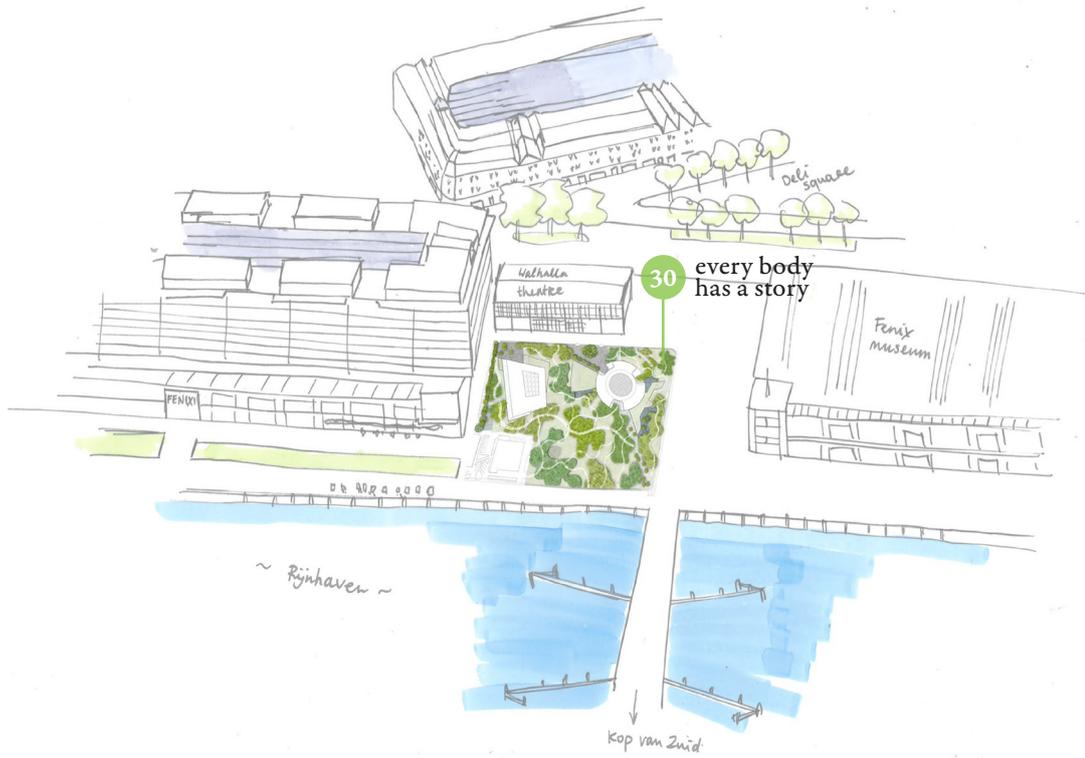
*Sylvan Constellation by DeathLAB (2021b)*

Initial design inspiration was taken from the work of the DeathLAB at Columbia University. More about their project can be read in chapter 03.03.

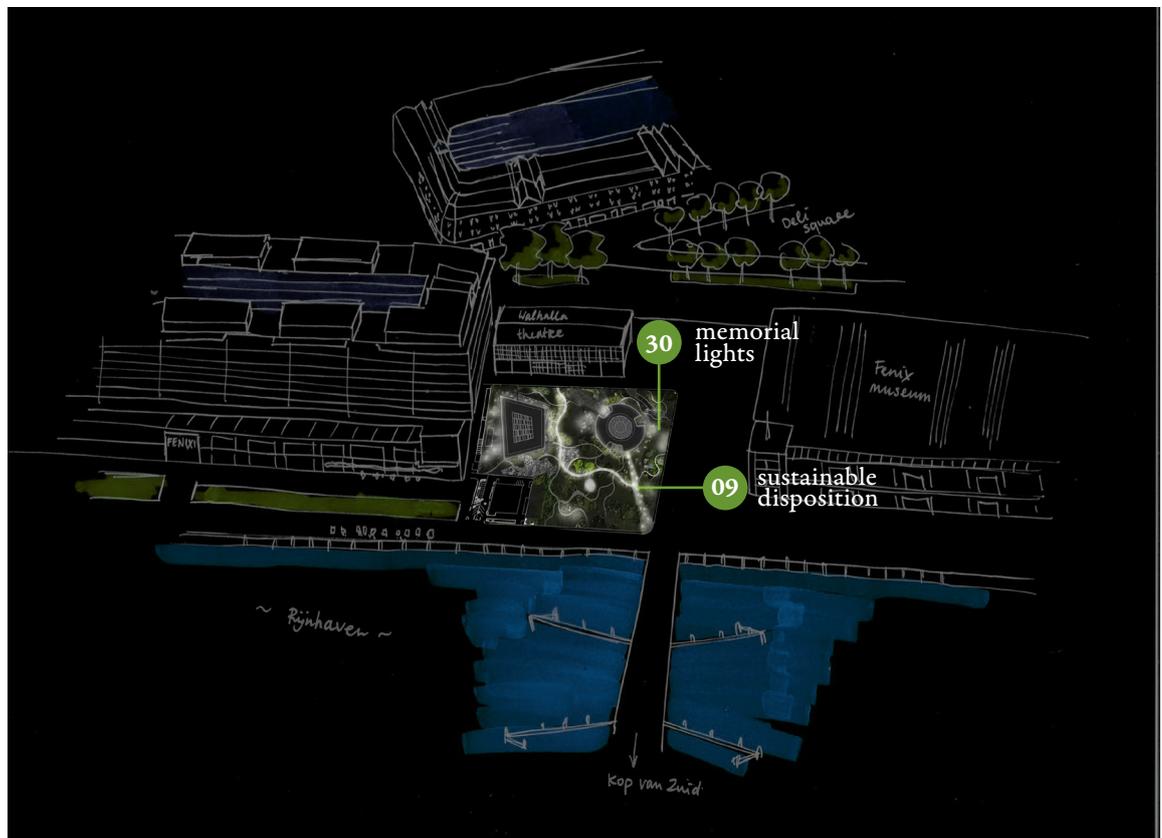


*Novo Nordisk Nature Park by SLA (2014)*

This project only addresses the program for Walhalla square; no design proposal was developed. To visualise the transformation of the square into a cemetery, the Novo Nordisk Nature Park by SLA (2014) is projected onto the site in the drawings on the right. This project was chosen because of the difference in experience between day and night.



*Projection of Novo Nordisk Nature Park during daytime*



*Projection of Novo Nordisk Nature Park during nighttime*

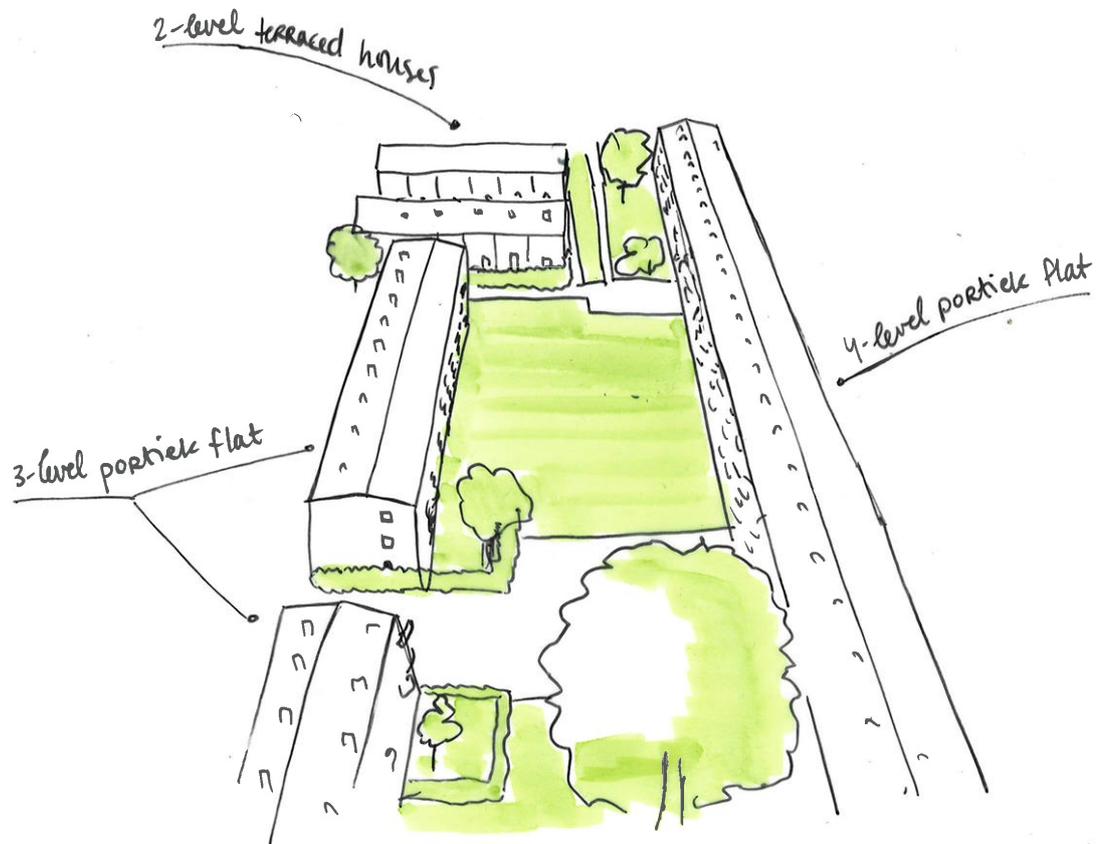
# 12 Pendrecht courtyard focus: proximity

**YEAR:** 1949  
**TYPE:** stamp neighbourhood  
**DESIGNER:** Lotte Stam-Beese  
**DISTRICT:** Charlois

**WHY HERE?** The function of the Pendrecht courtyards is unclear for residents; they don't know how to use them. The courts are anonymous and abandoned.



1:40.000



who can use  
the green?



## current situation

The fieldtrip to the Pendrecht courtyards was on October 2nd by bike. Almost all courtyards were without function and without life. I chose this particular design location because it's double the size and has interesting connectings with the surrounding streets, yet there was no function or user traces to be seen on the clipped lawn.



A. Entrance of the courtyard



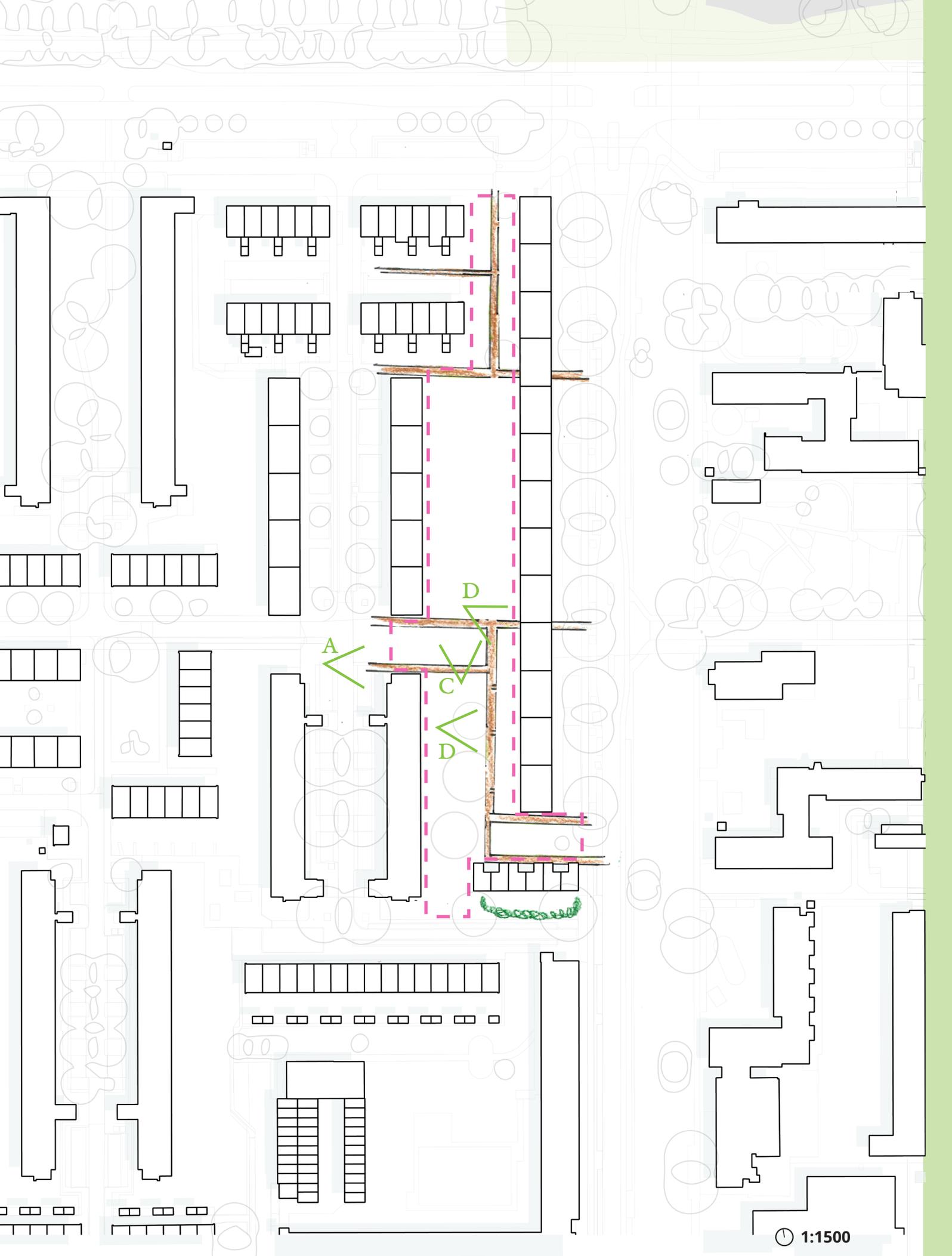
B. Some apartments have small gardens



C. The courtyard looks abandoned



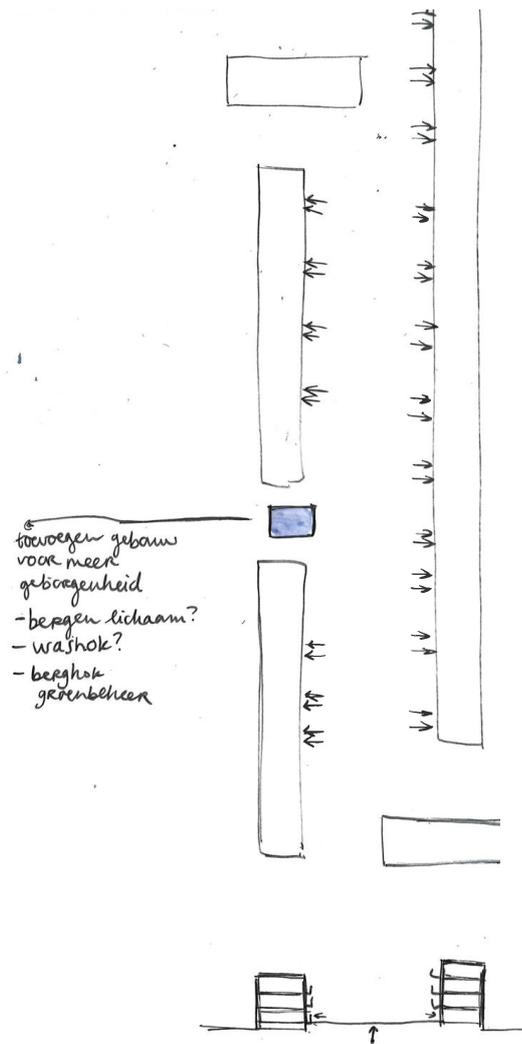
D. Passage to Kerkwervesingel



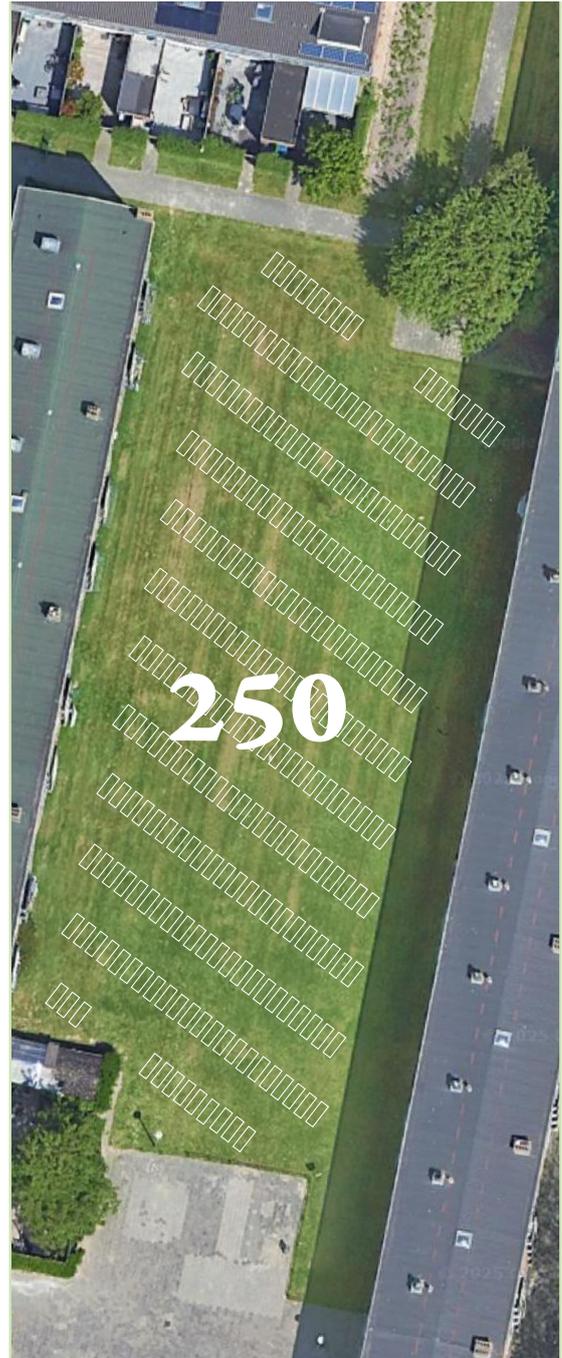
🕒 1:1500

## design exploration

At the main entrance of the courtyard, space is 'leaking out' because of the big opening.  
The electrical substation in the middle is too small in relation to the buildings around.



*Entrance to the Pendrecht courtyard design location*



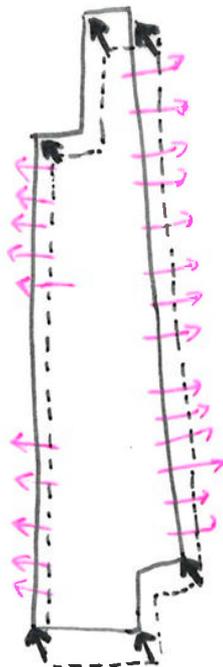
*Graves projected on the courtyard.*

# design steps

## 1. Raise the ground level to create entrances

The ground floor of the apartments bordering the courtyard is positioned half a storey above the external ground level. As a result, small residential entrances already overlook the courtyard. Increasing the number of entrances will intensify everyday use of the courtyard, as more residents are given a reason to occupy and pass through the space.

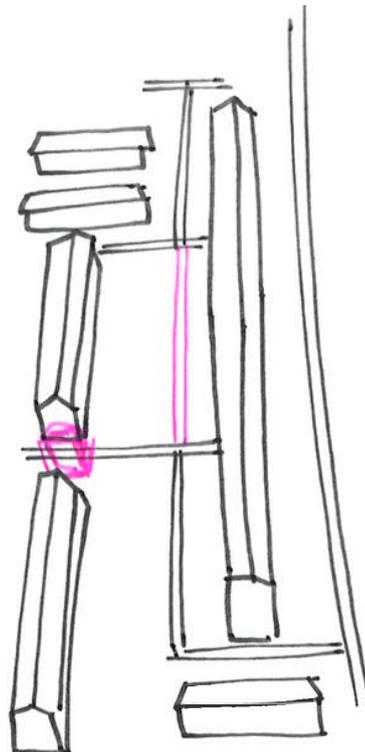
By raising the level of the courtyard, additional house entrances can be created. Ground-level elevation is a common intervention in cemetery design, as discussed in Chapter 03.02 of this project.



## 2. Connect and shield

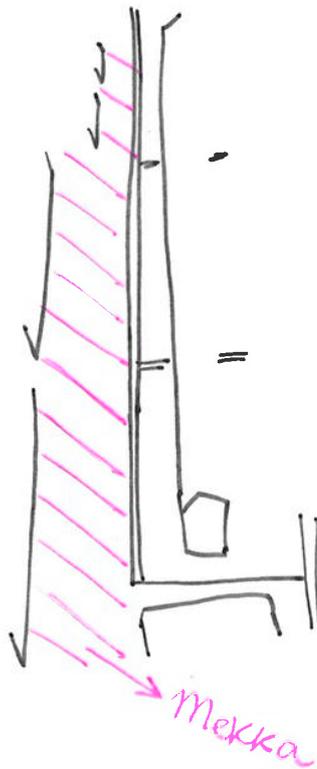
Currently, the two paths within the courtyard run only east–west, effectively dividing the space into two separate parts. These paths will be connected, which is also necessary to provide access to the new residential entrances.

At the entrance to the courtyard, a small shared building is introduced to shield the space and enhance the sense of security and privacy. This building may serve as storage for gardening equipment or function as a family house for temporary use prior to a funeral, for example for caring for or storing the body.



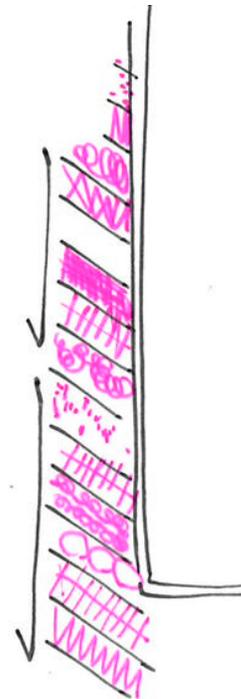
### 3. Add the diagonal

A significant part of Pendrecht's population is Muslim. As discussed in Chapter 3.xx, Islamic burial practices prescribe that the deceased be oriented towards Mecca. Introducing a diagonal axis within the courtyard enables this orientation and simultaneously provides a clear spatial structure for the public space.



### 4. Program the diagonal

The diagonal can be programmed with a range of functions. In addition to burial spaces, it may accommodate seating elements, a (community) garden, or play features, allowing the diagonal to support both commemorative and everyday use.



# design proposal

## Pendrecht 2035

- 28 Adding small-scale urban cemeteries on the Pendrecht courtyards, **graves are scattered** throughout the city.
- 03 By connecting the paths, there are **no dead-ends** in the courtyard anymore.
- 18 With the addition of a shared building, a more secure indoor space is created, which can be used as **outdoor ceremony** space.



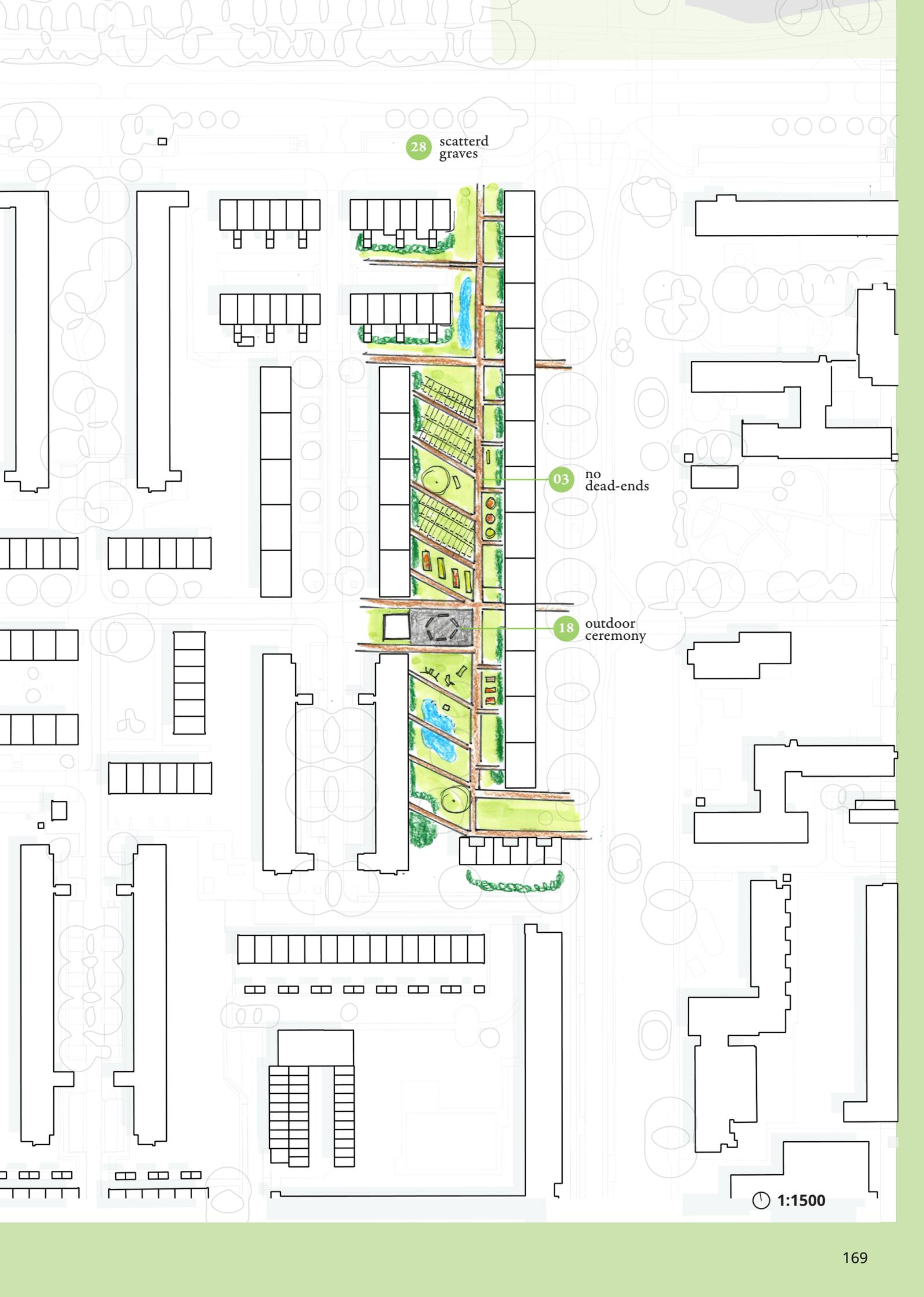
- 21 Now that the function of the courtyard is more legible, it will be easier for residents to take up space, for instance for their own **food production**.
- 20 The goal is that residents become more involved in the courtyard. **Voluntary stewardship** will help keep the cemetery neat and cared for.
- 14 Adding benches and tables, the courtyard will become a **place to stay** rather than to run through.

28 scattered graves

03 no dead-ends

18 outdoor ceremony

1:1500



# the impact of eternal graves on Pendrecht

If some of the graves are Islamic, they are considered eternal. This implies that once the residential buildings of Pendrecht have reached the end of their lifespan, the buildings may disappear, while the burial sites remain. The question then arises: what is possible in an area that is filled with small, scattered burial plots?

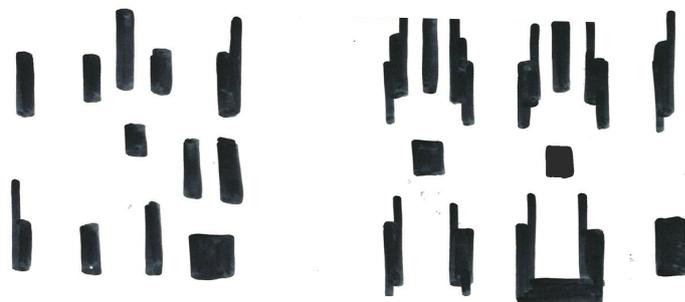
To explore this, I did a future-planning exercise for Pendrecht with 3 possible ways to plan Pendrecht again.

## Analysis



This is the plan of the north of Pendrecht.

Green cemeteries  
Red buildings

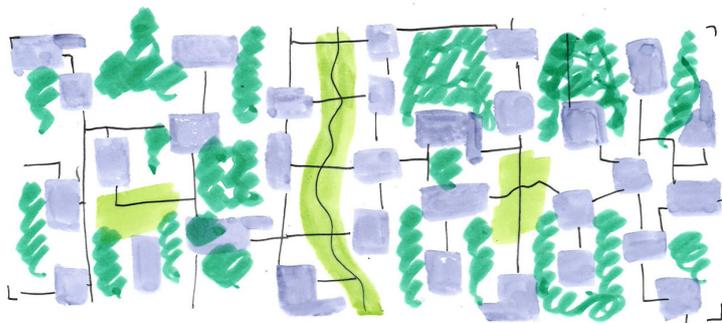


After the buildings are removed, the cemeteries (in black) remain.

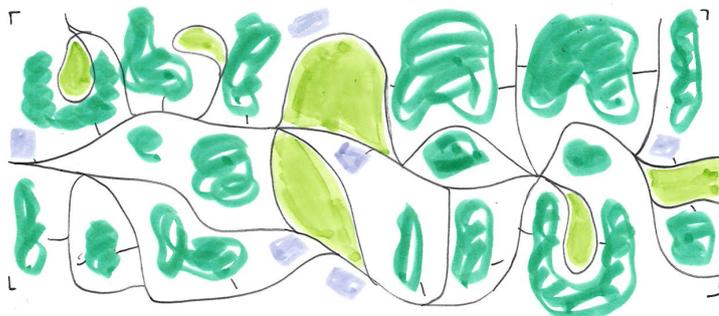


The figure ground that's left when you cannot build on the cemeteries.

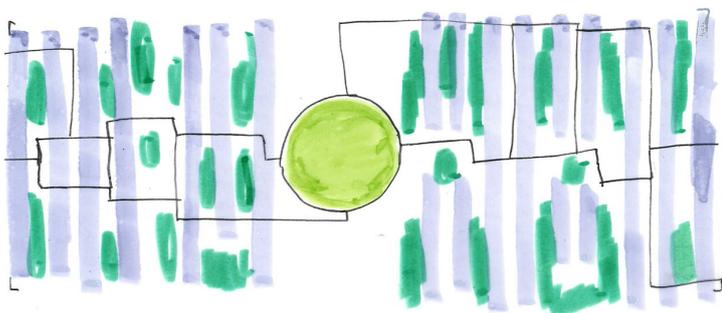
### Possible future designs



Apartment blocks



Landscape park typology



Strip parcelling

-  existing cemeteris
-  new cemeteries
-  new buildings



*07*

*Conclusion*

# 01 *discussion*

The research part of this thesis relies heavily on an experiential approach of analysis, which inevitably carries a degree of subjectivity. I have tried to minimize this dependency by conducting accompanied site visits, planning visits throughout all seasons and asking input in informal settings.

For ethical reasons, the decision was made not to use questionnaires on cemeteries. While this avoided placing additional emotional burden on grieving individuals, it also limited the breadth of perspectives included in the research. Incorporating insights from a more diverse group of bereaved users could further strengthen and validate the research outcomes.

This report presents four design explorations that aim to bring life and death into closer proximity within the urban environment. Each design responds to site-specific conditions and addresses different themes, resulting in varying levels of detail and resolution.

During the design process, there was limited interaction with residents and users of the project locations. The proposals are therefore primarily grounded in spatial analyses and the research findings presented in this thesis. Greater involvement of existing users and local communities could have enriched the designs and increased their contextual sensitivity.

Due to time constraints, the design proposals engage only minimally with questions of phasing, agency, and long-term governance. Although an indicative timeframe is provided for each project, detailed strategies for implementation, responsibility, maintenance, and the temporal management of graves remain underdeveloped. Addressing these aspects in future research or design phases would significantly strengthen the feasibility and impact of the proposals.



## *02 answering the sub-questions*

### **SQ1. How have historical, cultural and spatial dynamics influenced the development of and our attitude towards Dutch cemeteries?**

The Royal Decree of 1829 marked the beginning of the disconnect between the city and the cemetery: from that year on, burials were no longer permitted within the built-up area. Besides the physical distance from everyday life, a mental boundary also emerged through the design of cemeteries, which were often enclosed by high walls, sometimes a moat, and given stately architecture to prepare visitors for entering the realm of the dead. At the same time, cemeteries reflect the developments of the city itself: cemetery typologies follow architectural movements, and increasingly varied gravestones parallel the rise of individualisation.

Due to the growing popularity of cremation, the role of the cemetery has diminished; fewer people wish to be buried, leaving many cemeteries under financial pressure. As a result, maintenance of the intensive green landscape is reduced, yet no viable long-term solution has been found.

Change within cemeteries is slow, shaped by conservative policies and persistent societal values, but the funerary sector is experiencing new impulses that may awaken the cemetery and offer answers to its identity crisis since the rise of cremation. There is a growing demand for Islamic graves from Muslim communities, who have specific rituals and requirements regarding burial. Additionally, a strong sustainability movement is emerging, with people seeking environmentally conscious options for their passing. Coffin manufacturer Loop and the rise of natural burial grounds are leading the way.

### **SQ2. How can cities strengthen the relationship between citizens and the cemetery through the social, spatial and environmental sphere?**

To answer this question and support cities, this project developed a pattern language. The outcomes are diverse and numerous, and are summarised briefly here. Socially, it is

important to provide residents with more reasons to visit the cemetery, for example by introducing new functions or leasing unused parts of the cemetery to local associations. Volunteer engagement and education are also valuable, both around death itself and around the stories of the people buried there.

Spatially, much can be gained by adding entrances, opening up cemetery boundaries, and creating a landscape that invites strolling through height variations and interesting planting schemes. A key aspect of this project was also to bring the cemetery back into the city through small-scale burial grounds distributed throughout the urban fabric.

Environmentally, the strict regulations applied in natural burial grounds should (partly) be implemented in traditional cemeteries as well: no polluting or non-biodegradable materials should be buried. New disposal techniques such as resomation and human composting are promising alternatives to the environmentally harmful process of cremation.

### **SQ3. What does a cemetery in Rotterdam-South look like in the future?**

Traditional urban cemeteries often resemble businesses, taking into account the dead rather than the grieving. Natural burial grounds, by contrast, are better suited to mourning due to their natural settings and the possibility of finding a secluded place for oneself, yet they typically prohibit the tending and decorating of graves. They are also still located far from inhabited areas, mostly in the eastern part of the country.

The cemetery of the future combines the strengths of these two typologies and offers a broader public more reasons to visit: not only to visit a grave, but also for nature, proximity to home, or another social function. This project proposes a hybrid variant situated within the lived parts of the city. Such a model has endless possible outcomes; this project explored four design possibilities in different locations in Rotterdam, each with its own focus and responding on the context of the city.



08

*Reflection*

# 08 Reflection

## **1. How do you see the relation between your graduation project topic, your master's track (Urbanism), and your master's program (MSc Architecture, Urbanism and Building Sciences)?**

In the design courses of the Urbanism master's track, I experienced a strong focus on sustainability: circularity, ecology and climate adaptation. These topics are the backbone of my project, a 'no-brainer' if I may. The leading role however was for the social dimension. Starting the project, I knew nothing about the cemetery, but I saw the Urbanism master taught me a workflow which I can apply on any topic. I do hope emotional, social topics can get a bigger place in the master track, instead of spending ten weeks on a shopping mall.

As for my master programme: our master's program distincts itself from others in Delft by the critical mindset we are taught: I learned to address important topics and design solutions. I chose the topic of my graduation project out of dissatisfaction about how Dutch cities (and society) are currently dealing with death, grief and contemplation, and ended with a spatial exploration as alternative for the current system.

Beside Urbanism, my project also strongly relates to the Landscape Architecture track. I used LA methods (experiential analyses), designed green parks, and designed with soil.

## **2. How do you see the relation between research and design in your graduation project?**

There is a strong relation between research and design in my project. The relation was more clear when I used the method research by design: every drawing I made resulted in ten new questions to find answers to. I learned to sketch with a goal, and to learn from the drawings I made. In the end I deliberately opted to develop a pattern language to articulate the many connections between the research and design parts of my project.

## **3. What do you see as the value (and limitations) of your way of working: your approach, your used methods?**

My approach was intuitive: first doing what felt that made sense, then looking back which methods I actually used. It grew to be very experience-based, using fieldwork and interviews as primary research methods because these suited both my personal skills and the emotional topic of my project. I backed my findings up with academic sources. The experiential method is valuable because it reveals intangible spatial qualities, it captures emotional, sensory, temporal dimensions typical research overlooks and it aligns with the project's focus on grief, ritual, meaning, and perception.

However, an experiential approach inevitably carries a degree of subjectivity, as the analysis partly depends on my own perception of the cemeteries. I have tried to minimize this dependency by conducting accompanied site visits, planning visits throughout all seasons and asking input in informal settings. But my network is predominantly young and highly educated, so I cannot say that I talked to the cross-section of society.

#### **4. What are the academic and societal value, scope and implications of your graduation project, including ethical aspects?**

**Academic value:** My project consists of two parts. The first part, on opening existing cemeteries to the city, builds on a combination of literature and realised projects, such as Karres & Brands' plan for Ohlsdorf Friedhof in Hamburg and the new Järva cemetery in Stockholm, while keeping the values of the New Death Movement in mind. The second part, on adding cemeteries directly into the urban fabric, is where the project's innovation is strongest. I explored a cemetery typology that does not yet exist, positioned somewhere between a traditional cemetery, an urban park and a natural cemetery. The pattern language I developed bridges both parts of the project and offers a way to connect research findings with design intentions, something that, as far as I know, has not been done before.

**Societal value:** Because of the current disconnection between the city and the cemetery, only a small part of the population uses these places, even though they are public, central and possess many spatial and ecological qualities. Many people are hesitant to enter a cemetery or feel they are not allowed to be there. My project aims to open cemeteries to a broader audience—using land more efficiently, strengthening green networks and urban biodiversity, and creating space for wellbeing and reflection in the city.  
**Scope:** I chose to do a design-led exploration, with attention to cultural and religious diversity and ecology. I have taken technical feasibility into account to a broad extent, particularly in relation to soil remediation. Practical implications such as governance frameworks, management models and implementation strategies fall outside the scope and therefore I didn't elaborate on that.

**Implications:** If the project were to be realised, it would take time for society to shift its relationship with the cemetery. People will not immediately feel at ease with a cemetery on their doorstep, and resistance or public debate is likely. I think early involvement of stakeholders would be essential. Ethical considerations also play a role: opening up spaces of mourning brings questions of privacy, respect and cultural sensitivity. In this project, I kept these aspects in mind but chose to focus the design exploration on the desired future image rather than the step-by-step transition towards it.

## 5. How do you assess the transferability of your project results?

Geographical, NL: The aim of the research was to reintroduce cemeteries in the daily life. In this project, Rotterdam-South was the case study to test and spatialise the research results. Because the research is based on cemeteries Dutch cities in general, they can be applied on cities in The Netherlands with similar spatial and social characteristics. Municipalities and cemeteries can benefit from the patterns of the project and take the design interventions as example or conversation starter. In smaller Dutch settlements, the cemetery might be spatially closer to the urbanisation but other than that rural cemeteries often show the same problematic characteristics as the one in urban setting.

Geographical, abroad: The death attitude of a culture is influenced by among other things religion, political context and social structures, therefore it's hard to say how far the transferability reaches outside of the country. During fieldwork in London, Stockholm and Copenhagen, I saw the same tendencies as we have in The Netherlands, and the patterns are partly inspired by cemeteries abroad, making the patterns more universal than just Dutch context. That said, the project doesn't go deeper on these places than the particular cemeteries visited. Nevertheless, many countries are struggling about what to do with their necropolises in the light of urbanisation and densification of cities and sustainability, in which case inspiration can be taken from the project.

Methodological: One of the most important methods for the project was fieldwork: visiting a lot of cemeteries and mapping the experience of the spaces which I bundled in a fieldwork journal. The journal can be used as guide or example to analyse other cemeteries. The experiential analysis on landscape structure and boundaries that I developed can be transferred to other typologies.

The pattern language is worked out enough to communicate how I linked research findings to the final designs. For a municipality to use the pattern language, the patterns would have to be expanded and worked out more first: drawing relations between patterns and articulating more handles for design.

Typological: The cemetery is a very special typology in the city, the space is semi-public, emotional, its connects and divides people. There are some typologies which share part of the cemetery characteristics and therefore could be inspired by the project. The patterns could be used to make allotment gardens more public, to attract life to industrial areas or to add memorial spaces to the city. Grief can also be taken in a broader sense, seeing grief as the change we didn't want. The results could for example also be partly applied on projects about ecological grief.

## **6. How did your decision-making impact the project?**

I had a hard time choosing my two extra reflection questions because there are just so many good ones. This is a process I experience in almost every decision. Even though I have been in a design-oriented school for over seven years now, I still catch myself looking for the perfect solution for a situation or a system, as if there is only one. The easiest decision-making moments were when I could support it with findings, the hardest moments when I could only substantiate it on my gut-feeling as a designer. I spent two weeks figuring out which words I should put on the axes to build scenarios for the transformation of the cemetery, only to conclude that I actually didn't need scenarios to start the design. It slowed down the project on moments that weren't necessary. During the year, I got better at starting a task, knowing you also learn something useful if the task doesn't work out. In other words, I think I now know what they mean with 'trust the process'.

## **6. How has the topic of the project affected me as a designer and as a person? And how are the two connected?**

The topic of this project is very emotional and choosing this, friends and academic warned me if I really wanted to work on a heavy topic for a whole year. As stated in the fascination chapter, my motivation was very personal. Death was something I thought about a lot in my 'free time' and it has been refreshing to tackle the topic from another point of view, that of the designer. That lens gave me a more observational, objective stance and made it possible for me to look at the topic from a distance, as a social scientist. It was freeing that I could now spend my free time thinking about other stuff ;) Along the way I also concluded that spending a year trying to figure out everything about death and designing a solution, it was me just finding another way to try to take control over death, precisely the societal tendency which I was addressing with my project. I guess my fear of death hasn't subsided, but I can put it in perspective more. I am better at talking about it and now I actually enjoy visiting a cemetery!

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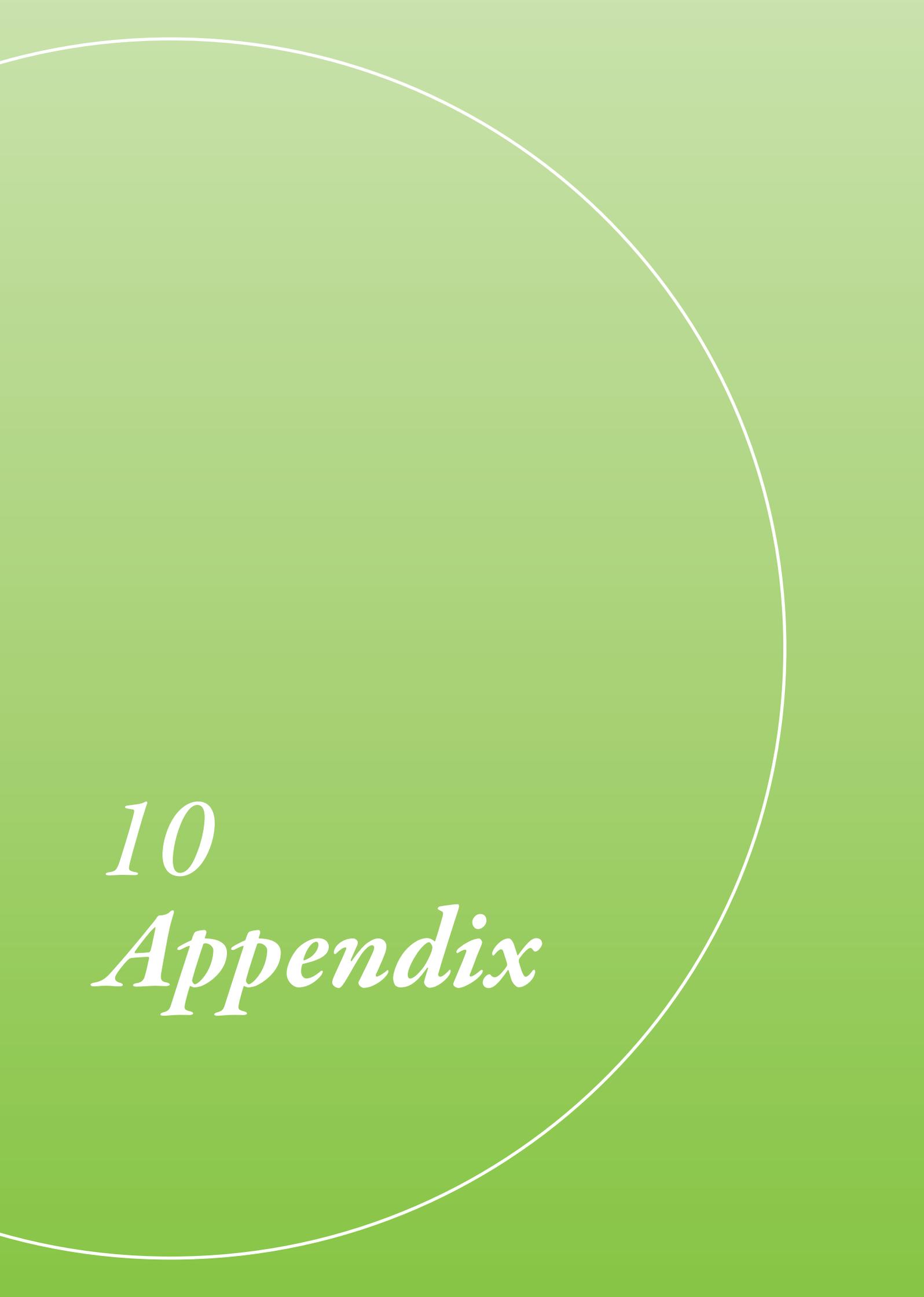
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*10*  
*Appendix*

# *A. Interview conclusions*

Seven interviews with nine people were conducted to contribute to answering the research question. The interviews were unstructured, because each interviewee has different backgrounds and areas of expertise.

To ensure readability, I chose to include the conclusions drawn from the interviews rather than the full transcripts. These conclusions contain all information that was used in the project. I acknowledge that they represent summaries of the interviewees' statements and therefore may contain the researcher's interpretation. *research connections and author's thoughts are added in green.* The full transcripts are available upon request.

## **INTERVIEWS**

A1. Theo van Werkhoven  
Cemetery Director  
St Laurentius Catholic cemetery

A2. Anita van Loon  
Funeral Foundation Director/Bosdrift cemetery  
Hilversum

A3. John Vogel & Robin Assenberg  
Managers Cemeteries  
Delft

A4. Marina Fidder  
Relationship Manager Natural Cemetery  
Hoeksche Waard

A5. Sander Klaassen  
Expert Landscape Architecture  
Municipality of Rotterdam

A6. Ingrid Addicks & Ton van Dam  
Administrator & Asset manager  
Zuiderbegraafplaats

A7. Bart Brands  
Expert cemetery design  
Karres + Brands Landscape design

**A1. THEO VAN WERKHOVEN 07/04/25  
CEMETERY DIRECTOR  
ST LAURENTIUS CATHOLIC CEMETERY ROTTERDAM**

Working at the cemetery is enjoyable because it involves people; you need to be committed.

Goats and play equipment ensure a soft landing for visiting children.

It is good for a child to learn that grief is part of life and not to be shielded from these emotions.

The Laurentius cemetery aims to be a memorial park rather than a cemetery.

Different cultural backgrounds have different customs at funerals. That works out fine.

"Having more money does not guarantee a greater involvement with each other."

The cemetery hopes to attract more customers by offering family rooms (for wakes).

This Catholic cemetery is economically self-sufficient (no municipal subsidies).

Nowadays, people are more conscious about saying goodbye, more personalized.

*at odd's with Bosdrift /van Loon's view (appendix A2)*

Funerals on Saturdays and Sundays are becoming more popular. Because we want to make less time for such moments. It's a shame.

The seclusion of the cemetery is a great quality.

A primary school can border a cemetery, although not all parents are happy about this.

**A2. ANITA VAN LOON 07/04/25  
FUNERAL FOUNDATION DIRECTOR/BOSDRIFT CEMETERY  
HILVERSUM**

Nothing happens without reason. You could call it fate.

A cemetery can serve as a social workplace.

A cemetery should be seen as a park, where you go to enjoy nature.

People work in the funeral industry out of intrinsic motivation, such as care or education. *parallel with Podkist podcast episode*

Cremation can be a source of income to fund cemetery management.

Traditional burials and natural burials can coexist side by side.

It is important to take good care of our heritage. *parallel with Highgate cemetery, London (see fieldwork journal A)*

The work of a funeral foundation director is very varied and enjoyable. It requires creativity and humanity.

There is a need for evening and weekend funerals so that people can take their time. *at odd's with Laurentius/van Werkhoven's policy (appendix A1)*

The Noorderbegraafplaats cemetery in Hilversum is being transformed from a traditional cemetery into a natural burial ground.

The auditorium is an important feature of the cemetery.

More life at the cemetery leads to more grave sales.

People can get used to new disposal practices. Just look at cremation.

A good relationship between cemetery management and rights holders is important.

Natural burial is cheaper in the long term than a private grave.

It is important to consider accessibility for children, to give them a pleasant introduction to the cemetery.

Dogs and cemeteries can be a good combination; Teun the dog senses sadness and can offer comfort.

Other activities at the cemetery are acceptable, as long as they are related to the theme.

Examples of activities: silent yoga, poet, singer, piano concert, sustainability market (funerary).

The beech tree is a future-proof tree for our changing climate.

The resomation residue is a calcium-rich 'ash' that Anita would use in the garden. This does not apply to bags of soil after cremation.

**A3. JOHN VOGEL & ROBIN ASSENBERG 29/04/25  
MANAGERS CEMETERIES  
DELFT**

There are many rules that a cemetery must adhere to.

Cemetery workers have a bad reputation for earning money over other people's death, that hurts. John and Robin would like to receive more understanding for their work at the cemetery.

Notices for when burial periods expire are the most work for John and Robin.

There are two types of graves: sand graves and vault graves. A sand grave can subside.

The Islamic graves in Delft are not permanent, but last for 20 or 30 years. You have to keep renewing them to make them permanent.

Working in a cemetery, you experience funerals very differently. You are less emotional and more focused on the details.

Many cemeteries cost more than they generate. A crematorium generates profit.

**A4. MARINA FIDDER 21/05/25**  
**RELATIONSHIP MANAGER NATURAL CEMETERY**  
**HOEKSCHE WAARD**

Natural burial is a way to bring nature back and guarantee it for the future.

Chemotherapy drugs in the soil are negligible; the body clears away drug residues itself.

New graves have a mound on top because they are still settling.

Guttation can cause trees to 'cry'. This is a natural process when the soil is moist and the weather is (or has become) warm.

People choose natural burial mainly because the eternal graves cause little hassle.

You're not allowed to decorate or put plants on the grave.

On the natural cemetery, it is difficult for visitors not to appropriate the graves to keep them recognizable.

*also heard in informal conversations*

The main purpose of the natural burial ground is to create a healthy humus layer.

Some plant species appeared spontaneously after the removal of unhealthy trees to bring more daylight to the forest floor. Interventions are kept to a minimum.

Everything that is buried must be biodegradable.

During the coronavirus pandemic, there was high demand for Islamic graves. Now not anymore.

**A5. SANDER KLAASSEN 26/05/2025  
EXPERT LANDSCAPE ARCHITECTURE  
MUNICIPALITY OF ROTTERDAM**

The municipality is working on making the cemetery in Crooswijk more public, perhaps by adding a function.

The municipality wants semi-public places such as allotment gardens and cemeteries to become more part of the city.

Adding a function can make a cemetery more accessible.  
Example: the mound village of Groningen with a café.

More entrances ensure that the cemetery can be part of a walk.

Giving 'eternal'/emotional value to outdoor space in the city is difficult, because the growth/importance of the city takes precedence.

If you start thinking for someone else, you usually don't do it right. Participation is important.

**A6. INGRID ADDICKS & TON VAN DAM 18/06/25  
ADMINISTRATOR & ASSET MANAGER  
ZUIDERBEGRAAFPLAATS**

Public toilets in cemeteries are difficult because there is little supervision. It is not convenient if they are made dirty just before a funeral service. Impossible for small cemeteries.

When the cemetery does not generate enough income to cover the costs, simply less [maintenance] is done.

The entrance [with the roundabout] is the cemetery's calling card ('visitekaartje').

The cemetery strives above all to be safe (paths free of leaves, not slippery, cemetery closed in stormy weather) and accessible.

The crematorium next to the Zuiderbegraafplaats cemetery is not part of it.

To lower the threshold, you can now renew a grave every five years.

Sometimes there are arguments about the flower beds, for example when someone has planted flowers too close to the edge. Ingrid finds these the most enjoyable challenges.

People don't read the sign with the rules at the entrance to the cemetery enough, so they are not well informed (about opening hours).

The Islamic graves at the Zuiderbegraafplaats are not eternal; that doesn't exist. They could buy off the burial rights; if they pay for green management annually, you can make it eternal as a tenant.

The new Islamic cemetery is not a threat to the Zuiderbegraafplaats, because the families of those already buried there want to be close to their loved ones.

More parking spaces are needed. Currently, the driveway is sometimes full.

The cemetery wants to do more to promote biodiversity.

The cemetery would like to have an outdoor auditorium like the one at Hofwijk cemetery.

There is a mass grave at the Zuiderbegraafplaats but the public is not allowed to know where.

**A7. BART BRANDS 23/10/25**  
**EXPERT CEMETERY DESIGN**  
**KARRES + BRANDS LANDSCAPE DESIGN**

Vacant sections of Friedhof Ohlsdorf in Hamburg are leased to associations for 10 years, such as archers and rose gardeners.

Friedhof Ohlsdorf applies the concept of 'Friedhof in Friedhof', translated as cemetery within a cemetery: a women's cemetery, a section for police officers, a section for firefighters.

At the Nieuwe Ooster in Amsterdam, Karres en Brands applied a 'barcode': each bar has a different vibe, because people today are very different and have different wishes.

Karres en Brands is collaborating on Campus Vivorum in Süßen, a so-called lab for experiments on mourning and cemeteries.

The psychologists at Campus Vivorum say that it is important for mourning to have a place you can visit. The remains do not necessarily have to be there.

The first CO2-neutral crematorium in the Netherlands is located in De Bilt.

Rituals arise naturally, but spatial elements can promote this. By creating lounge areas or special planting.

At De Nieuwe Ooster, a ritual has developed at a place with many magnolia trees, where people gather every year to clean up the fallen blossoms.

The cemetery on a sandy plain in Melbourne had to be planted 10 years before use so that the place would be green.

## *B. Informal conversations*

### **CONVERSATIONS THROUGHOUT THE YEAR WITH PEERS, FAMILY, DATES, PEOPLE I MET ONCE**

"As a child, I played hide and seek on a cemetery. The best hiding spot was behind the First World War Monument"

It is nice to organize your grieving: a specific place or moment to take the time for it.

Choosing a place for a grave is very personal: quiet, noisy, with a view, or close to the windmill?

"We were visiting a cemetery for sightseeing, but it gave me the opportunity to ask my uncle about his final wishes"

People who are grieving must be considerate of others so as not to trigger them with their stories. Also, they have difficulty starting the topic because they don't want to ruin the mood.

The Jewish ritual Shivve provides practical rules on how to deal with grief, such as when you're allowed to listen to music again, when you can cook again, when you have to go for a walk.

"In Colombia, we make a lot of noise at funerals."

It helps to talk to people in the same situation.

"Putting flowers is not allowed on a natural cemetery, so when I visit I take some pine cones or make a heart with twigs"

Grieving changes you as a person.

"With a friend we came across a cemetery. We sat there and talked about death for two hours. It was nice. Normally you wouldn't do that"

"Why can't you drink a beer on the cemetery?"

## C. Spatial national laws on burial

